

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: P1175384

Luminaire Tested: S125RDR-S850D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175384  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S850D835-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

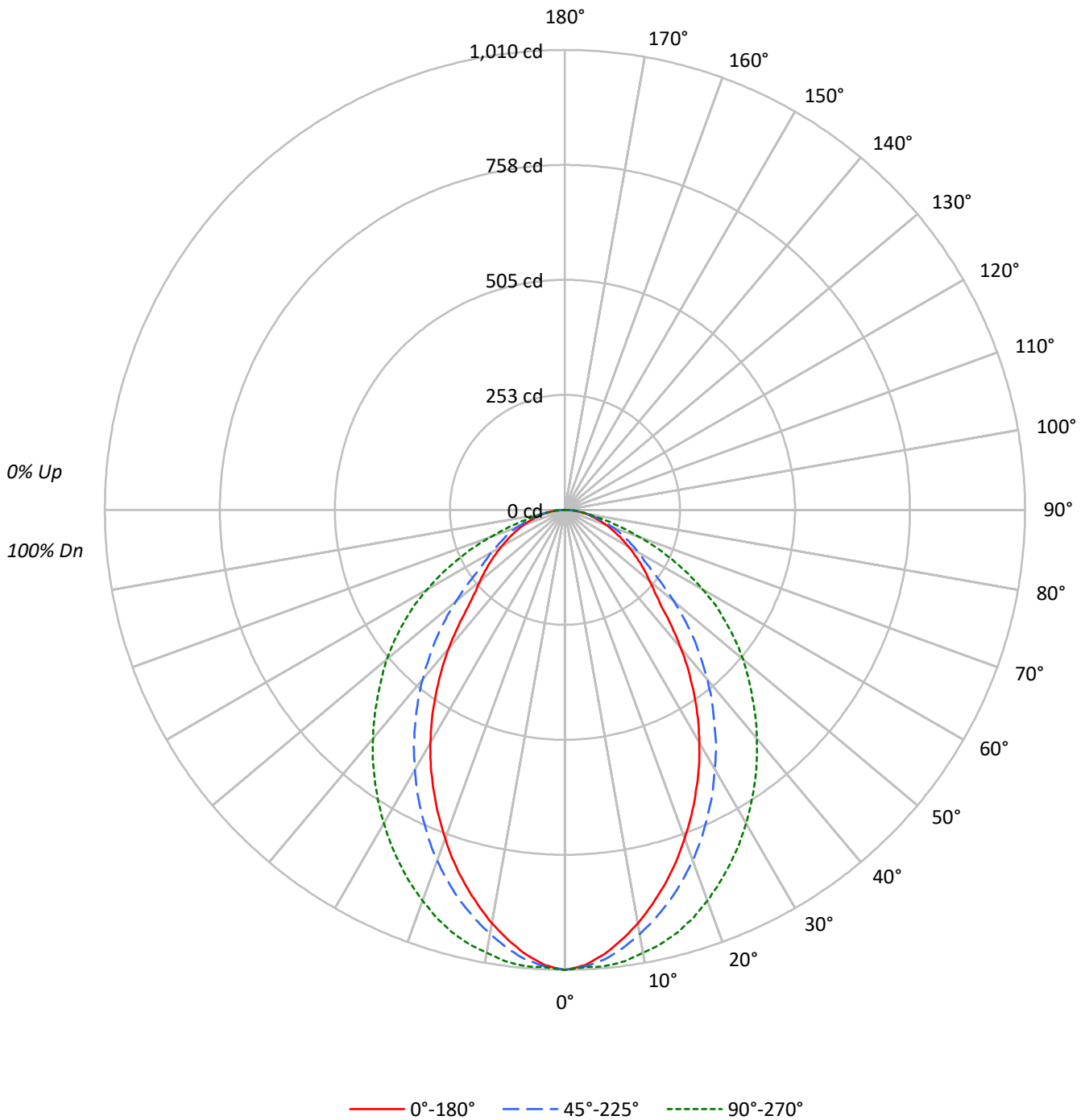
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1903.5 lumens  
Efficiency: N/A  
Efficacy: 73.8 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				

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

	0°	45°	90°
0°	6957	6957	6957
5°	6776	6853	6954
10°	6447	6615	6908
15°	6059	6334	6842
20°	5631	6008	6693
25°	5174	5630	6516
30°	4692	5231	6321
35°	4153	4809	6114
40°	3562	4371	5890
45°	2923	3892	5662
50°	2600	3344	5466
55°	2400	2801	5189
60°	2209	2552	4807
65°	2054	2403	4247
70°	1916	2245	3471
75°	1804	2078	2602
80°	1701	1903	1872
85°	1556	1896	1556

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5662 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.5	4.9
10°-20°	252.1	13.2
20°-30°	346.9	18.2
30°-40°	367.9	19.3
40°-50°	322.0	16.9
50°-60°	247.1	13.0
60°-70°	164.6	8.6
70°-80°	84.4	4.4
80°-90°	25.0	1.3
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°	692.5	36.4
0°-40°	1060.4	55.7
0°-60°	1629.5	85.6
0°-90°	1903.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1903.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	980	993	992	998	1006	92
15°	850	870	889	931	960	238
25°	681	704	741	804	858	313
35°	494	517	572	656	727	308
45°	300	325	400	499	582	237
55°	200	204	233	346	432	179
65°	126	127	148	194	261	126
75°	68	72	78	82	98	72
85°	20	22	24	23	20	22
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1010.4	1010.4	1010.4	1010.4	1010.4
2.5°	1001.0	1011.3	1003.5	1004.4	1005.3
5°	980.4	993.2	991.5	998.4	1006.1
7.5°	952.9	966.7	970.9	988.1	1000.1
10°	922.1	937.5	946.1	971.8	988.1
12.5°	886.9	904.9	918.6	952.1	976.1
15°	850.0	869.7	888.6	930.6	959.8
17.5°	810.6	830.3	855.2	903.2	938.4
20°	768.5	790.0	820.0	871.5	913.5
22.5°	725.6	747.9	782.2	838.9	886.9
25°	681.0	704.2	741.1	803.7	857.7
27.5°	637.3	658.7	701.6	768.5	827.7
30°	590.1	612.4	657.9	731.6	795.1
32.5°	542.9	565.2	617.6	694.8	761.7
35°	494.1	517.2	572.1	656.2	727.4
37.5°	445.2	469.2	530.1	616.7	692.2
40°	396.3	422.0	486.3	577.3	655.3
42.5°	346.5	374.0	441.7	538.7	619.3
45°	300.2	325.1	399.7	499.2	581.5
47.5°	266.8	281.3	355.1	458.9	545.5
50°	242.7	249.6	312.2	420.3	510.3
52.5°	221.3	225.6	270.2	384.3	471.7
55°	199.9	204.1	233.3	346.5	432.3
57.5°	179.3	181.8	205.9	308.8	392.8
60°	160.4	162.1	185.3	271.0	349.1
62.5°	143.2	144.1	165.5	232.4	305.4
65°	126.1	126.9	147.5	193.8	260.7
67.5°	110.6	110.6	130.4	158.7	217.9
70°	95.2	95.2	111.5	128.7	172.4
72.5°	81.5	83.2	94.3	103.8	134.7
75°	67.8	72.0	78.1	82.3	97.8
77.5°	54.9	60.0	62.6	64.3	65.2
80°	42.9	46.3	48.0	48.9	47.2
82.5°	31.7	34.3	35.2	35.2	32.6
85°	19.7	22.3	24.0	23.2	19.7
87.5°	9.4	12.9	13.7	12.0	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)