

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: P1056491

Luminaire Tested: S125R3DR-S850D950-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056491  
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-S850D950-X4F0-XX-UDD-FLL-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

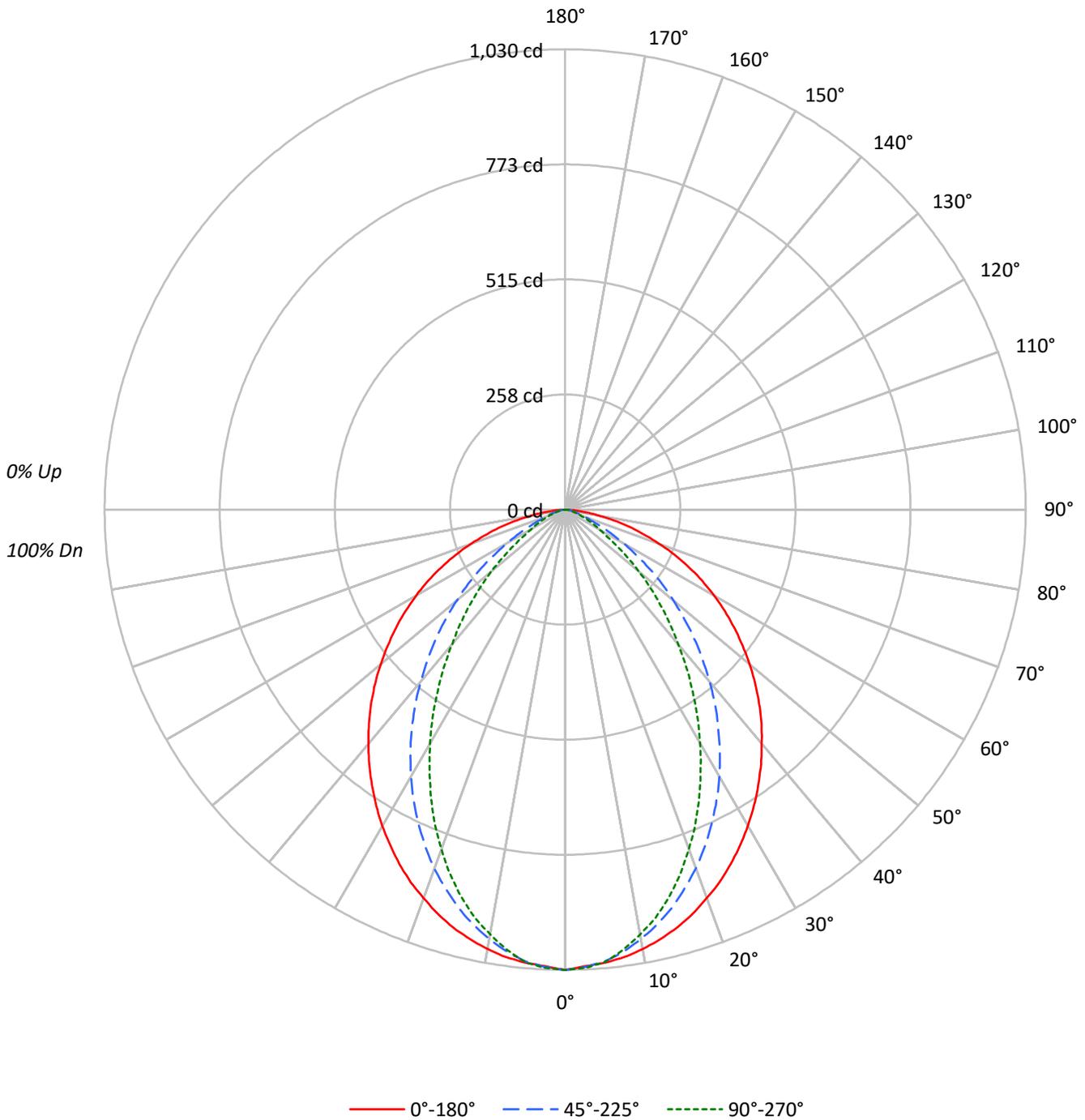
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1862.2 lumens  
Efficiency: N/A  
Efficacy: 70.5 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	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°	7284	7284	7284
5°	7223	7203	7217
10°	7170	7005	6930
15°	7087	6752	6570
20°	6962	6431	6086
25°	6831	6050	5537
30°	6674	5630	4930
35°	6496	5154	4289
40°	6312	4631	3627
45°	6132	4082	3004
50°	5918	3473	2360
55°	5690	2822	1717
60°	5436	2104	1227
65°	5107	1388	957
70°	4613	965	670
75°	4012	625	522
80°	3147	464	427
85°	1622	389	308

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6132 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.0	5.2
10°-20°	260.9	14.0
20°-30°	360.8	19.4
30°-40°	382.2	20.5
40°-50°	333.6	17.9
50°-60°	237.3	12.7
60°-70°	131.9	7.1
70°-80°	50.7	2.7
80°-90°	8.8	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°	717.6	38.5
0°-40°	1099.9	59.1
0°-60°	1670.8	89.7
0°-90°	1862.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1862.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1030	1030	1030	1030	1030	
5°	1018	1026	1015	1012	1017	97
15°	968	960	922	902	898	273
25°	876	846	776	728	710	403
35°	753	701	597	525	497	471
45°	613	540	408	326	300	473
55°	462	370	229	158	139	413
65°	305	200	83	61	57	302
75°	147	57	23	19	19	156
85°	20	6	5	4	4	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1030.3	1030.3	1030.3	1030.3	1030.3
2.5°	1022.7	1033.2	1024.6	1025.5	1026.5
5°	1017.9	1025.5	1015.1	1012.2	1017.0
7.5°	1010.3	1016.0	997.9	991.2	994.1
10°	998.8	1000.7	975.9	966.4	965.4
12.5°	984.5	981.7	951.1	935.9	934.9
15°	968.3	959.7	922.5	902.5	897.7
17.5°	948.3	934.9	889.1	863.4	855.7
20°	925.4	907.3	854.8	821.4	809.0
22.5°	902.5	877.7	816.6	774.6	761.3
25°	875.8	846.2	775.6	727.9	709.8
27.5°	847.2	811.9	733.6	678.3	656.4
30°	817.6	776.6	689.7	627.7	603.9
32.5°	786.1	739.3	643.9	576.2	551.4
35°	752.7	701.2	597.2	524.7	497.0
37.5°	719.3	662.1	551.4	474.1	445.5
40°	684.0	622.0	501.8	422.6	393.0
42.5°	649.7	581.0	455.1	374.0	347.3
45°	613.4	540.0	408.3	326.3	300.5
47.5°	576.2	497.0	361.6	281.4	255.7
50°	538.1	455.1	315.8	237.5	214.6
52.5°	499.9	413.1	272.8	195.6	175.5
55°	461.7	370.2	229.0	158.4	139.3
57.5°	423.6	328.2	187.9	124.0	106.8
60°	384.5	285.2	148.8	91.6	86.8
62.5°	345.3	243.3	115.4	75.4	71.5
65°	305.3	200.3	83.0	61.1	57.2
67.5°	265.2	161.2	60.1	46.7	43.9
70°	223.2	123.1	46.7	35.3	32.4
72.5°	183.2	88.7	33.4	25.8	24.8
75°	146.9	57.2	22.9	19.1	19.1
77.5°	110.7	34.3	16.2	14.3	14.3
80°	77.3	20.0	11.4	10.5	10.5
82.5°	46.7	10.5	7.6	6.7	6.7
85°	20.0	5.7	4.8	3.8	3.8
87.5°	3.8	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)