

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: P1059331

Luminaire Tested: S123RDR-S775D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

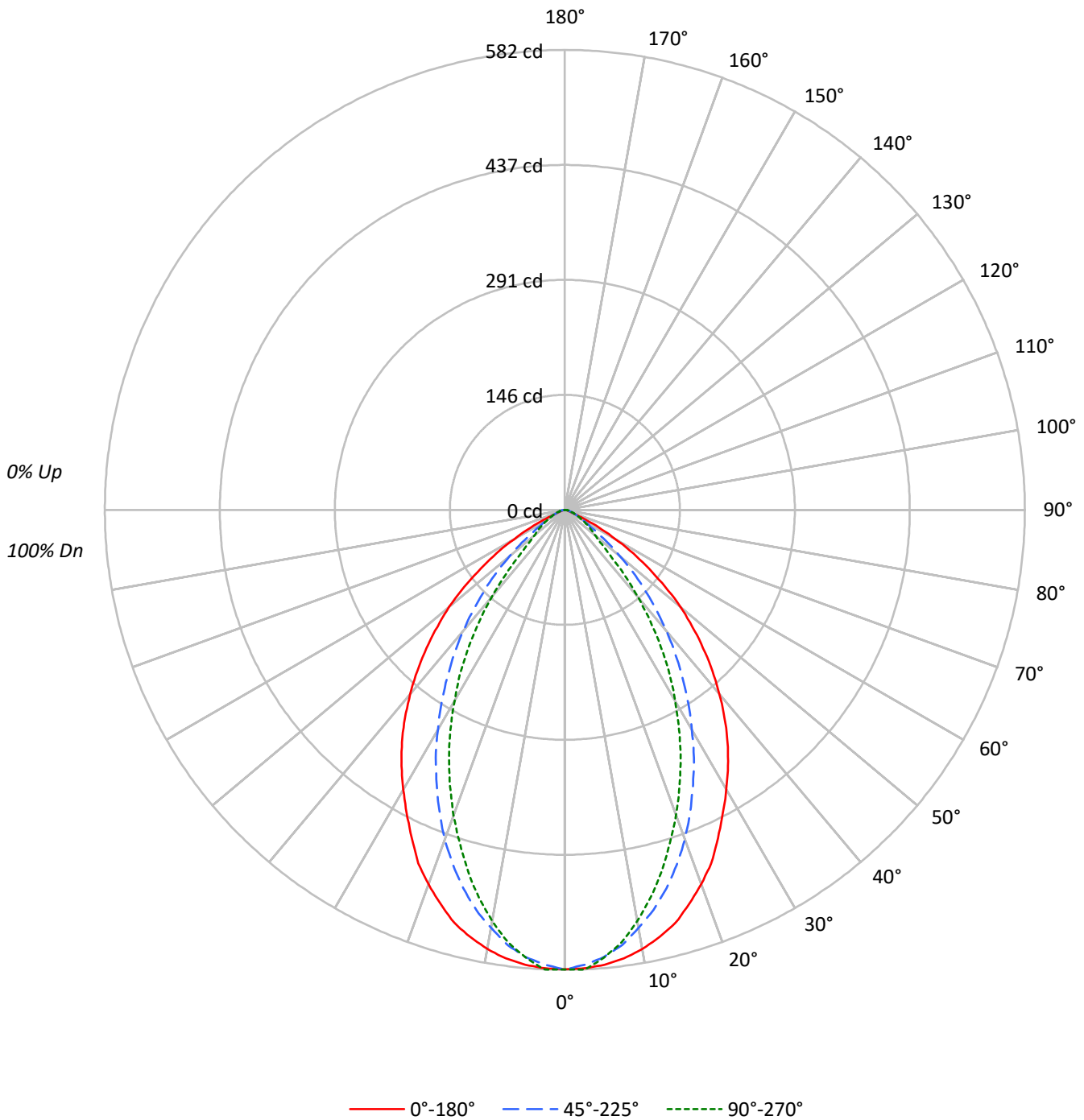
Lumens per Lamp: N/A
Luminaire Lumens: 750.7 lumens
Efficiency: N/A
Efficacy: 29.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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

TEST NUMBER: P1059331

CATALOG NUMBER: S123RDR-S775D830-X4F0-XX-UDD-SVL-B

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			100	
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91			91	
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82			82	
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73			73	
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66			66	
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60			60	
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55			55	
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50			50	
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46			46	
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42			42	
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6828	6828	6828
5°	6812	6695	6706
10°	6730	6408	6300
15°	6577	6030	5756
20°	6299	5546	5141
25°	5937	4969	4491
30°	5542	4358	3784
35°	5149	3717	3045
40°	4665	3063	2207
45°	4112	2376	1330
50°	3486	1661	904
55°	2653	995	755
60°	1733	634	592
65°	725	475	475
70°	247	340	371
75°	204	245	286
80°	122	183	243
85°	121	121	243

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4112 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	7.2
10°-20°	140.6	18.7
20°-30°	180.3	24.0
30°-40°	169.2	22.5
40°-50°	118.0	15.7
50°-60°	61.0	8.1
60°-70°	20.9	2.8
70°-80°	6.0	0.8
80°-90°	1.3	0.2
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°	374.5	49.9
0°-40°	543.7	72.4
0°-60°	722.7	96.3
0°-90°	750.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	750.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	582	582	582	582	582	
5°	578	577	568	571	569	55
15°	541	528	496	480	474	152
25°	458	429	384	357	347	211
35°	359	315	259	226	212	224
45°	248	202	143	99	80	191
55°	130	97	49	38	37	117
65°	26	22	17	16	17	31
75°	4	4	5	6	6	5
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	581.5	581.5	581.5	581.5	581.5
2.5°	580.6	581.5	576.1	581.5	582.4
5°	577.9	577.0	568.0	570.7	568.9
7.5°	572.5	569.8	555.4	551.8	551.8
10°	564.4	559.0	537.4	531.1	528.4
12.5°	553.6	546.4	518.5	506.8	502.3
15°	541.0	527.5	496.0	479.8	473.5
17.5°	523.0	505.0	470.8	451.9	442.0
20°	504.1	481.6	443.8	421.3	411.4
22.5°	484.3	457.3	414.1	389.8	379.0
25°	458.2	429.4	383.5	357.4	346.6
27.5°	433.0	402.4	353.8	324.1	313.3
30°	408.7	372.7	321.4	292.6	279.1
32.5°	384.4	343.9	290.8	259.3	246.7
35°	359.2	315.1	259.3	226.0	212.4
37.5°	332.2	287.2	229.6	193.5	177.3
40°	304.3	257.5	199.8	159.3	144.0
42.5°	276.4	230.5	170.1	128.7	110.7
45°	247.6	202.5	143.1	99.0	80.1
47.5°	218.7	174.6	117.0	72.0	60.3
50°	190.8	148.5	90.9	53.1	49.5
52.5°	160.2	123.3	68.4	44.1	43.2
55°	129.6	97.2	48.6	37.8	36.9
57.5°	102.6	75.6	35.1	31.5	30.6
60°	73.8	54.0	27.0	26.1	25.2
62.5°	48.6	36.9	21.6	20.7	20.7
65°	26.1	22.5	17.1	16.2	17.1
67.5°	10.8	12.6	12.6	13.5	13.5
70°	7.2	8.1	9.9	10.8	10.8
72.5°	5.4	6.3	7.2	8.1	8.1
75°	4.5	4.5	5.4	6.3	6.3
77.5°	2.7	3.6	3.6	4.5	5.4
80°	1.8	2.7	2.7	3.6	3.6
82.5°	0.9	1.8	1.8	2.7	2.7
85°	0.9	0.9	0.9	0.9	1.8
87.5°	0.0	0.0	0.0	0.0	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)