

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: P1056488

Luminaire Tested: S125R3DR-S850D940-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056488  
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-S850D940-X4F0-XX-UDD-FLL-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

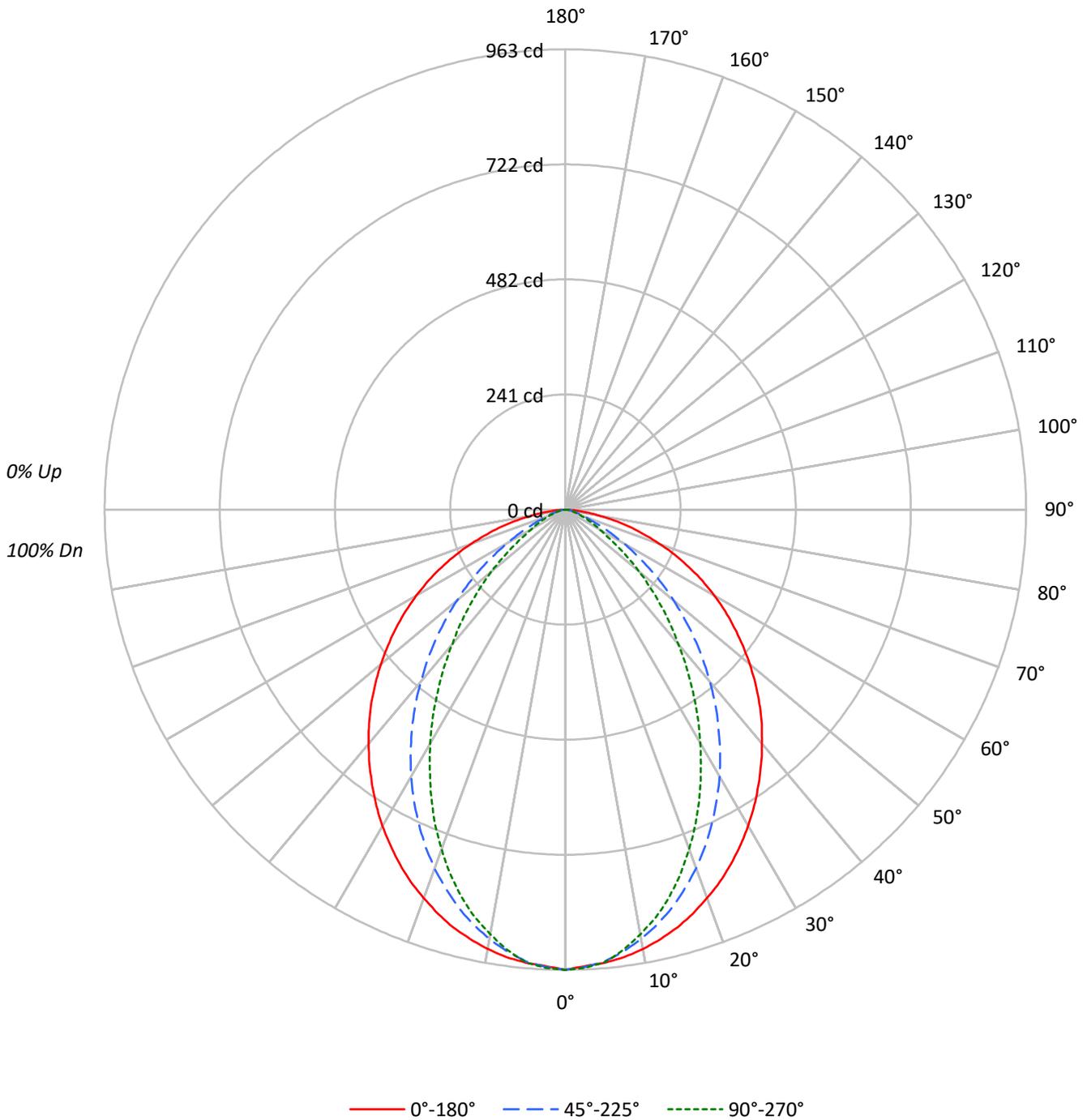
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1740.6 lumens  
Efficiency: N/A  
Efficacy: 65.9 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				
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35				
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				

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

	0°	45°	90°
0°	6808	6808	6808
5°	6752	6733	6746
10°	6702	6548	6478
15°	6624	6311	6141
20°	6507	6011	5689
25°	6385	5655	5175
30°	6238	5263	4608
35°	6072	4817	4010
40°	5901	4328	3391
45°	5733	3816	2808
50°	5531	3247	2206
55°	5319	2638	1605
60°	5081	1967	1147
65°	4772	1298	895
70°	4314	903	626
75°	3750	585	486
80°	2939	436	399
85°	1517	365	292

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5733 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.7	5.2
10°-20°	243.9	14.0
20°-30°	337.2	19.4
30°-40°	357.3	20.5
40°-50°	311.8	17.9
50°-60°	221.8	12.7
60°-70°	123.3	7.1
70°-80°	47.4	2.7
80°-90°	8.2	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°	670.8	38.5
0°-40°	1028.1	59.1
0°-60°	1561.7	89.7
0°-90°	1740.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1740.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	952	959	949	946	951	90
15°	905	897	862	844	839	255
25°	819	791	725	680	663	377
35°	704	655	558	490	465	440
45°	573	505	382	305	281	442
55°	432	346	214	148	130	386
65°	285	187	78	57	54	282
75°	137	54	21	18	18	146
85°	19	5	4	4	4	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	963.0	963.0	963.0	963.0	963.0
2.5°	955.9	965.7	957.7	958.6	959.5
5°	951.5	958.6	948.8	946.1	950.6
7.5°	944.3	949.7	932.7	926.5	929.2
10°	933.6	935.4	912.2	903.3	902.4
12.5°	920.2	917.6	889.0	874.8	873.9
15°	905.1	897.1	862.3	843.6	839.1
17.5°	886.4	873.9	831.1	807.0	799.9
20°	865.0	848.0	799.0	767.8	756.2
22.5°	843.6	820.4	763.3	724.1	711.6
25°	818.6	790.9	725.0	680.4	663.4
27.5°	791.8	758.8	685.7	634.0	613.5
30°	764.2	725.9	644.7	586.7	564.5
32.5°	734.8	691.1	601.9	538.6	515.4
35°	703.6	655.4	558.2	490.4	464.6
37.5°	672.3	618.8	515.4	443.2	416.4
40°	639.4	581.4	469.0	395.0	367.4
42.5°	607.3	543.1	425.3	349.6	324.6
45°	573.4	504.7	381.7	305.0	280.9
47.5°	538.6	464.6	338.0	263.1	239.0
50°	502.9	425.3	295.2	222.0	200.6
52.5°	467.3	386.1	255.0	182.8	164.1
55°	431.6	346.0	214.0	148.0	130.2
57.5°	395.9	306.7	175.7	115.9	99.9
60°	359.4	266.6	139.1	85.6	81.1
62.5°	322.8	227.4	107.9	70.4	66.9
65°	285.3	187.3	77.6	57.1	53.5
67.5°	247.9	150.7	56.2	43.7	41.0
70°	208.7	115.0	43.7	33.0	30.3
72.5°	171.2	82.9	31.2	24.1	23.2
75°	137.3	53.5	21.4	17.8	17.8
77.5°	103.4	32.1	15.2	13.4	13.4
80°	72.2	18.7	10.7	9.8	9.8
82.5°	43.7	9.8	7.1	6.2	6.2
85°	18.7	5.4	4.5	3.6	3.6
87.5°	3.6	1.8	1.8	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)