

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: P1055674

Luminaire Tested: S123R3DR-S775D935-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055674  
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-S775D935-X4F0-XX-UDD-FLL-B  
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

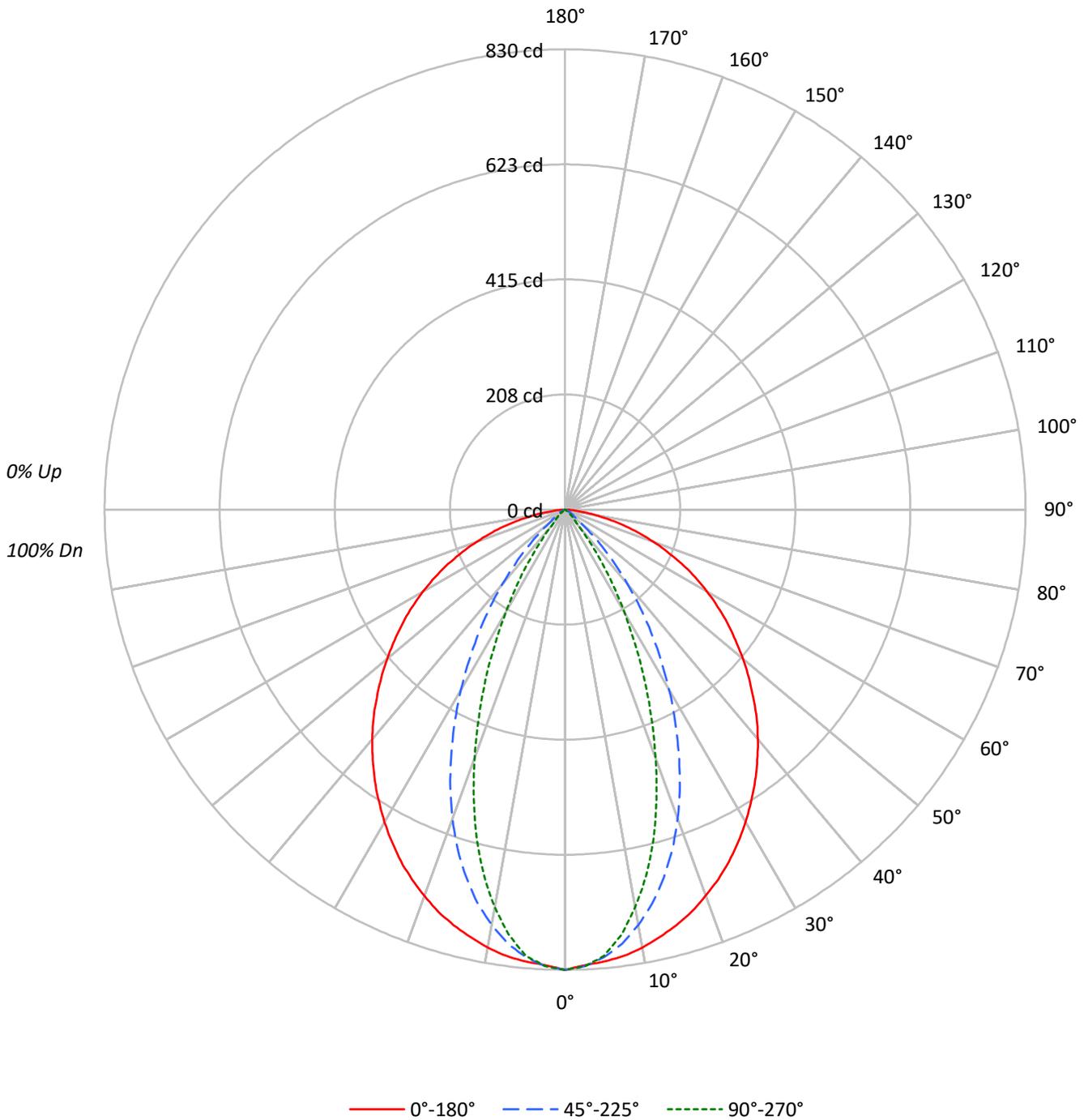
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 971.5 lumens  
Efficiency: N/A  
Efficacy: 36.8 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	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	57	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°	10007	10007	10007
5°	9899	9805	9774
10°	9823	9308	8917
15°	9683	8576	7684
20°	9511	7611	6120
25°	9312	6448	4512
30°	9062	5226	2961
35°	8794	3980	1622
40°	8510	2751	556
45°	8177	1599	322
50°	7848	630	193
55°	7510	397	90
60°	7121	248	41
65°	6633	123	26
70°	5950	60	32
75°	5054	42	42
80°	3763	62	0
85°	1425	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8177 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.1	7.8
10°-20°	193.1	19.9
20°-30°	230.4	23.7
30°-40°	195.4	20.1
40°-50°	132.8	13.7
50°-60°	82.3	8.5
60°-70°	41.7	4.3
70°-80°	17.0	1.8
80°-90°	2.6	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°	499.6	51.4
0°-40°	695.0	71.5
0°-60°	910.1	93.7
0°-90°	971.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	971.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	830	830	830	830	830	
5°	818	826	810	804	808	78
15°	776	756	687	633	616	219
25°	700	635	485	374	339	322
35°	598	480	270	146	110	373
45°	480	314	94	23	19	370
55°	357	158	19	7	4	319
65°	232	39	4	1	1	230
75°	108	7	1	1	1	115
85°	10	0	0	1	0	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	830.0	830.0	830.0	830.0	830.0
2.5°	822.3	833.4	824.0	823.1	824.0
5°	817.9	825.7	810.2	804.2	807.6
7.5°	811.9	815.4	789.5	774.0	774.0
10°	802.4	799.9	760.3	734.4	728.4
12.5°	789.5	779.2	727.5	687.1	675.9
15°	775.8	756.0	687.1	632.8	615.6
17.5°	760.3	730.1	643.2	572.6	547.6
20°	741.3	700.9	593.2	507.1	477.0
22.5°	721.5	669.0	540.7	440.0	406.4
25°	700.0	634.6	484.7	374.5	339.2
27.5°	675.9	598.4	429.6	311.7	272.9
30°	650.9	560.5	375.4	251.4	212.7
32.5°	624.2	520.9	321.2	196.3	160.1
35°	597.5	479.6	270.4	145.5	110.2
37.5°	569.1	438.2	221.3	100.7	69.7
40°	540.7	397.8	174.8	63.7	35.3
42.5°	511.4	355.6	132.6	31.9	24.1
45°	479.6	314.3	93.8	23.2	18.9
47.5°	449.4	274.7	62.0	18.9	14.6
50°	418.4	235.1	33.6	13.8	10.3
52.5°	387.4	197.2	24.1	10.3	6.9
55°	357.3	158.4	18.9	6.9	4.3
57.5°	326.3	124.8	14.6	4.3	2.6
60°	295.3	92.1	10.3	2.6	1.7
62.5°	264.3	63.7	6.9	1.7	0.9
65°	232.5	38.7	4.3	0.9	0.9
67.5°	199.8	26.7	2.6	0.9	0.9
70°	168.8	18.9	1.7	0.9	0.9
72.5°	137.8	12.1	0.9	0.9	0.0
75°	108.5	6.9	0.9	0.9	0.9
77.5°	80.1	2.6	0.9	0.9	0.0
80°	54.2	0.9	0.9	0.9	0.0
82.5°	30.1	0.0	0.9	0.9	0.0
85°	10.3	0.0	0.0	0.9	0.0
87.5°	0.0	0.0	0.0	0.9	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)