

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: P1056480

Luminaire Tested: S125R3DR-S850D927-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056480  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S850D927-X4F0-XX-UDD-FLL-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

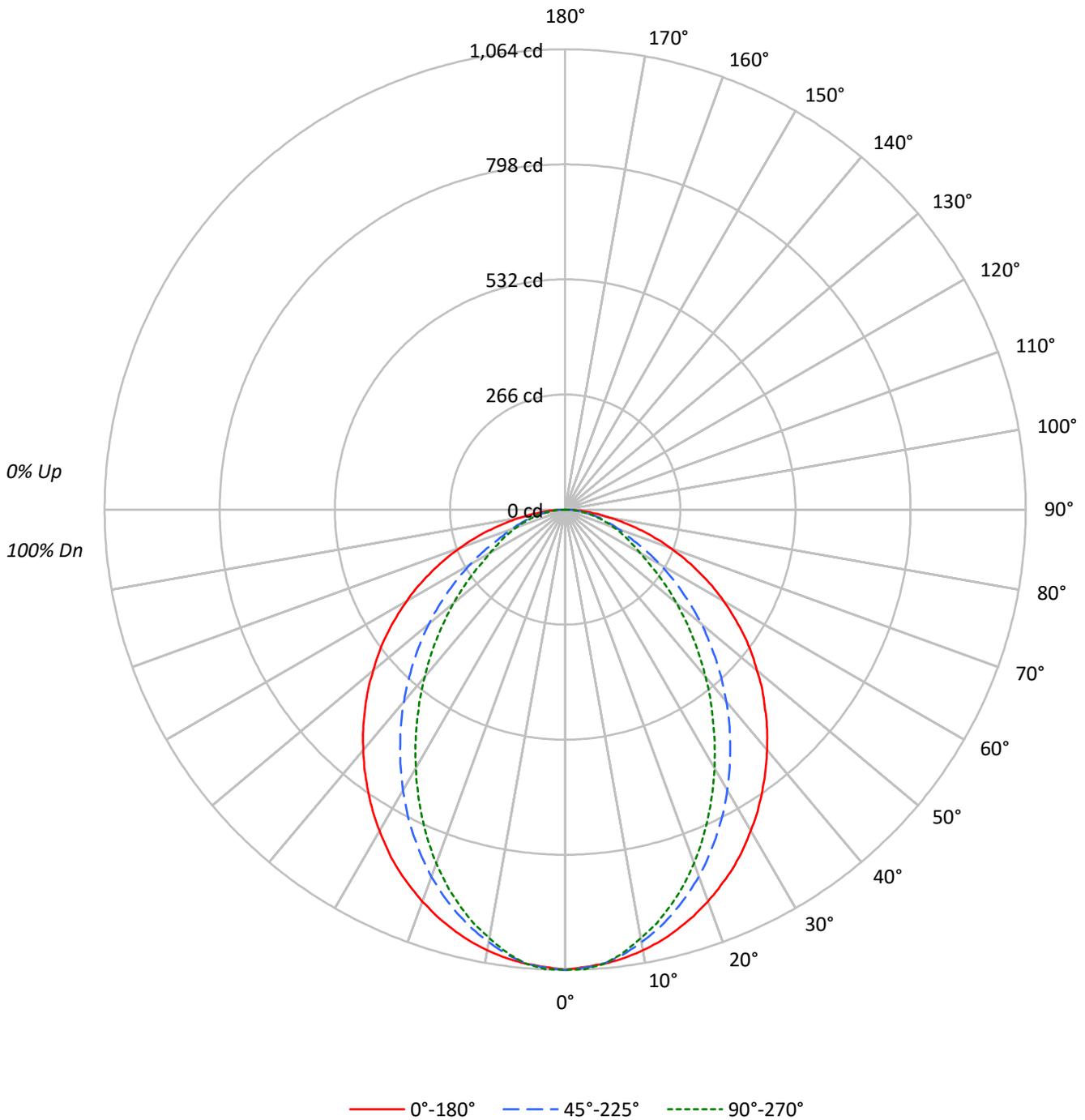
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2254.9 lumens  
Efficiency: N/A  
Efficacy: 85.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17  
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																	
RC	80									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	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	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86																											
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73																											
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																											
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55																											
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48																											
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43																											
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38																											
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34																											
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31																											
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28																											

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

	0°	45°	90°
0°	7521	7521	7521
5°	7477	7471	7477
10°	7427	7290	7222
15°	7352	7068	6923
20°	7253	6794	6550
25°	7143	6469	6105
30°	7003	6117	5632
35°	6851	5736	5141
40°	6696	5344	4657
45°	6533	4934	4174
50°	6360	4514	3694
55°	6199	4052	3212
60°	5981	3562	2822
65°	5684	3021	2625
70°	5339	2701	2456
75°	4826	2488	2316
80°	4193	2259	2162
85°	3277	1995	1995

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6533 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.5	4.4
10°-20°	273.3	12.1
20°-30°	386.1	17.1
30°-40°	425.0	18.8
40°-50°	396.5	17.6
50°-60°	316.5	14.0
60°-70°	213.0	9.4
70°-80°	113.4	5.0
80°-90°	31.5	1.4
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°	758.9	33.7
0°-40°	1184.0	52.5
0°-60°	1897.0	84.1
0°-90°	2254.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2254.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1054	1062	1053	1050	1054	100
15°	1004	999	966	949	946	283
25°	916	888	829	793	783	422
35°	794	747	665	612	596	497
45°	654	592	494	433	418	505
55°	503	427	329	276	261	449
65°	340	265	181	160	157	337
75°	177	117	91	86	85	188
85°	40	28	25	25	25	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1063.9	1063.9	1063.9	1063.9	1063.9
2.5°	1058.4	1067.1	1059.9	1061.5	1063.1
5°	1053.6	1062.3	1052.8	1049.6	1053.6
7.5°	1045.7	1052.8	1037.0	1029.8	1033.0
10°	1034.6	1039.3	1015.6	1006.1	1006.1
12.5°	1021.1	1021.1	992.6	979.1	979.1
15°	1004.5	998.9	965.7	949.0	945.9
17.5°	985.5	975.2	935.6	914.2	910.2
20°	964.1	947.4	903.1	875.4	870.6
22.5°	940.3	918.9	867.4	833.4	827.8
25°	915.8	888.0	829.4	793.0	782.7
27.5°	888.0	854.8	790.6	749.4	736.7
30°	857.9	819.9	749.4	703.5	690.0
32.5°	827.0	784.3	707.4	658.3	643.3
35°	793.8	747.0	664.6	612.4	595.7
37.5°	760.5	709.8	622.7	568.0	550.6
40°	725.6	670.2	579.1	522.8	504.6
42.5°	690.8	631.4	536.3	479.3	460.3
45°	653.5	591.8	493.5	433.3	417.5
47.5°	617.9	551.4	451.5	392.9	375.5
50°	578.3	509.4	410.4	351.7	335.9
52.5°	541.9	468.2	369.2	314.5	297.9
55°	503.0	427.0	328.8	276.5	260.6
57.5°	462.6	385.8	289.9	240.8	225.8
60°	423.0	344.6	251.9	206.8	199.6
62.5°	382.6	305.8	216.3	181.4	176.7
65°	339.8	265.4	180.6	160.0	156.9
67.5°	299.4	226.6	152.1	140.2	137.0
70°	258.3	187.7	130.7	120.4	118.8
72.5°	217.8	150.5	110.1	103.0	101.4
75°	176.7	117.2	91.1	85.6	84.8
77.5°	138.6	87.9	72.1	69.7	68.1
80°	103.0	65.8	55.5	53.9	53.1
82.5°	70.5	45.2	39.6	39.6	38.0
85°	40.4	27.7	24.6	25.3	24.6
87.5°	15.1	11.9	11.1	11.9	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)