

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: P1061773

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061773  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S850D835-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

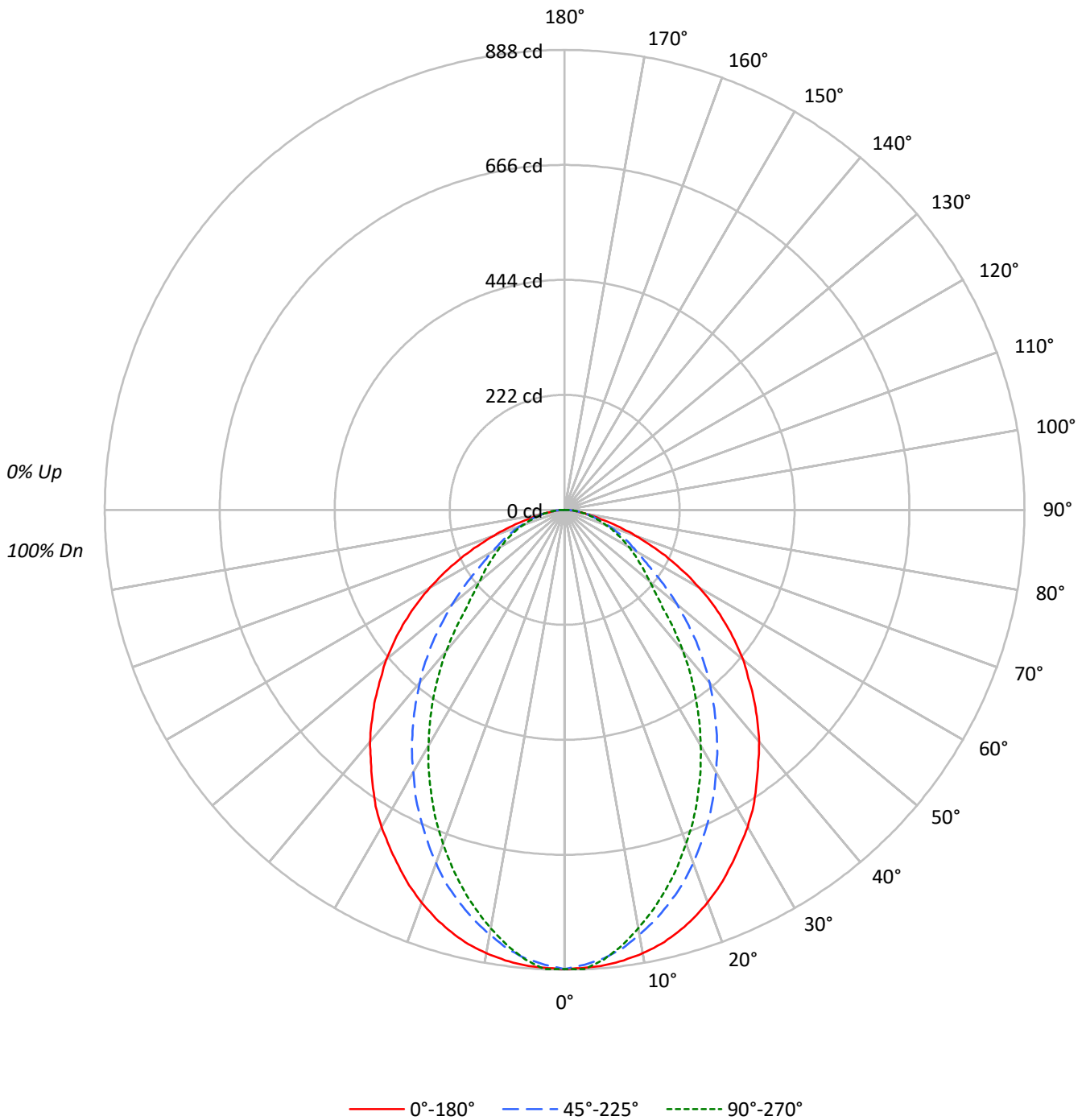
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1680.0 lumens  
Efficiency: N/A  
Efficacy: 65.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
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

TEST NUMBER: P1061773

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-WVL-B

### Luminous Intensity Polar Plot



TEST NUMBER: P1061773

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-WVL-B

**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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50				50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45				45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36				36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				30

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

	0°	45°	90°
0°	6106	6106	6106
5°	6103	6010	6023
10°	6079	5823	5736
15°	6019	5593	5402
20°	5912	5319	5023
25°	5764	5003	4623
30°	5619	4647	4180
35°	5431	4289	3707
40°	5254	3912	3193
45°	5035	3498	2615
50°	4817	3032	2290
55°	4520	2532	2115
60°	4124	2214	1976
65°	3609	2023	1836
70°	2927	1822	1705
75°	2102	1665	1588
80°	1451	1491	1491
85°	1066	1296	1367

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5035 cd/sqm



TEST NUMBER: P1061773

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-WVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.4	4.9
10°-20°	223.0	13.3
20°-30°	308.2	18.3
30°-40°	328.3	19.5
40°-50°	288.4	17.2
50°-60°	218.7	13.0
60°-70°	142.0	8.5
70°-80°	70.4	4.2
80°-90°	18.4	1.1
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°	613.7	36.5
0°-40°	942.0	56.1
0°-60°	1449.2	86.3
0°-90°	1680.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1680.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	887	887	887	887	887	
5°	883	881	870	872	871	84
15°	844	825	785	766	758	238
25°	759	717	659	625	608	350
35°	646	586	510	464	441	404
45°	517	445	359	295	269	399
55°	376	302	211	182	176	336
65°	222	165	124	115	113	219
75°	79	69	63	61	60	88
85°	14	15	16	16	17	17
90°	0	0	0	0	0	



TEST NUMBER: P1061773

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-WVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	886.8	886.8	886.8	886.8	<i>886.8</i>
2.5°	<i>884.9</i>	<i>886.8</i>	<i>879.1</i>	<i>885.8</i>	<i>887.8</i>
5°	883.0	881.0	869.5	872.4	<i>871.4</i>
7.5°	877.2	873.3	854.1	852.1	<i>848.3</i>
10°	869.5	859.8	832.9	826.1	<i>820.4</i>
12.5°	858.9	843.5	810.7	797.3	<i>790.5</i>
15°	844.4	825.2	784.7	766.4	<i>757.8</i>
17.5°	827.1	800.2	757.8	732.7	<i>723.1</i>
20°	806.9	775.1	726.0	697.1	<i>685.6</i>
22.5°	784.7	747.2	692.3	661.5	<i>649.0</i>
25°	758.7	717.3	658.6	624.9	<i>608.5</i>
27.5°	732.7	686.5	623.0	585.4	<i>568.1</i>
30°	706.8	653.8	584.5	544.0	<i>525.7</i>
32.5°	678.8	620.1	548.8	504.5	<i>483.4</i>
35°	646.1	586.4	510.3	464.1	<i>441.0</i>
37.5°	614.3	550.8	472.8	420.8	<i>398.6</i>
40°	584.5	517.1	435.2	378.4	<i>355.3</i>
42.5°	550.8	481.4	397.7	338.0	<i>312.0</i>
45°	517.1	444.8	359.2	294.6	<i>268.6</i>
47.5°	481.4	410.2	318.7	255.2	<i>237.8</i>
50°	449.7	374.6	283.1	225.3	<i>213.8</i>
52.5°	413.1	339.9	246.5	202.2	<i>194.5</i>
55°	376.5	302.3	210.9	182.0	<i>176.2</i>
57.5°	338.9	268.6	182.9	164.7	<i>158.9</i>
60°	299.5	234.0	160.8	146.4	<i>143.5</i>
62.5°	260.0	198.4	141.5	131.0	<i>127.1</i>
65°	221.5	164.7	124.2	114.6	<i>112.7</i>
67.5°	182.0	133.8	106.9	100.1	<i>99.2</i>
70°	145.4	108.8	90.5	86.7	<i>84.7</i>
72.5°	111.7	86.7	76.1	73.2	<i>72.2</i>
75°	79.0	69.3	62.6	60.7	<i>59.7</i>
77.5°	53.0	53.0	50.1	48.1	<i>49.1</i>
80°	36.6	38.5	37.6	37.6	<i>37.6</i>
82.5°	24.1	26.0	27.0	27.0	<i>27.0</i>
85°	13.5	15.4	16.4	16.4	<i>17.3</i>
87.5°	4.8	5.8	6.7	7.7	<i>7.7</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)