

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: P1055679

Luminaire Tested: S123R3DR-S775D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055679  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123R3DR-S775D940-X4F0-XX-UDD-FLL-W  
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

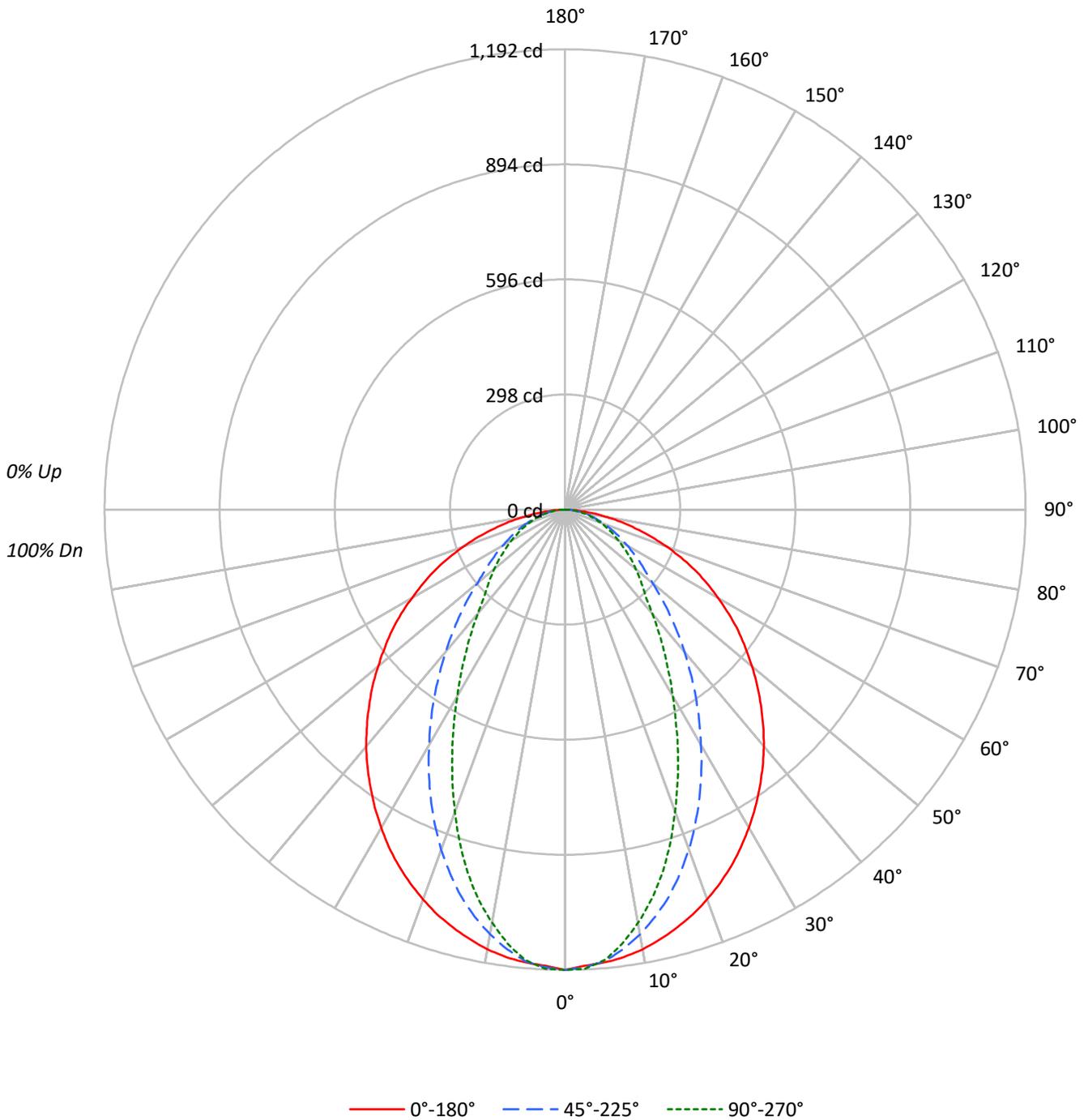
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2091.0 lumens  
Efficiency: N/A  
Efficacy: 79.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02  
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14374	14374	14374
5°	14246	14213	14180
10°	14158	13678	13307
15°	13991	12956	12153
20°	13786	12024	10686
25°	13546	10948	9194
30°	13246	9795	7771
35°	12927	8662	6563
40°	12603	7564	5515
45°	12223	6522	4864
50°	11841	5552	4466
55°	11489	4948	4124
60°	11010	4473	3848
65°	10558	4097	3612
70°	9838	3772	3395
75°	8804	3489	3200
80°	7554	3222	2972
85°	5298	2960	2836

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12223 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.5	5.3
10°-20°	292.4	14.0
20°-30°	385.2	18.4
30°-40°	390.9	18.7
40°-50°	339.8	16.3
50°-60°	266.2	12.7
60°-70°	180.9	8.7
70°-80°	98.0	4.7
80°-90°	27.0	1.3
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°	788.1	37.7
0°-40°	1179.0	56.4
0°-60°	1785.1	85.4
0°-90°	2091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2091.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1192	1192	1192	1192	1192	
5°	1177	1191	1174	1164	1172	112
15°	1121	1105	1038	987	974	316
25°	1018	957	823	720	691	469
35°	878	774	588	476	446	549
45°	717	575	382	295	285	553
55°	547	380	235	201	196	488
65°	370	205	144	128	127	365
75°	189	94	75	70	69	202
85°	38	23	21	20	20	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1192.2	1192.2	1192.2	1192.2	1192.2
2.5°	1182.4	1197.6	1186.0	1186.9	1190.4
5°	1177.1	1191.3	1174.4	1163.7	1171.7
7.5°	1169.0	1179.7	1148.5	1131.6	1134.3
10°	1156.5	1160.1	1117.3	1090.6	1087.0
12.5°	1139.6	1133.4	1079.9	1040.6	1034.4
15°	1120.9	1104.8	1038.0	987.1	973.7
17.5°	1099.5	1072.7	988.9	926.5	906.0
20°	1074.5	1037.1	937.2	857.8	832.9
22.5°	1047.8	999.6	881.0	787.4	761.5
25°	1018.3	956.8	823.0	720.5	691.1
27.5°	986.2	914.0	764.2	654.5	621.5
30°	951.5	869.4	703.6	590.3	558.2
32.5°	915.8	822.2	645.6	530.6	499.4
35°	878.3	774.0	588.5	476.2	445.9
37.5°	840.0	725.0	533.2	424.5	395.9
40°	800.8	675.0	480.6	376.3	350.4
42.5°	758.8	625.1	429.8	330.8	311.2
45°	716.9	575.2	382.5	295.2	285.3
47.5°	675.0	524.3	338.0	270.2	261.3
50°	631.3	475.3	296.0	247.0	238.1
52.5°	588.5	427.1	261.3	224.7	218.5
55°	546.6	379.9	235.4	200.6	196.2
57.5°	502.9	333.5	209.6	181.9	176.6
60°	456.6	288.9	185.5	162.3	159.6
62.5°	414.6	247.0	164.1	145.3	142.7
65°	370.1	205.1	143.6	128.4	126.6
67.5°	324.6	170.3	124.8	112.4	111.5
70°	279.1	143.6	107.0	97.2	96.3
72.5°	234.5	118.6	90.1	83.8	82.0
75°	189.0	94.5	74.9	69.6	68.7
77.5°	148.0	73.1	59.7	56.2	55.3
80°	108.8	54.4	46.4	43.7	42.8
82.5°	71.3	37.5	33.0	31.2	31.2
85°	38.3	23.2	21.4	19.6	20.5
87.5°	13.4	9.8	9.8	8.9	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)