

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: P1059362

Luminaire Tested: S123RDR-S775D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059362
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

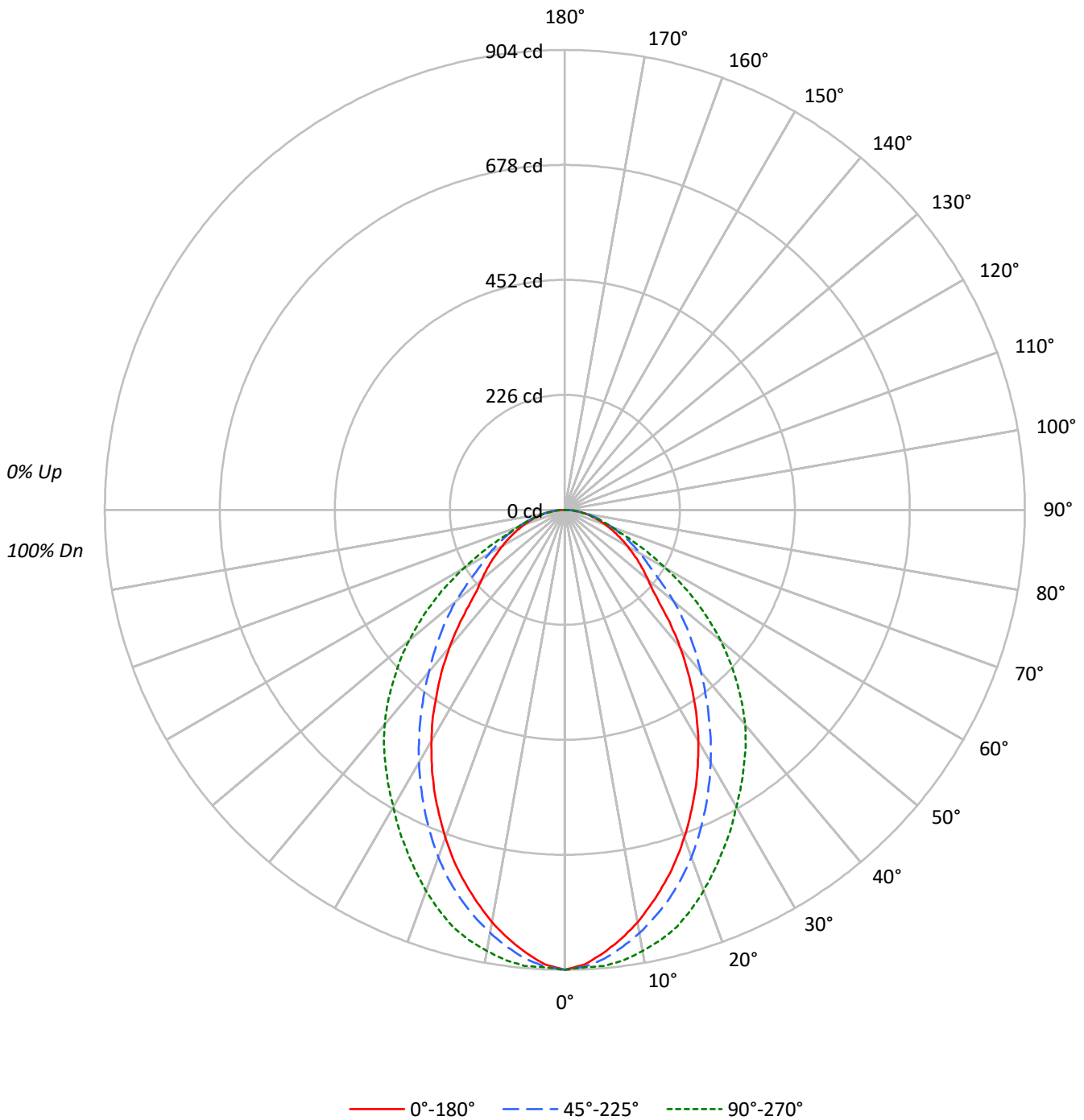
Lumens per Lamp: N/A
Luminaire Lumens: 1633.0 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10615	10615	10615
5°	10306	10444	10606
10°	9819	10072	10501
15°	9224	9624	10320
20°	8569	9085	9959
25°	7868	8445	9544
30°	7113	7775	9139
35°	6274	7064	8796
40°	5394	6368	8448
45°	4436	5737	7920
50°	3891	5111	7298
55°	3601	4361	6465
60°	3311	4007	5352
65°	3092	3682	4212
70°	2911	3347	3347
75°	2740	3076	2885
80°	2583	2793	2434
85°	2425	2708	1859

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7920 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	5.1
10°-20°	224.1	13.7
20°-30°	303.8	18.6
30°-40°	317.7	19.5
40°-50°	275.5	16.9
50°-60°	204.9	12.6
60°-70°	131.5	8.1
70°-80°	70.5	4.3
80°-90°	21.3	1.3
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°	611.5	37.4
0°-40°	929.2	56.9
0°-60°	1409.6	86.3
0°-90°	1633.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1633.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	874	889	886	892	900	82
15°	759	777	792	824	849	213
25°	607	626	652	695	737	278
35°	438	459	493	555	614	273
45°	267	287	346	420	477	210
55°	176	180	213	273	316	157
65°	111	121	132	141	152	111
75°	60	70	68	65	64	64
85°	18	22	20	17	14	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	904.0	904.0	904.0	904.0	904.0
2.5°	894.5	907.2	898.7	898.7	899.8
5°	874.3	889.2	886.0	892.4	899.8
7.5°	850.0	865.9	866.9	881.8	892.4
10°	823.5	839.4	844.7	865.9	880.7
12.5°	791.7	809.7	819.2	845.7	866.9
15°	758.8	776.8	791.7	823.5	848.9
17.5°	723.8	741.9	760.9	797.0	824.5
20°	685.7	704.8	727.0	763.1	797.0
22.5°	646.5	666.6	689.9	729.1	767.3
25°	607.3	626.3	651.8	695.2	736.6
27.5°	565.9	586.1	612.6	660.3	706.9
30°	524.6	544.7	573.4	624.2	674.0
32.5°	482.2	502.3	533.1	590.3	644.4
35°	437.7	458.9	492.8	555.3	613.6
37.5°	395.3	415.4	453.6	522.5	584.0
40°	351.9	373.1	415.4	489.6	551.1
42.5°	309.5	330.7	380.5	454.7	515.1
45°	267.1	287.2	345.5	419.7	476.9
47.5°	234.2	249.1	312.6	382.6	439.8
50°	213.0	218.3	279.8	346.6	399.5
52.5°	193.9	198.2	243.8	310.5	358.2
55°	175.9	180.2	213.0	273.4	315.8
57.5°	157.9	163.2	189.7	235.3	273.4
60°	141.0	147.3	170.6	201.4	227.9
62.5°	126.1	133.5	151.6	170.6	188.6
65°	111.3	120.8	132.5	141.0	151.6
67.5°	97.5	108.1	114.5	116.6	117.6
70°	84.8	95.4	97.5	97.5	97.5
72.5°	72.1	83.7	81.6	80.5	79.5
75°	60.4	69.9	67.8	64.6	63.6
77.5°	48.8	57.2	54.1	51.9	48.8
80°	38.2	44.5	41.3	39.2	36.0
82.5°	28.6	32.9	29.7	27.6	24.4
85°	18.0	22.3	20.1	17.0	13.8
87.5°	9.5	12.7	10.6	9.5	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)