

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: P1059393

Luminaire Tested: S123RDR-S775D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059393
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-S775D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

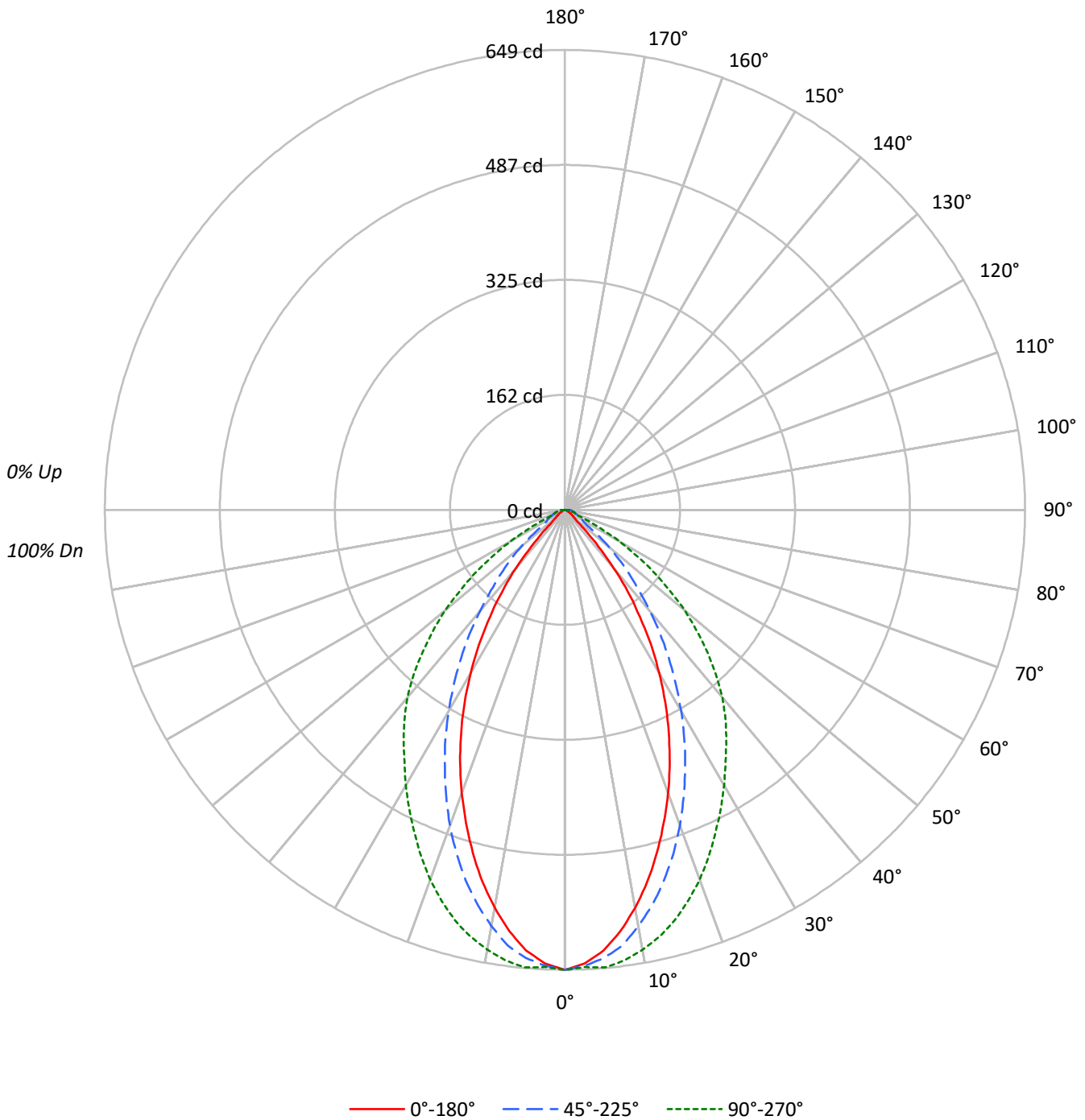
Lumens per Lamp: N/A
Luminaire Lumens: 779.3 lumens
Efficiency: N/A
Efficacy: 30.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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°	7622	7622	7622
5°	7360	7480	7642
10°	6794	7109	7515
15°	6097	6574	7289
20°	5318	5926	6939
25°	4487	5194	6509
30°	3608	4441	6084
35°	2640	3655	5685
40°	1648	2850	5296
45°	623	2124	4716
50°	296	1465	4021
55°	227	803	3108
60°	160	681	2043
65°	119	592	853
70°	117	556	556
75°	154	581	581
80°	230	690	636
85°	458	1145	916

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4716 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	7.6
10°-20°	152.8	19.6
20°-30°	189.1	24.3
30°-40°	169.6	21.8
40°-50°	111.2	14.3
50°-60°	55.6	7.1
60°-70°	21.7	2.8
70°-80°	12.2	1.6
80°-90°	7.5	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°	401.5	51.5
0°-40°	571.1	73.3
0°-60°	737.9	94.7
0°-90°	779.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	779.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	649	649	649	649	649	
5°	624	635	635	641	648	58
15°	502	522	541	577	600	140
25°	346	368	401	458	502	158
35°	184	209	255	332	397	115
45°	38	61	128	219	284	36
55°	11	14	39	108	152	10
65°	4	13	21	28	31	4
75°	3	13	13	13	13	4
85°	3	8	8	8	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	649.1	649.1	649.1	649.1	649.1
2.5°	640.6	650.0	644.0	644.8	645.7
5°	624.4	634.6	634.6	641.4	648.3
7.5°	599.6	611.6	620.1	632.0	641.4
10°	569.8	584.3	596.2	617.5	630.3
12.5°	537.4	555.3	570.6	598.8	616.7
15°	501.5	522.0	540.8	576.6	599.6
17.5°	463.2	483.6	508.4	550.2	578.3
20°	425.6	446.1	474.2	521.2	555.3
22.5°	386.4	407.7	437.6	489.6	529.7
25°	346.3	367.6	400.9	458.0	502.4
27.5°	306.2	327.5	365.1	427.3	476.0
30°	266.1	287.4	327.5	394.1	448.7
32.5°	226.0	249.1	290.9	363.4	421.4
35°	184.2	209.0	255.0	331.8	396.6
37.5°	145.9	168.9	220.9	304.5	371.9
40°	107.5	132.2	185.9	278.1	345.5
42.5°	69.9	96.4	154.4	249.1	315.6
45°	37.5	60.6	127.9	219.2	284.0
47.5°	20.5	33.3	103.2	187.7	251.6
50°	16.2	18.8	80.2	160.4	220.1
52.5°	13.6	15.4	57.1	134.8	185.1
55°	11.1	13.6	39.2	107.5	151.8
57.5°	9.4	11.9	30.7	83.6	118.6
60°	6.8	10.2	29.0	61.4	87.0
62.5°	5.1	11.1	25.6	42.6	57.1
65°	4.3	12.8	21.3	28.1	30.7
67.5°	3.4	13.6	18.8	17.9	17.9
70°	3.4	12.8	16.2	15.4	16.2
72.5°	3.4	13.6	14.5	13.6	14.5
75°	3.4	12.8	12.8	12.8	12.8
77.5°	3.4	11.9	11.9	11.1	11.1
80°	3.4	10.2	10.2	10.2	9.4
82.5°	3.4	9.4	9.4	9.4	7.7
85°	3.4	8.5	8.5	8.5	6.8
87.5°	2.6	7.7	8.5	7.7	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)