

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: P1059355

Luminaire Tested: S123RDR-S775D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059355
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

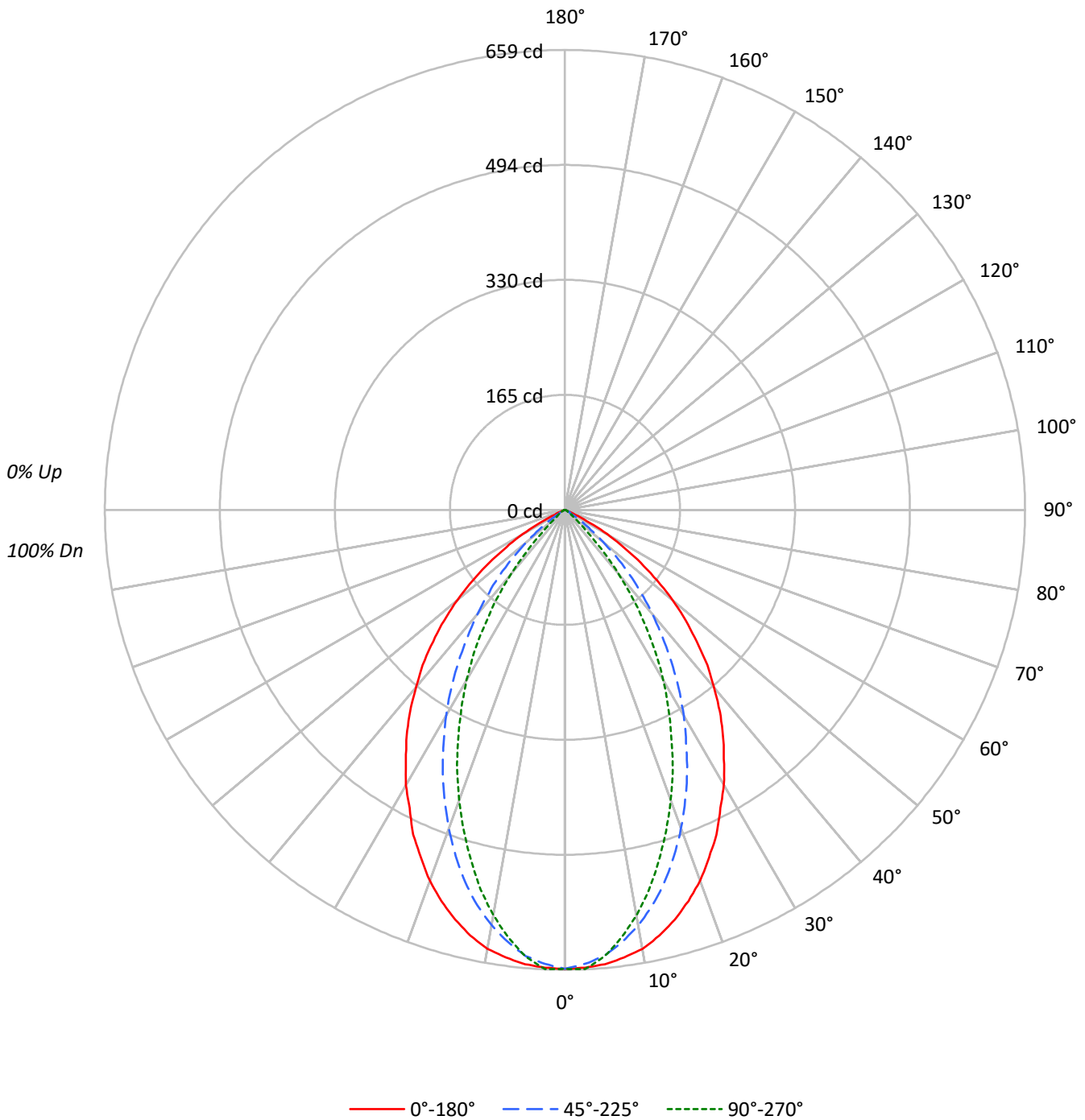
Lumens per Lamp: N/A
Luminaire Lumens: 750.5 lumens
Efficiency: N/A
Efficacy: 29.1 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92				
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76				
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69				
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63				
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58				
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53				
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49				
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46				
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7723	7723	7723
5°	7703	7565	7578
10°	7614	7210	7034
15°	7390	6708	6321
20°	7068	6074	5532
25°	6656	5365	4680
30°	6175	4610	3820
35°	5662	3810	2840
40°	5081	2988	1818
45°	4432	2180	756
50°	3676	1297	290
55°	2711	543	217
60°	1642	200	124
65°	442	117	58
70°	0	38	38
75°	0	0	50
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4432 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.5	8.1
10°-20°	156.3	20.8
20°-30°	194.7	25.9
30°-40°	174.1	23.2
40°-50°	109.9	14.6
50°-60°	46.0	6.1
60°-70°	8.7	1.2
70°-80°	0.3	0.0
80°-90°	0.0	0.0
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°	411.6	54.8
0°-40°	585.7	78.0
0°-60°	741.6	98.8
0°-90°	750.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	750.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	654	652	642	644	643	62
15°	608	593	552	528	520	171
25°	514	472	414	378	361	235
35°	395	338	266	218	198	246
45°	267	208	131	70	46	206
55°	132	91	26	11	11	119
65°	16	12	4	2	2	22
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	657.7	657.7	657.7	657.7	657.7
2.5°	656.6	657.7	651.3	657.7	658.8
5°	653.5	652.4	641.8	643.9	642.9
7.5°	647.1	643.9	624.9	620.6	618.5
10°	638.6	630.2	604.7	594.2	589.9
12.5°	624.9	613.2	580.4	563.4	557.1
15°	607.9	593.1	551.8	528.5	520.0
17.5°	587.8	566.6	520.0	494.6	481.9
20°	565.6	535.9	486.1	455.4	442.7
22.5°	539.1	506.3	450.1	417.3	403.5
25°	513.7	472.4	414.1	378.1	361.2
27.5°	481.9	438.5	376.0	338.9	320.9
30°	455.4	405.6	340.0	298.7	281.7
32.5°	423.6	371.7	302.9	257.4	241.5
35°	395.0	337.9	265.8	218.2	198.1
37.5°	364.3	305.0	228.8	179.0	159.9
40°	331.5	272.2	194.9	139.8	118.6
42.5°	301.8	239.4	161.0	103.8	82.6
45°	266.9	207.6	131.3	69.9	45.5
47.5°	235.1	177.9	99.6	39.2	24.4
50°	201.2	147.2	71.0	20.1	15.9
52.5°	166.3	117.6	46.6	13.8	12.7
55°	132.4	91.1	26.5	10.6	10.6
57.5°	99.6	65.7	13.8	8.5	7.4
60°	69.9	43.4	8.5	6.4	5.3
62.5°	40.2	25.4	6.4	4.2	4.2
65°	15.9	11.7	4.2	2.1	2.1
67.5°	1.1	3.2	2.1	1.1	1.1
70°	0.0	0.0	1.1	1.1	1.1
72.5°	0.0	0.0	1.1	1.1	1.1
75°	0.0	0.0	0.0	0.0	1.1
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)