

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: P1056479

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056479  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)  
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-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

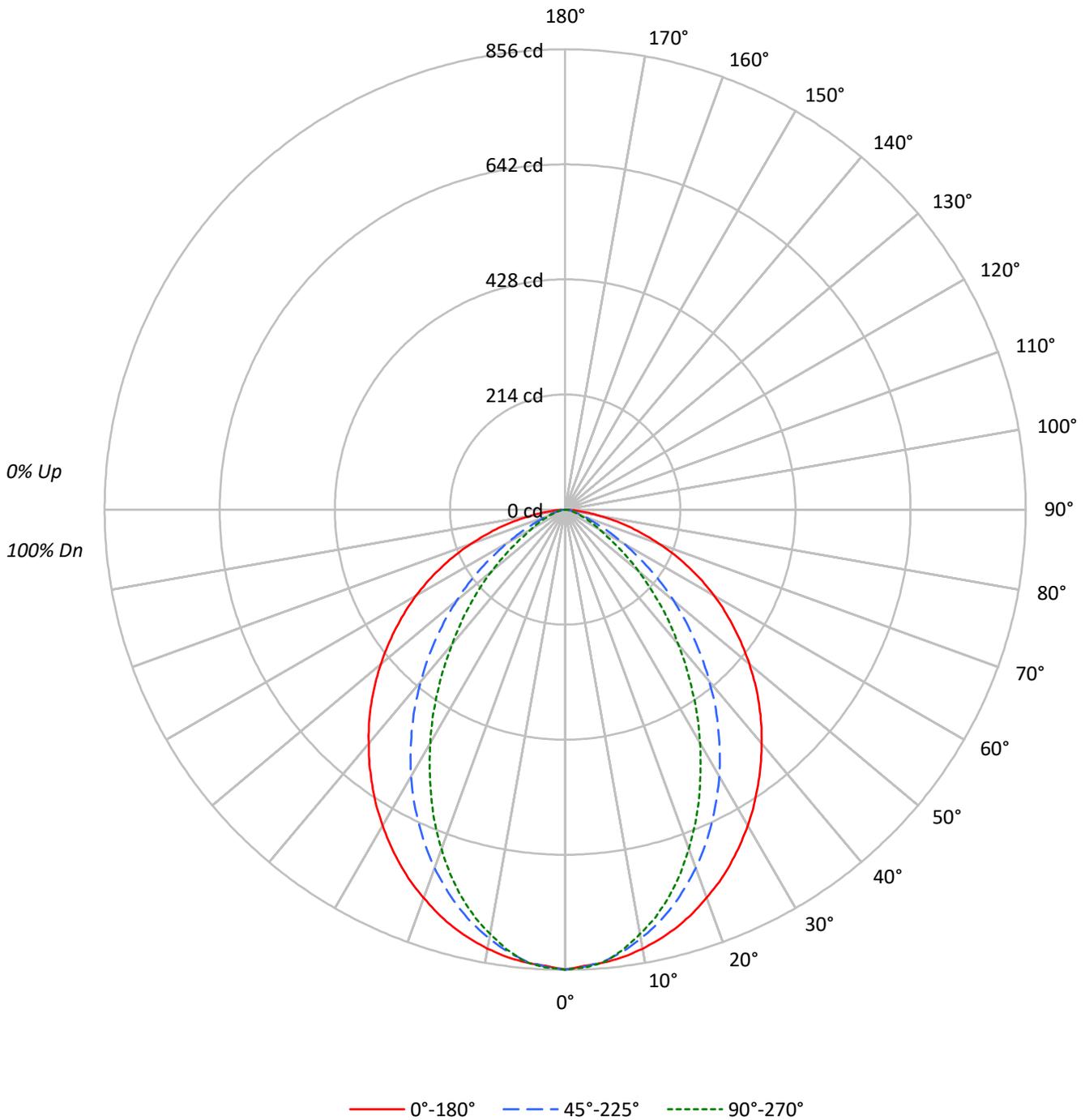
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1546.3 lumens  
Efficiency: N/A  
Efficacy: 58.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59				59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47				47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35				35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32

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

	0°	45°	90°
0°	6049	6049	6049
5°	5999	5982	5993
10°	5954	5817	5755
15°	5885	5606	5455
20°	5781	5340	5054
25°	5672	5023	4597
30°	5542	4675	4094
35°	5394	4280	3562
40°	5242	3845	3012
45°	5093	3390	2494
50°	4914	2884	1960
55°	4725	2343	1426
60°	4513	1748	1019
65°	4240	1153	795
70°	3832	802	556
75°	3332	519	432
80°	2614	387	354
85°	1346	324	260

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5093 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.7	5.2
10°-20°	216.6	14.0
20°-30°	299.6	19.4
30°-40°	317.4	20.5
40°-50°	277.0	17.9
50°-60°	197.0	12.7
60°-70°	109.6	7.1
70°-80°	42.1	2.7
80°-90°	7.3	0.5
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°	595.9	38.5
0°-40°	913.3	59.1
0°-60°	1387.4	89.7
0°-90°	1546.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1546.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	845	852	843	840	844	80
15°	804	797	766	749	745	226
25°	727	703	644	604	589	335
35°	625	582	496	436	413	391
45°	509	448	339	271	250	393
55°	383	307	190	132	116	343
65°	254	166	69	51	48	250
75°	122	48	19	16	16	129
85°	17	5	4	3	3	25
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	855.6	855.6	855.6	855.6	855.6
2.5°	849.2	857.9	850.8	851.6	852.4
5°	845.3	851.6	842.9	840.5	844.5
7.5°	838.9	843.7	828.6	823.1	825.5
10°	829.4	831.0	810.4	802.5	801.7
12.5°	817.5	815.2	789.8	777.1	776.3
15°	804.1	796.9	766.0	749.4	745.4
17.5°	787.4	776.3	738.3	716.9	710.6
20°	768.4	753.4	709.8	682.1	671.8
22.5°	749.4	728.8	678.1	643.3	632.2
25°	727.2	702.7	644.0	604.4	589.4
27.5°	703.5	674.1	609.2	563.2	545.0
30°	678.9	644.8	572.7	521.3	501.5
32.5°	652.8	613.9	534.7	478.5	457.9
35°	625.0	582.3	495.9	435.7	412.7
37.5°	597.3	549.8	457.9	393.7	369.9
40°	568.0	516.5	416.7	350.9	326.4
42.5°	539.5	482.4	377.9	310.5	288.4
45°	509.4	448.4	339.1	270.9	249.5
47.5°	478.5	412.7	300.2	233.7	212.3
50°	446.8	377.9	262.2	197.3	178.2
52.5°	415.1	343.0	226.6	162.4	145.8
55°	383.4	307.4	190.1	131.5	115.7
57.5°	351.7	272.5	156.1	103.0	88.7
60°	319.2	236.9	123.6	76.0	72.1
62.5°	286.8	202.0	95.9	62.6	59.4
65°	253.5	166.4	68.9	50.7	47.5
67.5°	220.2	133.9	49.9	38.8	36.4
70°	185.4	102.2	38.8	29.3	26.9
72.5°	152.1	73.7	27.7	21.4	20.6
75°	122.0	47.5	19.0	15.8	15.8
77.5°	91.9	28.5	13.5	11.9	11.9
80°	64.2	16.6	9.5	8.7	8.7
82.5°	38.8	8.7	6.3	5.5	5.5
85°	16.6	4.8	4.0	3.2	3.2
87.5°	3.2	1.6	1.6	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)