

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: P1055671

Luminaire Tested: S123R3DR-S775D930-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055671
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S775D930-X4F0-XX-UDD-FLL-B
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

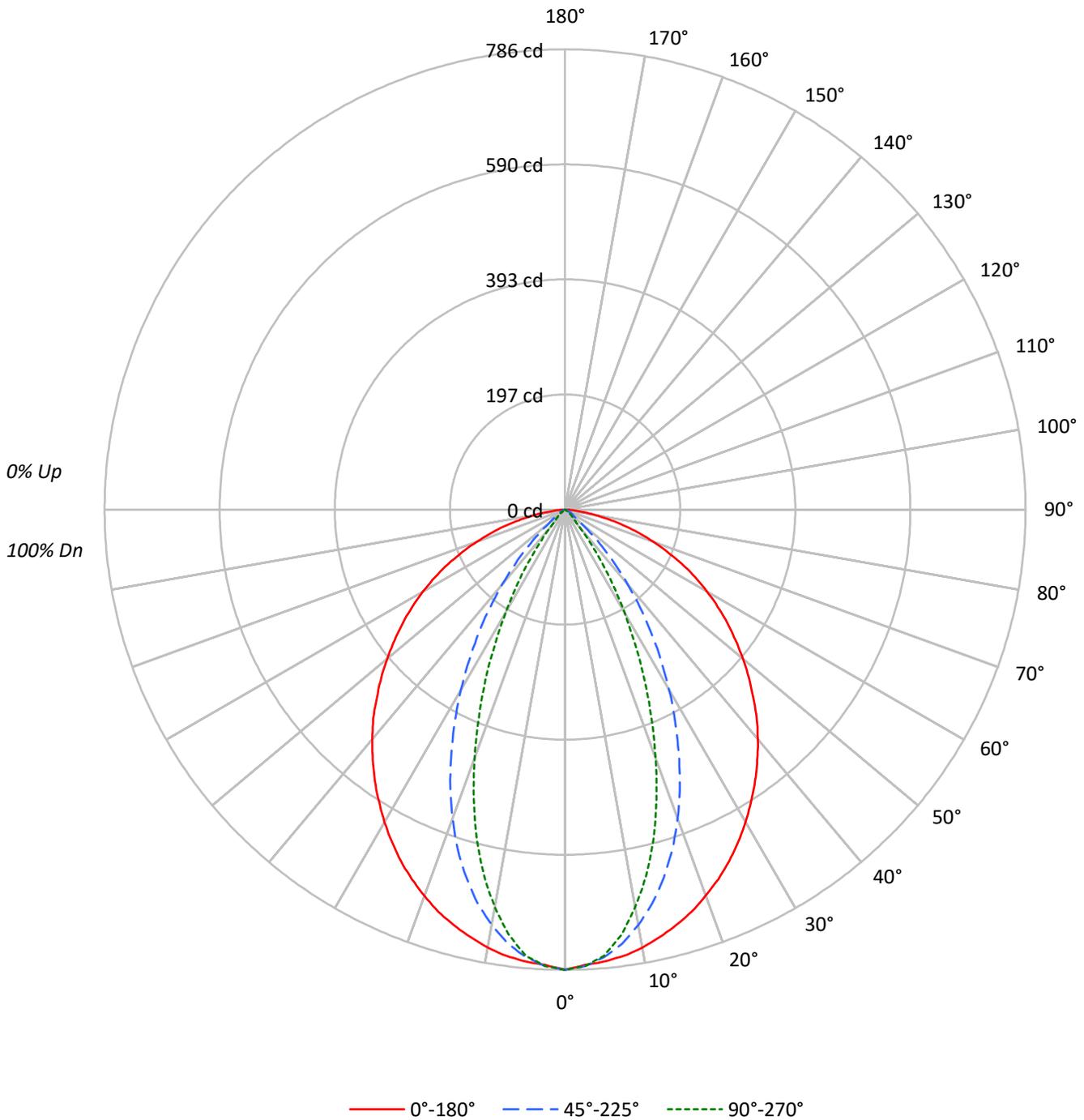
Lumens per Lamp: N/A
Luminaire Lumens: 919.8 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	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	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	81	70	63	58	79	69	62	57	67	61	57	66	61	56	64	60	56	54
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9475	9475	9475
5°	9373	9285	9255
10°	9303	8813	8444
15°	9169	8121	7276
20°	9007	7207	5795
25°	8817	6106	4273
30°	8581	4949	2804
35°	8328	3768	1537
40°	8058	2605	526
45°	7743	1516	305
50°	7431	596	184
55°	7111	376	86
60°	6742	236	39
65°	6279	117	23
70°	5633	56	28
75°	4784	37	37
80°	3569	56	0
85°	1356	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7743 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.1	7.8
10°-20°	182.9	19.9
20°-30°	218.1	23.7
30°-40°	185.0	20.1
40°-50°	125.8	13.7
50°-60°	77.9	8.5
60°-70°	39.5	4.3
70°-80°	16.1	1.7
80°-90°	2.5	0.3
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°	473.1	51.4
0°-40°	658.1	71.5
0°-60°	861.8	93.7
0°-90°	919.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	919.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	786	786	786	786	786	
5°	774	782	767	762	765	74
15°	735	716	651	599	583	207
25°	663	601	459	355	321	305
35°	566	454	256	138	104	354
45°	454	298	89	22	18	351
55°	338	150	18	6	4	302
65°	220	37	4	1	1	217
75°	103	6	1	1	1	109
85°	10	0	0	1	0	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	785.9	785.9	785.9	785.9	785.9
2.5°	778.6	789.2	780.2	779.4	780.2
5°	774.5	781.9	767.2	761.5	764.7
7.5°	768.8	772.1	747.6	733.0	733.0
10°	759.9	757.4	719.9	695.4	689.7
12.5°	747.6	737.8	688.9	650.6	640.0
15°	734.6	715.8	650.6	599.2	582.9
17.5°	719.9	691.4	609.0	542.2	518.5
20°	702.0	663.7	561.7	480.2	451.7
22.5°	683.2	633.5	512.0	416.6	384.8
25°	662.8	600.9	459.0	354.7	321.2
27.5°	640.0	566.6	406.8	295.1	258.4
30°	616.4	530.8	355.5	238.1	201.4
32.5°	591.1	493.3	304.1	185.9	151.6
35°	565.8	454.1	256.0	137.8	104.4
37.5°	538.9	415.0	209.5	95.4	66.0
40°	512.0	376.7	165.5	60.3	33.4
42.5°	484.3	336.7	125.6	30.2	22.8
45°	454.1	297.6	88.9	22.0	17.9
47.5°	425.6	260.1	58.7	17.9	13.9
50°	396.2	222.6	31.8	13.0	9.8
52.5°	366.9	186.7	22.8	9.8	6.5
55°	338.3	150.0	17.9	6.5	4.1
57.5°	309.0	118.2	13.9	4.1	2.4
60°	279.6	87.2	9.8	2.4	1.6
62.5°	250.3	60.3	6.5	1.6	0.8
65°	220.1	36.7	4.1	0.8	0.8
67.5°	189.1	25.3	2.4	0.8	0.8
70°	159.8	17.9	1.6	0.8	0.8
72.5°	130.4	11.4	0.8	0.8	0.0
75°	102.7	6.5	0.8	0.8	0.8
77.5°	75.8	2.4	0.8	0.8	0.0
80°	51.4	0.8	0.8	0.8	0.0
82.5°	28.5	0.0	0.8	0.8	0.0
85°	9.8	0.0	0.0	0.8	0.0
87.5°	0.0	0.0	0.0	0.8	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)