

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: P1056481

Luminaire Tested: S125R3DR-S850D930-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056481  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S850D930-X4F0-XX-UDD-FLL-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

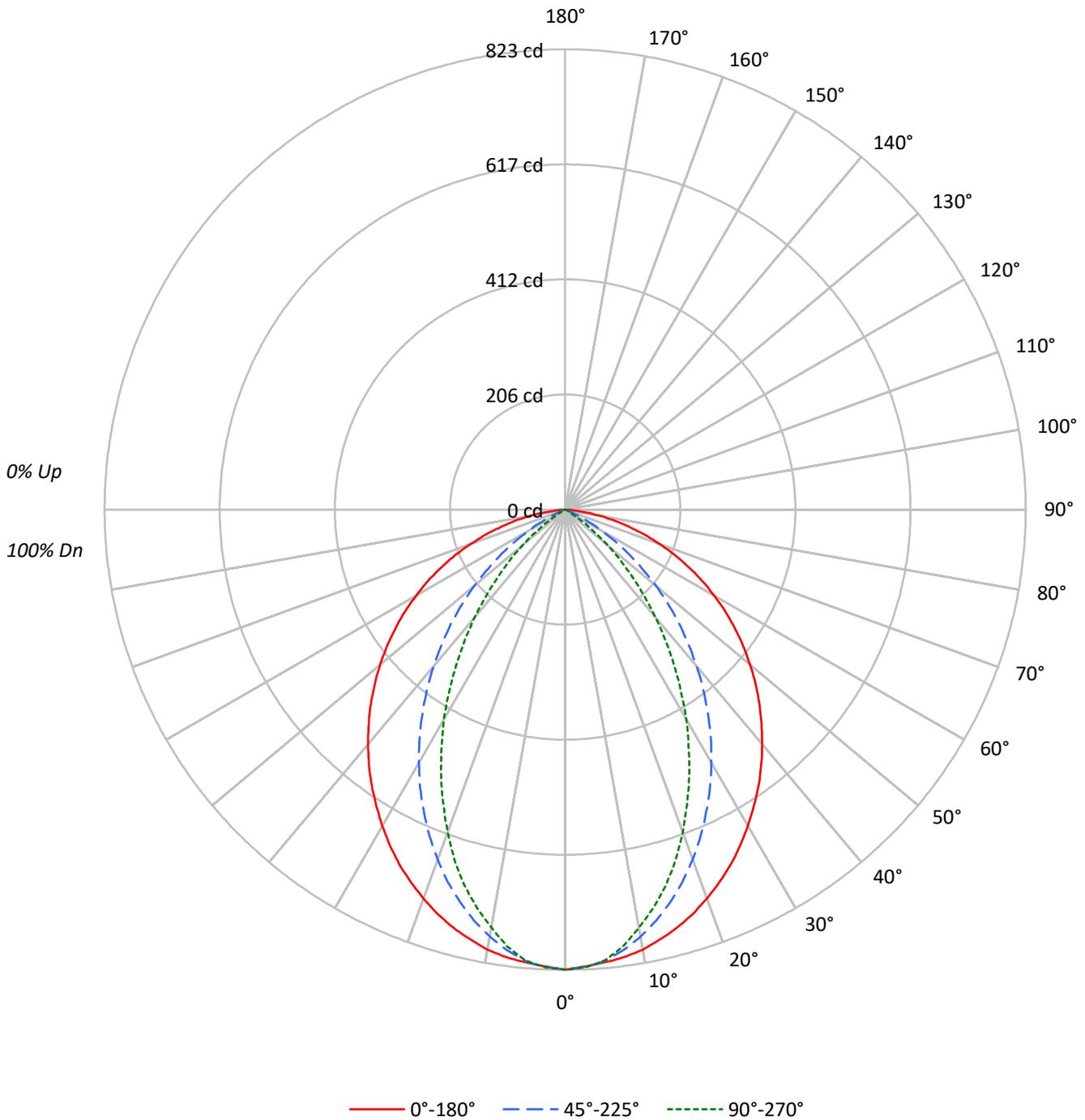
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1333.4 lumens  
Efficiency: N/A  
Efficacy: 50.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07  
Luminous Opening: Rectangular (W 0.39' 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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	5815	5815	5815
5°	5769	5751	5745
10°	5736	5566	5448
15°	5662	5316	5090
20°	5569	5011	4618
25°	5462	4655	4096
30°	5331	4266	3540
35°	5200	3834	2927
40°	5056	3371	2317
45°	4907	2877	1680
50°	4743	2323	1085
55°	4561	1698	482
60°	4346	1049	139
65°	4078	381	82
70°	3692	134	33
75°	3207	44	22
80°	2455	33	0
85°	1127	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4907 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.4	5.7
10°-20°	205.2	15.4
20°-30°	277.6	20.8
30°-40°	285.1	21.4
40°-50°	236.2	17.7
50°-60°	151.7	11.4
60°-70°	73.3	5.5
70°-80°	24.8	1.9
80°-90°	3.2	0.2
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°	559.1	41.9
0°-40°	844.3	63.3
0°-60°	1232.1	92.4
0°-90°	1333.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1333.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	823	823	823	823	823	
5°	813	819	810	806	810	77
15°	774	764	726	701	696	218
25°	700	666	597	543	525	322
35°	602	545	444	367	339	377
45°	491	410	288	199	168	378
55°	370	272	138	60	39	331
65°	244	134	23	6	5	241
75°	117	25	2	1	1	125
85°	14	0	0	0	0	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	822.6	822.6	822.6	822.6	822.6
2.5°	817.7	824.3	818.6	817.7	819.4
5°	812.9	819.4	810.4	805.5	809.6
7.5°	807.1	810.4	794.9	786.8	788.4
10°	799.0	798.2	775.4	761.5	759.0
12.5°	786.8	782.7	752.5	733.0	728.9
15°	773.7	763.9	726.4	701.2	695.5
17.5°	758.2	742.7	697.9	665.3	657.1
20°	740.3	719.1	666.1	626.2	613.9
22.5°	720.7	693.8	632.7	585.4	569.1
25°	700.3	666.1	596.8	543.0	525.1
27.5°	677.5	637.6	560.9	499.8	477.8
30°	653.1	607.4	522.6	455.8	433.7
32.5°	627.8	577.2	484.3	411.7	384.8
35°	602.5	544.6	444.3	366.9	339.2
37.5°	575.6	512.0	405.2	324.5	294.3
40°	547.9	478.6	365.3	280.5	251.1
42.5°	519.3	444.3	325.3	238.9	208.7
45°	490.8	410.1	287.8	198.9	168.0
47.5°	461.5	375.0	248.7	159.8	132.9
50°	431.3	340.8	211.2	124.7	98.7
52.5°	401.1	305.7	172.8	90.5	66.9
55°	370.1	271.5	137.8	60.3	39.1
57.5°	339.2	236.4	105.2	33.4	14.7
60°	307.4	203.0	74.2	11.4	9.8
62.5°	276.4	167.1	46.5	9.0	7.3
65°	243.8	134.5	22.8	6.5	4.9
67.5°	212.0	103.5	9.8	4.1	2.4
70°	178.6	75.0	6.5	2.4	1.6
72.5°	147.6	48.1	4.1	1.6	0.8
75°	117.4	25.3	1.6	0.8	0.8
77.5°	88.1	10.6	0.8	0.8	0.8
80°	60.3	4.9	0.8	0.8	0.0
82.5°	35.9	1.6	0.8	0.8	0.0
85°	13.9	0.0	0.0	0.0	0.0
87.5°	0.8	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)