

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: P1057854

Luminaire Tested: S122RDRP-S1005D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057854
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D940-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

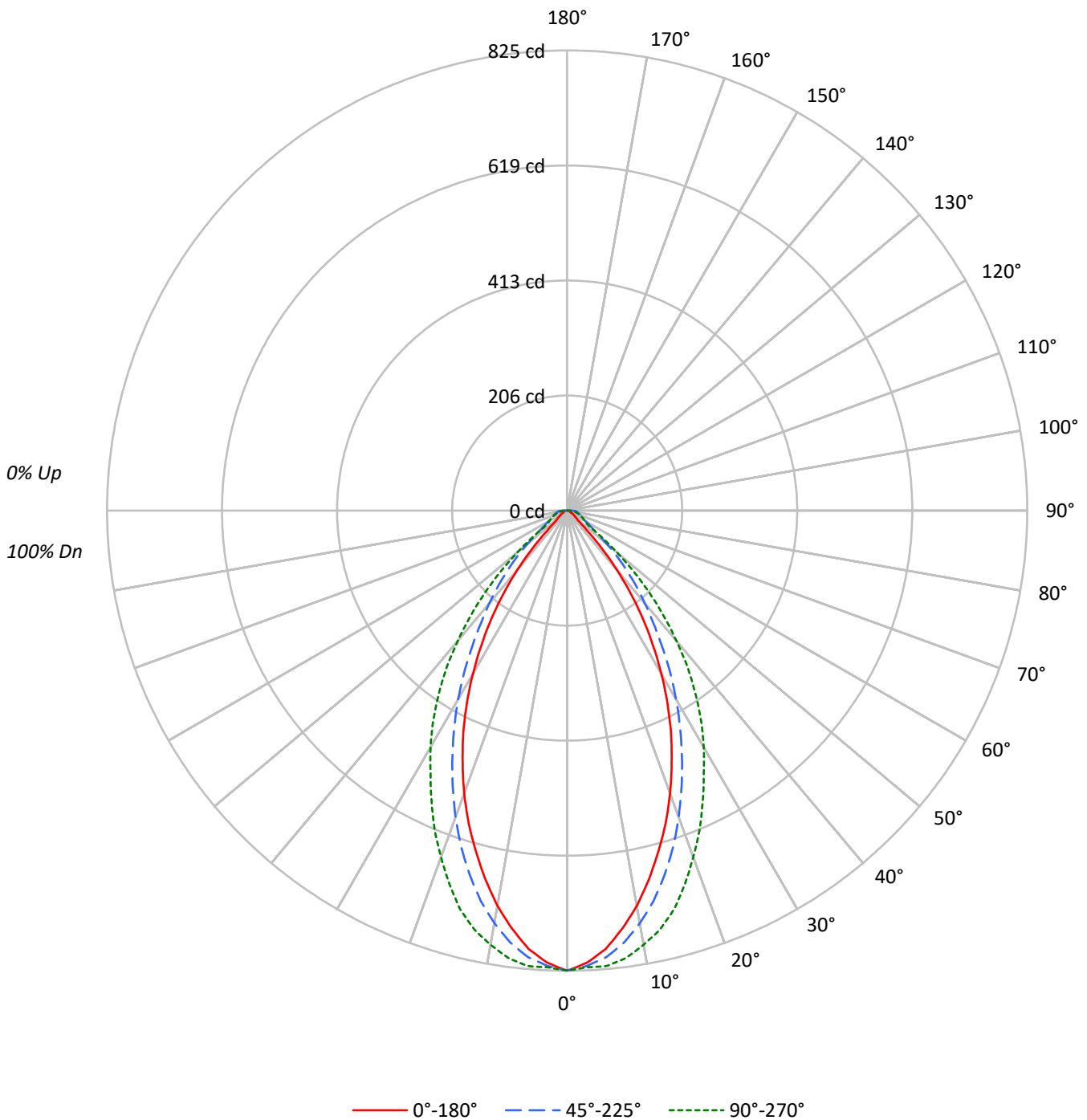
Lumens per Lamp: N/A
Luminaire Lumens: 897.7 lumens
Efficiency: N/A
Efficacy: 21.5 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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					100			
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74					74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67					67			
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56					56			
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52					52			
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45					45			
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15218	15218	15218
5°	14616	14885	15180
10°	13476	14068	14810
15°	12075	12906	14142
20°	10598	11480	12982
25°	8973	9913	11713
30°	7198	8323	10432
35°	5321	6659	9035
40°	3339	5213	7342
45°	1307	3925	5441
50°	643	2653	3333
55°	508	1740	1486
60°	391	1413	1362
65°	288	1327	1327
70°	356	1354	1354
75°	378	1504	1412
80°	563	1966	1541
85°	1122	3345	2244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 6134 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.3	8.4
10°-20°	190.4	21.2
20°-30°	227.8	25.4
30°-40°	191.7	21.4
40°-50°	109.2	12.2
50°-60°	43.1	4.8
60°-70°	27.1	3.0
70°-80°	20.2	2.2
80°-90°	12.8	1.4
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°	493.6	55.0
0°-40°	685.3	76.3
0°-60°	837.6	93.3
0°-90°	897.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	897.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	825	825	825	825	825	
5°	789	806	804	813	820	73
15°	632	654	676	715	740	176
25°	441	460	487	537	575	201
35°	236	257	296	359	401	146
45°	50	88	150	189	208	47
55°	16	34	54	55	46	14
65°	7	30	30	29	30	7
75°	5	21	21	20	20	6
85°	5	14	16	14	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	824.7	824.7	824.7	824.7	824.7
2.5°	811.5	826.0	816.8	818.1	819.5
5°	789.1	806.3	803.6	812.9	819.5
7.5°	756.1	774.6	781.2	797.0	808.9
10°	719.2	740.3	750.8	775.9	790.4
12.5°	676.9	700.7	716.5	748.2	769.3
15°	632.1	654.5	675.6	715.2	740.3
17.5°	587.2	609.6	632.1	675.6	702.0
20°	539.7	560.8	584.6	630.8	661.1
22.5°	489.6	512.0	535.7	583.2	620.2
25°	440.7	460.5	486.9	537.1	575.3
27.5°	389.3	409.1	438.1	489.6	530.5
30°	337.8	357.6	390.6	443.4	489.6
32.5°	286.3	307.5	343.1	401.1	447.3
35°	236.2	257.3	295.6	358.9	401.1
37.5°	187.4	211.1	253.4	315.4	355.0
40°	138.6	166.3	216.4	271.8	304.8
42.5°	92.4	126.7	182.1	228.3	256.0
45°	50.1	88.4	150.4	188.7	208.5
47.5°	27.7	56.7	120.1	150.4	162.3
50°	22.4	39.6	92.4	114.8	116.1
52.5°	18.5	35.6	68.6	81.8	75.2
55°	15.8	34.3	54.1	55.4	46.2
57.5°	13.2	33.0	44.9	39.6	39.6
60°	10.6	33.0	38.3	35.6	36.9
62.5°	7.9	33.0	34.3	31.7	33.0
65°	6.6	30.4	30.4	29.0	30.4
67.5°	6.6	27.7	27.7	26.4	27.7
70°	6.6	26.4	25.1	25.1	25.1
72.5°	5.3	23.8	23.8	22.4	22.4
75°	5.3	21.1	21.1	19.8	19.8
77.5°	5.3	19.8	19.8	18.5	17.2
80°	5.3	17.2	18.5	17.2	14.5
82.5°	5.3	15.8	17.2	15.8	11.9
85°	5.3	14.5	15.8	14.5	10.6
87.5°	4.0	14.5	14.5	11.9	7.9
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	7.15	8.37	7.52	8.69	9.00	9.18	10.40	9.54	10.71	11.02
	3H	8.70	9.78	9.08	10.11	10.48	11.15	12.24	11.53	12.57	12.93
	4H	9.25	10.26	9.66	10.62	11.00	12.06	13.08	12.47	13.43	13.81
	6H	9.81	10.74	10.23	11.11	11.51	12.95	13.88	13.36	14.25	14.65
	8H	10.11	10.99	10.54	11.38	11.78	13.35	14.23	13.78	14.62	15.03
	12H	10.47	11.31	10.90	11.69	12.12	13.80	14.64	14.23	15.02	15.45
4H	2H	8.34	9.35	8.75	9.70	10.09	9.80	10.81	10.20	11.16	11.55
	3H	10.54	11.37	10.96	11.78	12.18	12.04	12.88	12.46	13.28	13.69
	4H	11.59	12.34	12.03	12.76	13.21	13.11	13.86	13.55	14.28	14.73
	6H	12.49	13.14	12.96	13.59	14.05	14.23	14.87	14.69	15.32	15.79
	8H	12.88	13.48	13.35	13.93	14.40	14.75	15.35	15.22	15.80	16.27
	12H	13.30	13.83	13.79	14.32	14.79	15.33	15.86	15.81	16.35	16.82
8H	4H	12.39	13.00	12.87	13.45	13.92	13.61	14.21	14.08	14.66	15.13
	6H	13.78	14.28	14.28	14.77	15.26	15.01	15.50	15.51	16.00	16.48
	8H	14.50	14.94	15.02	15.46	15.95	15.74	16.19	16.27	16.71	17.20
	12H	15.25	15.64	15.76	16.14	16.71	16.58	16.97	17.09	17.46	18.04
12H	4H	12.56	13.09	13.05	13.58	14.05	13.71	14.24	14.19	14.72	15.20
	6H	14.11	14.56	14.64	15.07	15.57	15.22	15.67	15.75	16.19	16.68
	8H	15.02	15.42	15.54	15.91	16.49	16.11	16.50	16.62	17.00	17.57