

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: P1059357

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059357
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
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-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

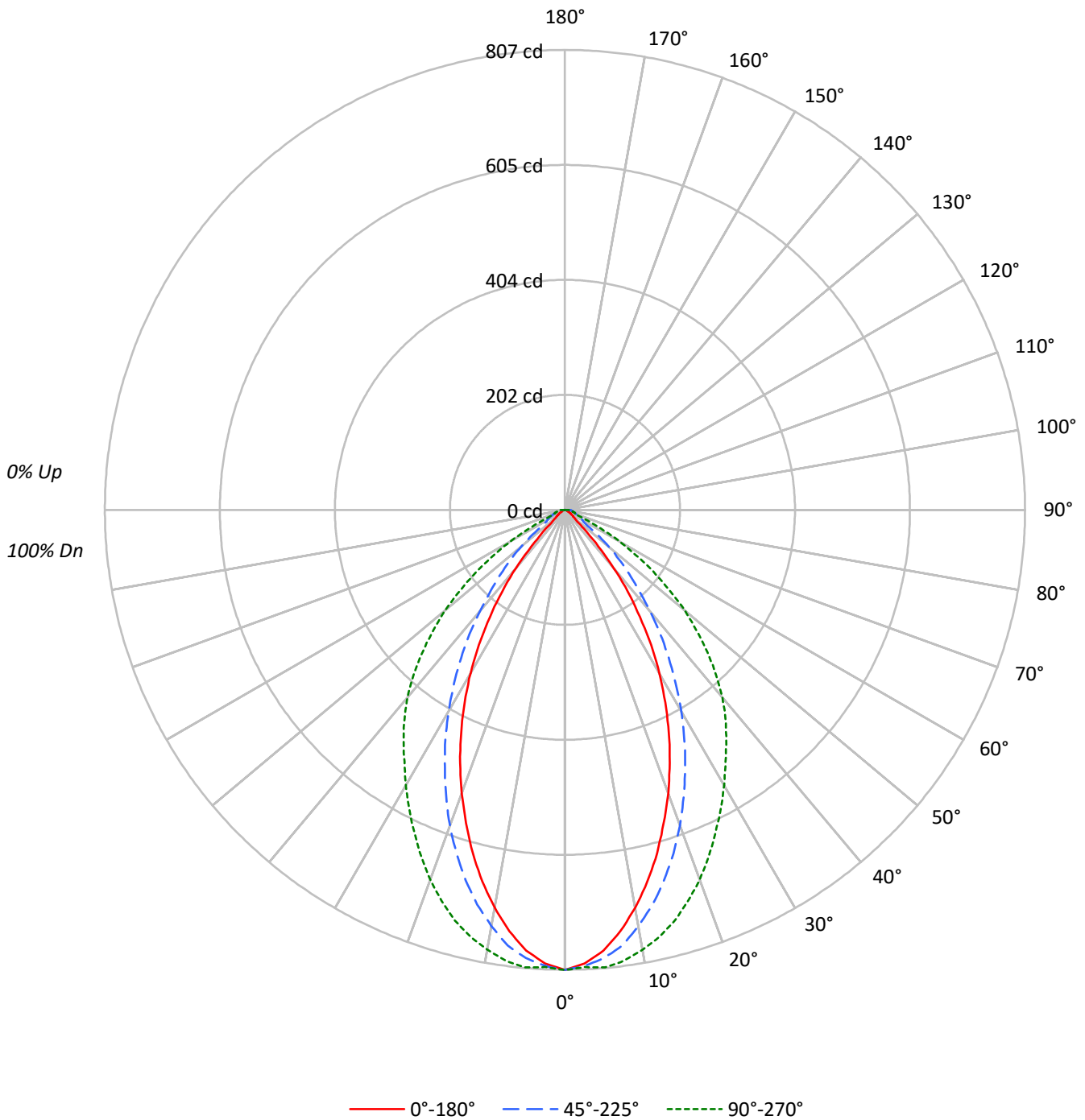
Lumens per Lamp: N/A
Luminaire Lumens: 969.2 lumens
Efficiency: N/A
Efficacy: 37.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9480	9480	9480
5°	9153	9303	9503
10°	8449	8841	9347
15°	7583	8177	9066
20°	6614	7370	8630
25°	5580	6460	8095
30°	4488	5524	7566
35°	3284	4547	7071
40°	2049	3546	6585
45°	776	2642	5867
50°	369	1821	5000
55°	283	999	3865
60°	200	848	2541
65°	147	736	1061
70°	144	694	694
75°	191	721	721
80°	284	859	791
85°	566	1428	1145

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5867 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	7.6
10°-20°	190.0	19.6
20°-30°	235.2	24.3
30°-40°	210.9	21.8
40°-50°	138.3	14.3
50°-60°	69.2	7.1
60°-70°	27.0	2.8
70°-80°	15.2	1.6
80°-90°	9.4	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°	499.3	51.5
0°-40°	710.2	73.3
0°-60°	917.7	94.7
0°-90°	969.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	969.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	807	807	807	807	807	
5°	776	789	789	798	806	72
15°	624	649	673	717	746	174
25°	431	457	499	570	625	197
35°	229	260	317	413	493	143
45°	47	75	159	273	353	44
55°	14	17	49	134	189	13
65°	5	16	26	35	38	5
75°	4	16	16	16	16	4
85°	4	11	11	11	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	807.3	807.3	807.3	807.3	807.3
2.5°	796.7	808.3	800.9	802.0	803.0
5°	776.5	789.2	789.2	797.7	806.2
7.5°	745.8	760.6	771.2	786.1	797.7
10°	708.6	726.7	741.5	768.0	783.9
12.5°	668.3	690.6	709.7	744.7	767.0
15°	623.8	649.2	672.6	717.1	745.8
17.5°	576.0	601.5	632.2	684.2	719.2
20°	529.3	554.8	589.8	648.2	690.6
22.5°	480.5	507.1	544.2	608.9	658.8
25°	430.7	457.2	498.6	569.7	624.8
27.5°	380.8	407.4	454.0	531.5	591.9
30°	331.0	357.5	407.4	490.1	558.0
32.5°	281.1	309.8	361.7	451.9	524.0
35°	229.1	259.9	317.2	412.7	493.3
37.5°	181.4	210.0	274.8	378.7	462.5
40°	133.7	164.4	231.3	345.8	429.6
42.5°	87.0	119.9	192.0	309.8	392.5
45°	46.7	75.3	159.1	272.6	353.3
47.5°	25.5	41.4	128.4	233.4	312.9
50°	20.2	23.3	99.7	199.4	273.7
52.5°	17.0	19.1	71.1	167.6	230.2
55°	13.8	17.0	48.8	133.7	188.8
57.5°	11.7	14.9	38.2	104.0	147.5
60°	8.5	12.7	36.1	76.4	108.2
62.5°	6.4	13.8	31.8	53.0	71.1
65°	5.3	15.9	26.5	35.0	38.2
67.5°	4.2	17.0	23.3	22.3	22.3
70°	4.2	15.9	20.2	19.1	20.2
72.5°	4.2	17.0	18.0	17.0	18.0
75°	4.2	15.9	15.9	15.9	15.9
77.5°	4.2	14.9	14.9	13.8	13.8
80°	4.2	12.7	12.7	12.7	11.7
82.5°	4.2	11.7	11.7	11.7	9.5
85°	4.2	10.6	10.6	10.6	8.5
87.5°	3.2	9.5	10.6	9.5	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)