

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: P1059339

Luminaire Tested: S123RDR-S775D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059339
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-S775D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

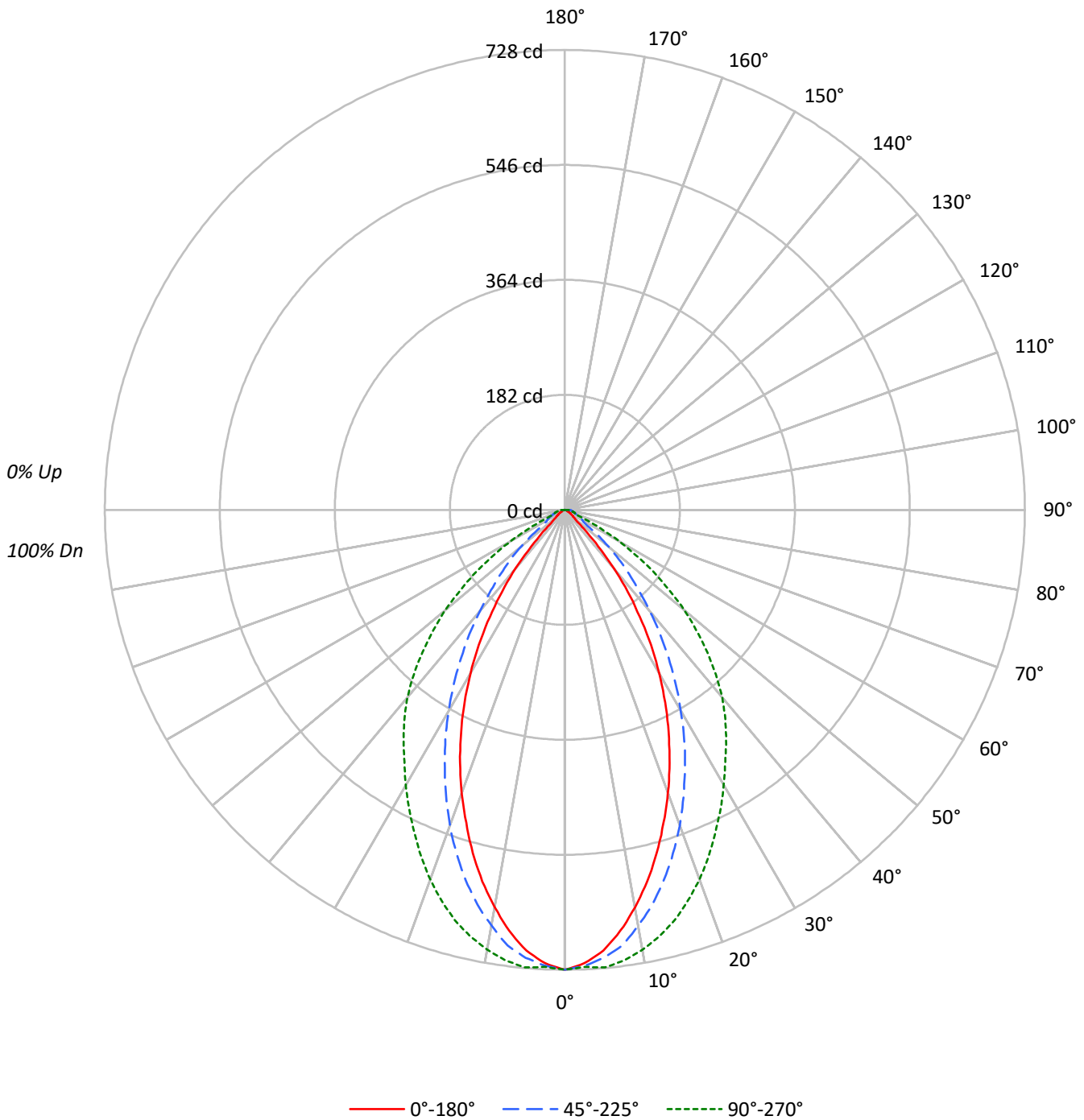
Lumens per Lamp: N/A
Luminaire Lumens: 873.9 lumens
Efficiency: N/A
Efficacy: 33.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	8547	8547	8547
5°	8253	8389	8569
10°	7619	7972	8429
15°	6838	7373	8175
20°	5964	6645	7781
25°	5032	5825	7300
30°	4046	4980	6822
35°	2962	4100	6376
40°	1847	3196	5938
45°	699	2383	5289
50°	332	1642	4509
55°	254	901	3486
60°	181	763	2292
65°	133	664	956
70°	130	625	625
75°	172	649	649
80°	257	778	710
85°	512	1293	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5289 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	7.6
10°-20°	171.3	19.6
20°-30°	212.1	24.3
30°-40°	190.1	21.8
40°-50°	124.7	14.3
50°-60°	62.4	7.1
60°-70°	24.3	2.8
70°-80°	13.7	1.6
80°-90°	8.5	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°	450.3	51.5
0°-40°	640.4	73.3
0°-60°	827.5	94.7
0°-90°	873.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	873.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	728	728	728	728	728	
5°	700	712	712	719	727	65
15°	562	585	606	647	672	157
25°	388	412	450	514	563	177
35°	207	234	286	372	445	129
45°	42	68	144	246	318	40
55°	12	15	44	120	170	11
65°	5	14	24	32	34	5
75°	4	14	14	14	14	4
85°	4	10	10	10	8	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	727.9	727.9	727.9	727.9	727.9
2.5°	718.4	728.9	722.2	723.2	724.1
5°	700.2	711.7	711.7	719.3	727.0
7.5°	672.5	685.8	695.4	708.8	719.3
10°	639.0	655.2	668.6	692.5	706.9
12.5°	602.6	622.7	639.9	671.5	691.6
15°	562.5	585.4	606.5	646.6	672.5
17.5°	519.4	542.4	570.1	617.0	648.5
20°	477.3	500.3	531.8	584.5	622.7
22.5°	433.3	457.2	490.7	549.1	594.0
25°	388.4	412.3	449.6	513.7	563.4
27.5°	343.4	367.3	409.4	479.2	533.8
30°	298.4	322.4	367.3	441.9	503.1
32.5°	253.5	279.3	326.2	407.5	472.5
35°	206.6	234.4	286.0	372.1	444.8
37.5°	163.6	189.4	247.7	341.5	417.1
40°	120.5	148.3	208.5	311.8	387.4
42.5°	78.4	108.1	173.1	279.3	353.9
45°	42.1	67.9	143.5	245.8	318.5
47.5°	23.0	37.3	115.7	210.4	282.2
50°	18.2	21.0	89.9	179.8	246.8
52.5°	15.3	17.2	64.1	151.1	207.6
55°	12.4	15.3	44.0	120.5	170.3
57.5°	10.5	13.4	34.4	93.7	133.0
60°	7.7	11.5	32.5	68.9	97.6
62.5°	5.7	12.4	28.7	47.8	64.1
65°	4.8	14.3	23.9	31.6	34.4
67.5°	3.8	15.3	21.0	20.1	20.1
70°	3.8	14.3	18.2	17.2	18.2
72.5°	3.8	15.3	16.3	15.3	16.3
75°	3.8	14.3	14.3	14.3	14.3
77.5°	3.8	13.4	13.4	12.4	12.4
80°	3.8	11.5	11.5	11.5	10.5
82.5°	3.8	10.5	10.5	10.5	8.6
85°	3.8	9.6	9.6	9.6	7.7
87.5°	2.9	8.6	9.6	8.6	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)