

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: P1055573

Luminaire Tested: S123R3DRP-S1000D950-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1055573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DRP-S1000D950-X4F0-XX-UDD-F-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

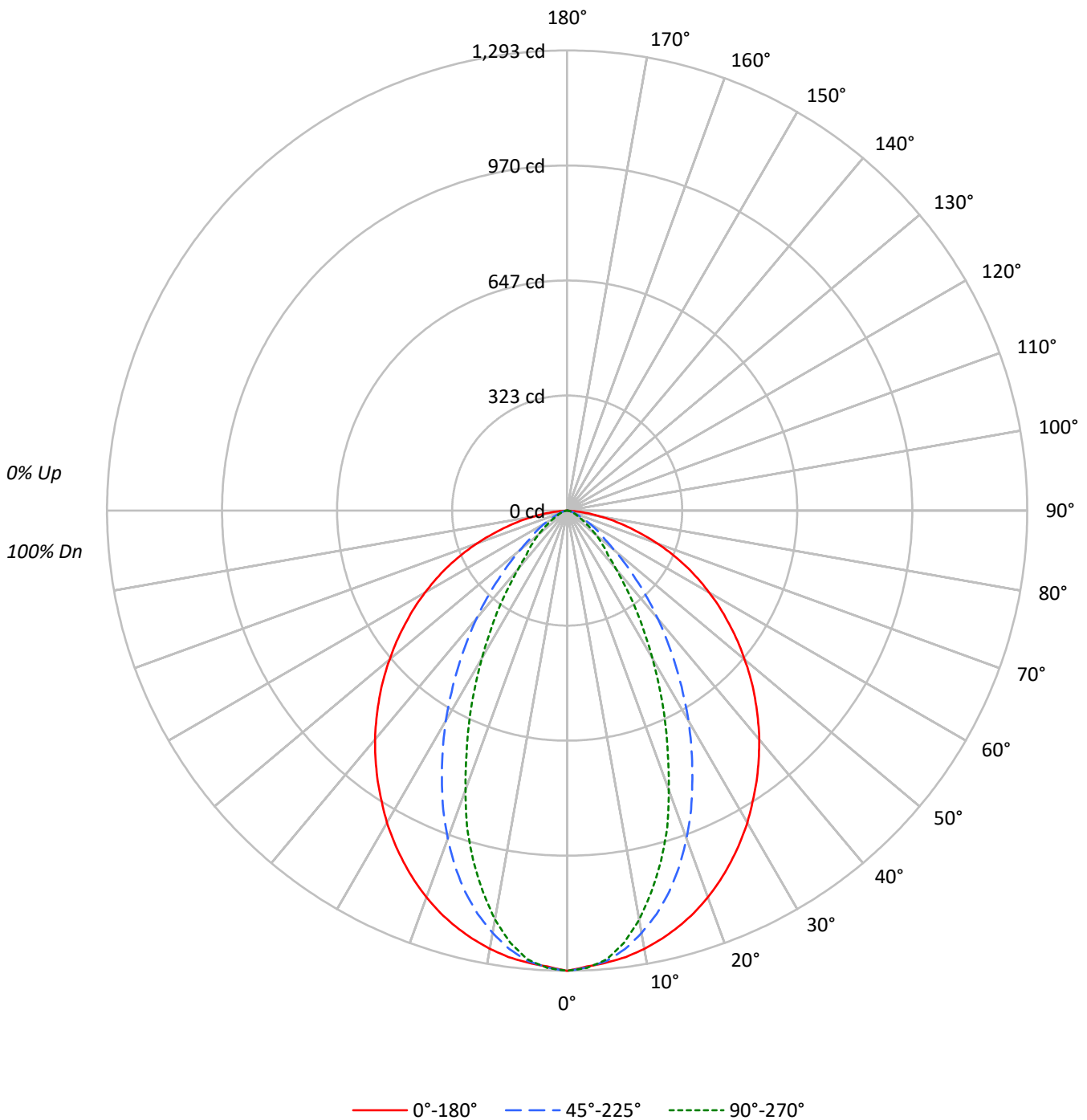
Lumens per Lamp: N/A
Luminaire Lumens: 1798.7 lumens
Efficiency: N/A
Efficacy: 51.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79					79			
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62					62			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56					56			
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51					51			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46					46			
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42					42			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15594	15594	15594
5°	15431	15371	15327
10°	15309	14753	14288
15°	15103	13833	12716
20°	14833	12584	10712
25°	14481	11073	8644
30°	14097	9489	6656
35°	13658	7832	4926
40°	13217	6232	3357
45°	12730	4662	2529
50°	12210	3243	1977
55°	11674	2371	1444
60°	11116	1775	1034
65°	10458	1190	804
70°	9465	864	649
75°	8166	629	512
80°	6554	514	424
85°	3389	512	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12730 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.6	6.6
10°-20°	311.2	17.3
20°-30°	391.0	21.7
30°-40°	364.2	20.2
40°-50°	278.8	15.5
50°-60°	185.3	10.3
60°-70°	99.9	5.6
70°-80°	40.9	2.3
80°-90°	7.8	0.4
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°	821.8	45.7
0°-40°	1186.0	65.9
0°-60°	1650.1	91.7
0°-90°	1798.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1798.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1293	1293	1293	1293	1293	
5°	1275	1288	1270	1265	1266	121
15°	1210	1190	1108	1043	1019	341
25°	1089	1015	832	694	650	501
35°	928	791	532	376	335	580
45°	747	552	273	161	148	576
55°	555	321	113	78	69	498
65°	367	124	42	31	28	362
75°	175	29	14	12	11	188
85°	24	4	4	4	2	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1293.4	1293.4	1293.4	1293.4	1293.4
2.5°	1282.3	1298.3	1284.8	1286.0	1286.0
5°	1275.0	1288.5	1270.1	1265.2	1266.4
7.5°	1265.2	1273.8	1243.1	1227.2	1224.7
10°	1250.5	1252.9	1205.1	1176.9	1167.1
12.5°	1232.1	1223.5	1161.0	1114.4	1096.0
15°	1210.0	1190.4	1108.3	1043.3	1018.8
17.5°	1185.5	1152.4	1048.2	963.6	934.2
20°	1156.1	1109.5	980.8	875.3	834.9
22.5°	1124.2	1064.1	909.7	784.6	739.2
25°	1088.6	1015.1	832.4	693.9	649.8
27.5°	1051.9	962.4	756.4	608.1	562.7
30°	1012.6	908.4	681.6	524.7	478.1
32.5°	969.7	849.6	604.4	447.5	400.9
35°	928.0	790.7	532.1	376.4	334.7
37.5°	883.9	731.9	462.2	313.8	267.3
40°	839.8	671.8	396.0	252.5	213.3
42.5°	793.2	611.7	333.5	201.1	170.4
45°	746.6	551.7	273.4	160.6	148.3
47.5°	700.0	491.6	220.7	138.5	126.3
50°	651.0	434.0	172.9	117.7	105.4
52.5°	604.4	376.4	134.9	96.8	85.8
55°	555.4	321.2	112.8	78.5	68.7
57.5°	510.0	264.8	93.2	61.3	53.9
60°	461.0	214.5	73.6	47.8	42.9
62.5°	414.4	168.0	56.4	38.0	34.3
65°	366.6	123.8	41.7	30.6	28.2
67.5°	318.7	89.5	31.9	24.5	23.3
70°	268.5	67.4	24.5	19.6	18.4
72.5°	220.7	47.8	18.4	15.9	14.7
75°	175.3	29.4	13.5	12.3	11.0
77.5°	134.9	17.2	9.8	9.8	8.6
80°	94.4	9.8	7.4	7.4	6.1
82.5°	57.6	6.1	4.9	4.9	4.9
85°	24.5	3.7	3.7	3.7	2.5
87.5°	3.7	1.2	1.2	1.2	1.2
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	19.36	20.71	19.72	21.03	21.34	7.93	9.29	8.29	9.60	9.91
	3H	21.11	22.31	21.49	22.64	23.01	8.59	9.80	8.97	10.13	10.49
	4H	21.81	22.93	22.21	23.28	23.67	8.79	9.91	9.19	10.26	10.65
	6H	22.32	23.36	22.74	23.73	24.12	8.91	9.94	9.32	10.31	10.71
	8H	22.46	23.44	22.89	23.83	24.24	8.94	9.92	9.37	10.31	10.72
	12H	22.51	23.45	22.95	23.83	24.26	8.96	9.89	9.39	10.27	10.70
4H	2H	19.16	20.29	19.57	20.64	21.02	8.49	9.61	8.89	9.96	10.34
	3H	20.96	21.88	21.37	22.28	22.68	9.28	10.21	9.70	10.61	11.01
	4H	21.65	22.47	22.09	22.89	23.34	9.54	10.37	9.98	10.79	11.23
	6H	22.22	22.93	22.68	23.38	23.84	9.74	10.45	10.20	10.90	11.36
	8H	22.40	23.06	22.87	23.51	23.98	9.79	10.46	10.26	10.90	11.37
	12H	22.48	23.07	22.97	23.55	24.03	9.83	10.41	10.31	10.90	11.37
8H	4H	21.53	22.19	22.00	22.64	23.11	9.86	10.52	10.33	10.97	11.44
	6H	22.08	22.62	22.58	23.12	23.60	10.11	10.65	10.61	11.14	11.62
	8H	22.26	22.74	22.78	23.26	23.75	10.19	10.68	10.71	11.19	11.69
	12H	22.36	22.79	22.88	23.29	23.86	10.28	10.70	10.79	11.20	11.77
12H	4H	21.49	22.07	21.97	22.55	23.03	9.90	10.49	10.39	10.97	11.44
	6H	22.02	22.51	22.55	23.02	23.52	10.15	10.64	10.67	11.15	11.64
	8H	22.22	22.65	22.73	23.14	23.71	10.28	10.71	10.79	11.20	11.77