

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: P1059089

Luminaire Tested: S123RDRP-S1165D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059089
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D830-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

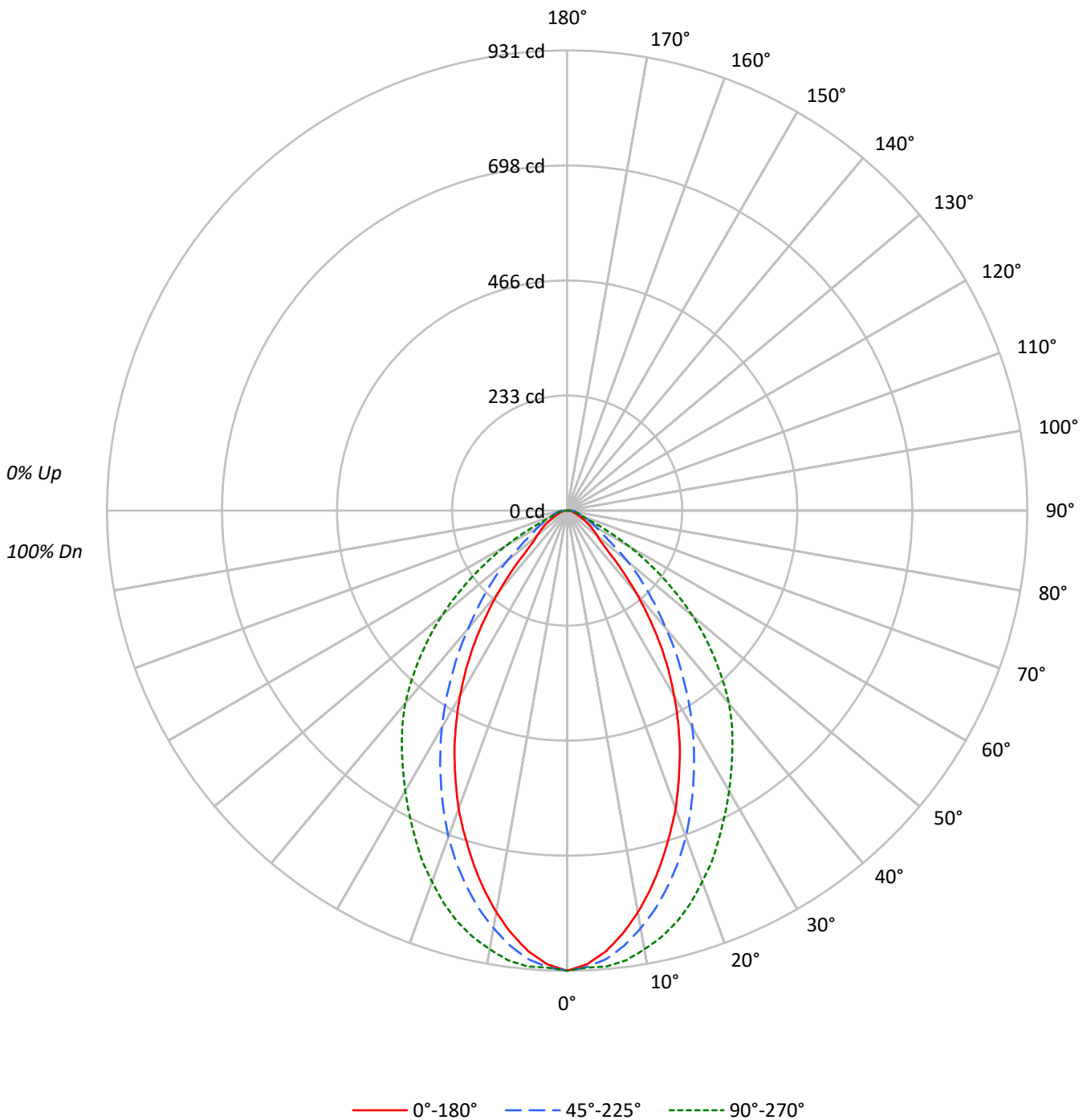
Lumens per Lamp: N/A
Luminaire Lumens: 1246.8 lumens
Efficiency: N/A
Efficacy: 29.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71					71			
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64					64			
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58					58			
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52					52			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44					44			
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10932	10932	10932
5°	10557	10734	10909
10°	9837	10226	10744
15°	8955	9566	10458
20°	8016	8780	9986
25°	6991	7836	9439
30°	5878	6873	8882
35°	4676	5826	8357
40°	3334	4750	7813
45°	1986	3814	6996
50°	1465	2905	6058
55°	1224	1976	4813
60°	989	1628	3384
65°	792	1398	1812
70°	652	1212	1119
75°	617	1171	1048
80°	642	1285	1008
85°	916	1832	1280

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6996 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	6.9
10°-20°	222.2	17.8
20°-30°	283.4	22.7
30°-40°	266.6	21.4
40°-50°	191.6	15.4
50°-60°	109.8	8.8
60°-70°	50.2	4.0
70°-80°	25.2	2.0
80°-90°	12.3	1.0
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°	591.1	47.4
0°-40°	857.7	68.8
0°-60°	1159.0	93.0
0°-90°	1246.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1246.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	931	931	931	931	931	
5°	896	913	911	917	926	83
15°	737	762	787	829	860	206
25°	540	564	605	670	728	246
35°	326	349	406	499	583	202
45°	120	145	230	338	421	100
55°	60	61	96	178	235	54
65°	28	39	50	56	65	29
75°	14	27	26	23	23	15
85°	7	14	14	12	10	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	931.0	931.0	931.0	931.0	931.0
2.5°	918.7	932.3	924.2	924.2	925.5
5°	895.6	913.3	910.6	917.4	925.5
7.5°	863.0	882.0	887.5	903.8	917.4
10°	825.0	846.7	857.6	883.4	901.1
12.5°	782.8	807.3	825.0	857.6	883.4
15°	736.6	762.4	786.9	829.0	860.3
17.5°	689.1	714.9	746.1	795.1	831.8
20°	641.5	667.3	702.6	754.3	799.1
22.5°	589.8	615.7	653.7	712.2	766.5
25°	539.6	564.0	604.8	670.0	728.5
27.5°	486.6	511.0	555.9	626.5	691.8
30°	433.5	458.0	506.9	583.0	655.1
32.5°	380.5	403.6	456.7	540.9	618.4
35°	326.2	349.3	406.4	498.8	583.0
37.5°	270.5	293.6	360.2	460.7	547.7
40°	217.5	243.3	309.9	422.7	509.7
42.5°	165.8	193.0	269.1	381.9	466.2
45°	119.6	145.4	229.7	338.4	421.3
47.5°	91.1	104.6	194.3	294.9	377.8
50°	80.2	81.5	159.0	255.5	331.6
52.5°	69.3	70.7	123.7	217.5	282.7
55°	59.8	61.2	96.5	178.0	235.1
57.5°	50.3	53.0	78.8	141.3	188.9
60°	42.1	47.6	69.3	107.4	144.1
62.5°	34.0	43.5	59.8	78.8	103.3
65°	28.5	39.4	50.3	55.7	65.2
67.5°	23.1	36.7	42.1	39.4	39.4
70°	19.0	32.6	35.3	32.6	32.6
72.5°	16.3	31.3	29.9	27.2	27.2
75°	13.6	27.2	25.8	23.1	23.1
77.5°	12.2	23.1	21.7	20.4	19.0
80°	9.5	19.0	19.0	17.7	14.9
82.5°	8.2	16.3	16.3	14.9	12.2
85°	6.8	13.6	13.6	12.2	9.5
87.5°	5.4	12.2	12.2	10.9	6.8
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	8.29	9.61	8.66	9.92	10.24	15.52	16.83	15.88	17.15	17.46
	3H	9.69	10.86	10.07	11.19	11.56	15.75	16.92	16.13	17.25	17.62
	4H	10.26	11.35	10.66	11.70	12.08	15.86	16.95	16.26	17.30	17.68
	6H	10.71	11.72	11.13	12.09	12.48	15.97	16.97	16.38	17.34	17.73
	8H	10.90	11.85	11.33	12.24	12.65	16.01	16.96	16.44	17.35	17.76
	12H	11.09	12.00	11.53	12.38	12.81	16.06	16.97	16.50	17.35	17.78
4H	2H	9.37	10.46	9.77	10.81	11.19	15.48	16.57	15.88	16.92	17.30
	3H	11.06	11.95	11.47	12.35	12.76	15.85	16.74	16.26	17.14	17.55
	4H	11.89	12.69	12.33	13.11	13.55	16.03	16.83	16.46	17.25	17.69
	6H	12.55	13.24	13.01	13.69	14.15	16.25	16.94	16.71	17.39	17.85
	8H	12.80	13.45	13.27	13.90	14.37	16.35	17.00	16.82	17.44	17.91
	12H	13.06	13.63	13.55	14.11	14.59	16.47	17.04	16.95	17.52	18.00
8H	4H	12.33	12.97	12.80	13.42	13.89	16.07	16.72	16.54	17.17	17.64
	6H	13.28	13.81	13.78	14.30	14.78	16.41	16.94	16.91	17.43	17.91
	8H	13.74	14.22	14.26	14.73	15.22	16.59	17.07	17.12	17.59	18.08
	12H	14.22	14.64	14.74	15.14	15.71	16.83	17.25	17.34	17.74	18.31
12H	4H	12.39	12.96	12.87	13.44	13.91	16.07	16.64	16.55	17.12	17.59
	6H	13.42	13.90	13.94	14.42	14.91	16.43	16.91	16.95	17.42	17.92
	8H	14.02	14.44	14.53	14.93	15.50	16.69	17.11	17.21	17.61	18.18