

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: P1056484

Luminaire Tested: S125R3DR-S850D935-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056484  
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-S850D935-X4F0-XX-UDD-FLL-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

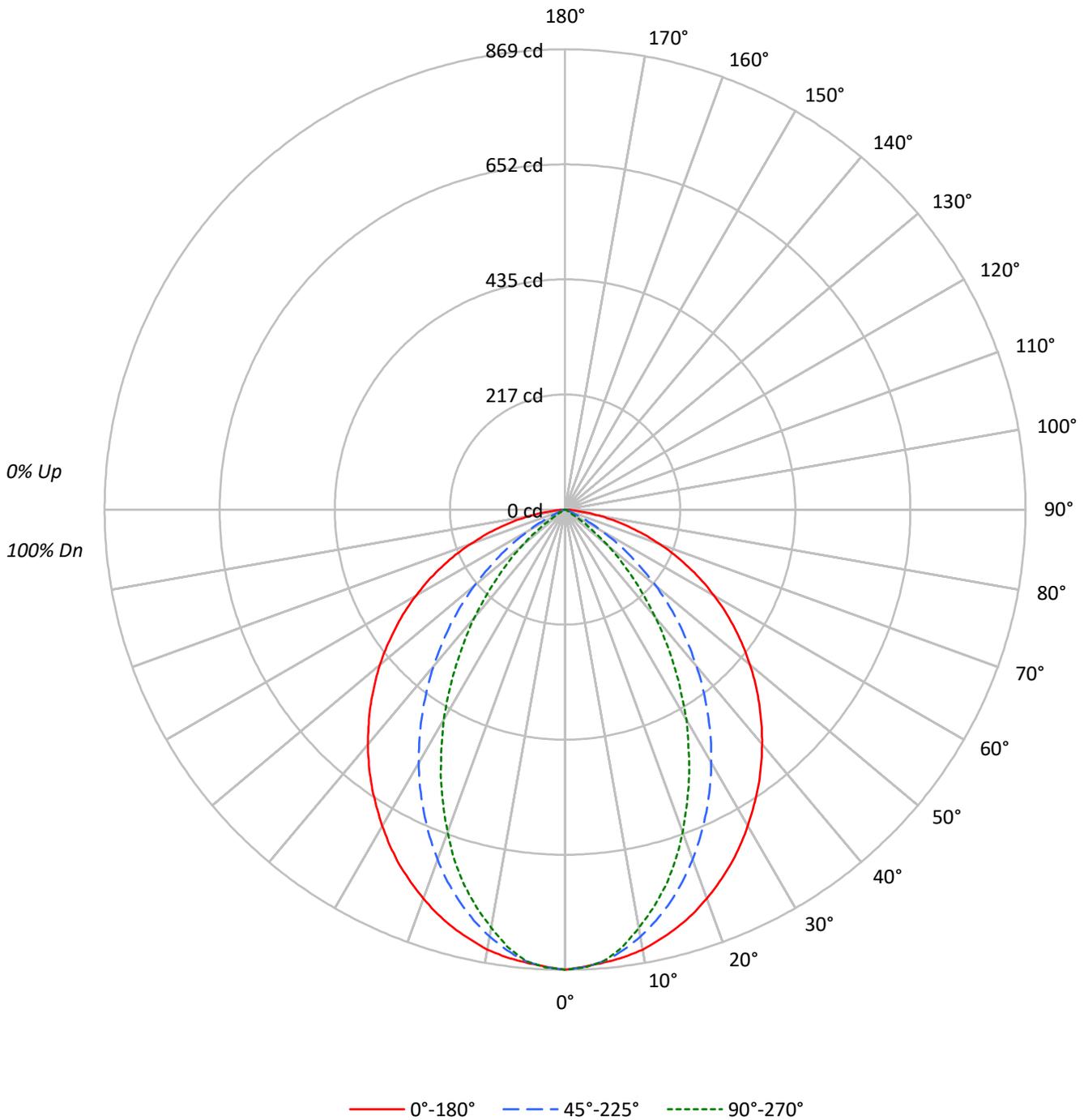
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1408.1 lumens  
Efficiency: N/A  
Efficacy: 53.3 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	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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78				78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69				69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61				61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55				55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49				49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45				45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34				34

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

	0°	45°	90°
0°	6141	6141	6141
5°	6091	6073	6067
10°	6057	5878	5754
15°	5980	5615	5375
20°	5882	5292	4877
25°	5769	4916	4325
30°	5630	4505	3739
35°	5491	4049	3091
40°	5340	3559	2447
45°	5182	3038	1774
50°	5010	2453	1146
55°	4818	1793	509
60°	4589	1108	146
65°	4306	403	87
70°	3898	143	35
75°	3387	46	25
80°	2593	37	0
85°	1184	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5182 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.7	5.7
10°-20°	216.7	15.4
20°-30°	293.1	20.8
30°-40°	301.1	21.4
40°-50°	249.5	17.7
50°-60°	160.2	11.4
60°-70°	77.4	5.5
70°-80°	26.2	1.9
80°-90°	3.4	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°	590.5	41.9
0°-40°	891.6	63.3
0°-60°	1301.2	92.4
0°-90°	1408.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1408.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	869	869	869	869	869	
5°	858	865	856	851	855	82
15°	817	807	767	740	734	230
25°	740	703	630	573	554	340
35°	636	575	469	387	358	398
45°	518	433	304	210	177	400
55°	391	287	146	64	41	349
65°	257	142	24	7	5	255
75°	124	27	2	1	1	131
85°	15	0	0	0	0	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	868.7	868.7	868.7	868.7	868.7
2.5°	863.6	870.5	864.4	863.6	865.3
5°	858.4	865.3	855.8	850.7	855.0
7.5°	852.4	855.8	839.5	830.9	832.6
10°	843.8	842.9	818.8	804.2	801.6
12.5°	830.9	826.6	794.7	774.0	769.7
15°	817.1	806.8	767.2	740.5	734.4
17.5°	800.7	784.4	737.0	702.6	694.0
20°	781.8	759.4	703.4	661.2	648.3
22.5°	761.1	732.7	668.1	618.2	601.0
25°	739.6	703.4	630.3	573.4	554.5
27.5°	715.5	673.3	592.4	527.8	504.5
30°	689.7	641.4	551.9	481.3	458.1
32.5°	663.0	609.6	511.4	434.8	406.4
35°	636.3	575.1	469.2	387.4	358.2
37.5°	607.9	540.7	427.9	342.7	310.8
40°	578.6	505.4	385.7	296.2	265.2
42.5°	548.5	469.2	343.5	252.3	220.4
45°	518.3	433.1	303.9	210.1	177.4
47.5°	487.3	396.1	262.6	168.8	140.3
50°	455.5	359.9	223.0	131.7	104.2
52.5°	423.6	322.9	182.5	95.6	70.6
55°	390.9	286.7	145.5	63.7	41.3
57.5°	358.2	249.7	111.1	35.3	15.5
60°	324.6	214.4	78.4	12.1	10.3
62.5°	291.9	176.5	49.1	9.5	7.7
65°	257.4	142.1	24.1	6.9	5.2
67.5°	223.9	109.3	10.3	4.3	2.6
70°	188.6	79.2	6.9	2.6	1.7
72.5°	155.8	50.8	4.3	1.7	0.9
75°	124.0	26.7	1.7	0.9	0.9
77.5°	93.0	11.2	0.9	0.9	0.9
80°	63.7	5.2	0.9	0.9	0.0
82.5°	37.9	1.7	0.9	0.9	0.0
85°	14.6	0.0	0.0	0.0	0.0
87.5°	0.9	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)