

Scaled data based on original data using
LM-79-2019 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: S123RDR-S1165D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S123RDR-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

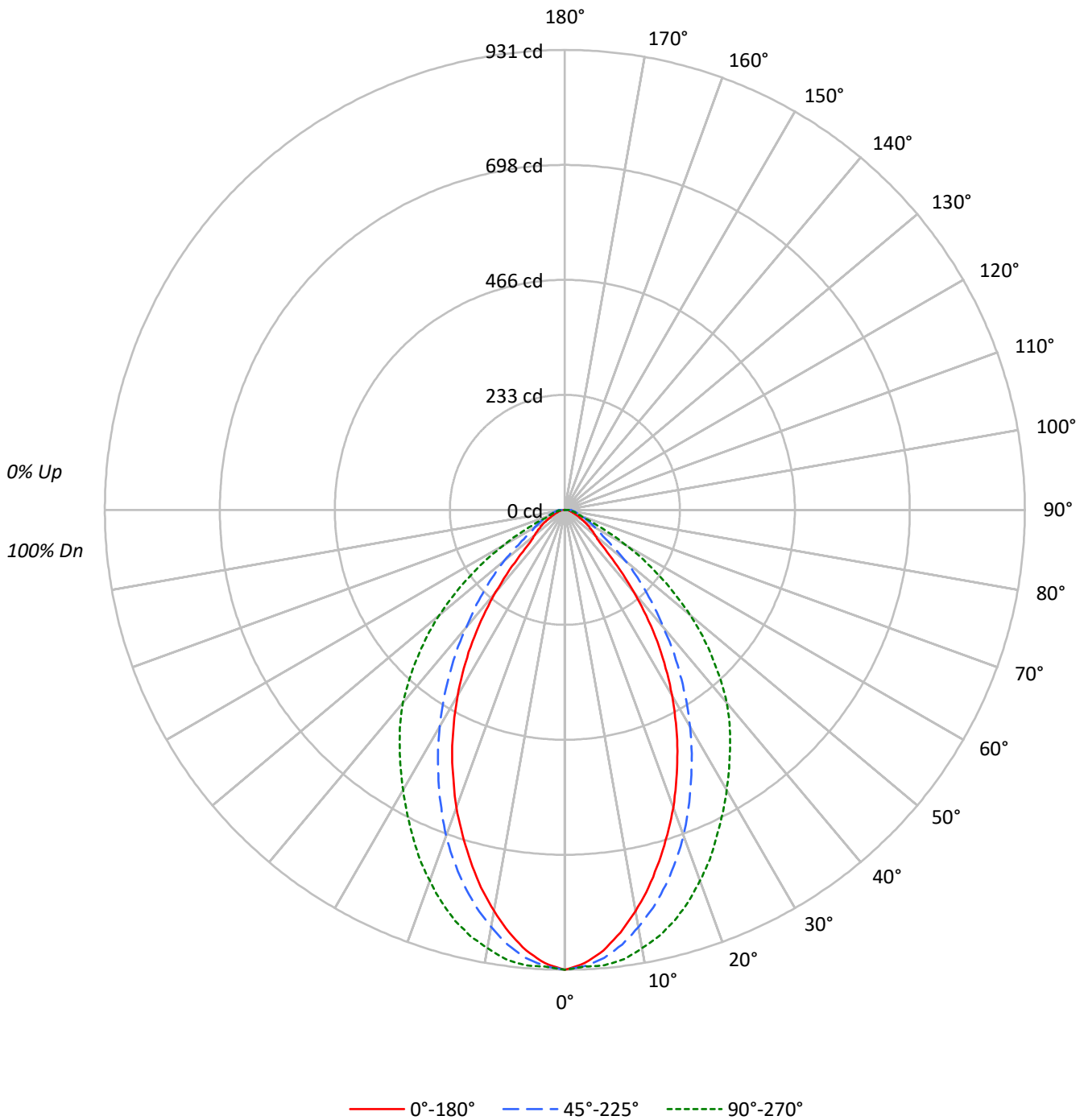
Lumens per Lamp: N/A
Luminaire Lumens: 1246.8 lumens
Efficiency: N/A
Efficacy: 29.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64				
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58				
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52				
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44				
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	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

(END OF REPORT)