

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: P1175390

Luminaire Tested: S125RDR-S850D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175390  
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-S850D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

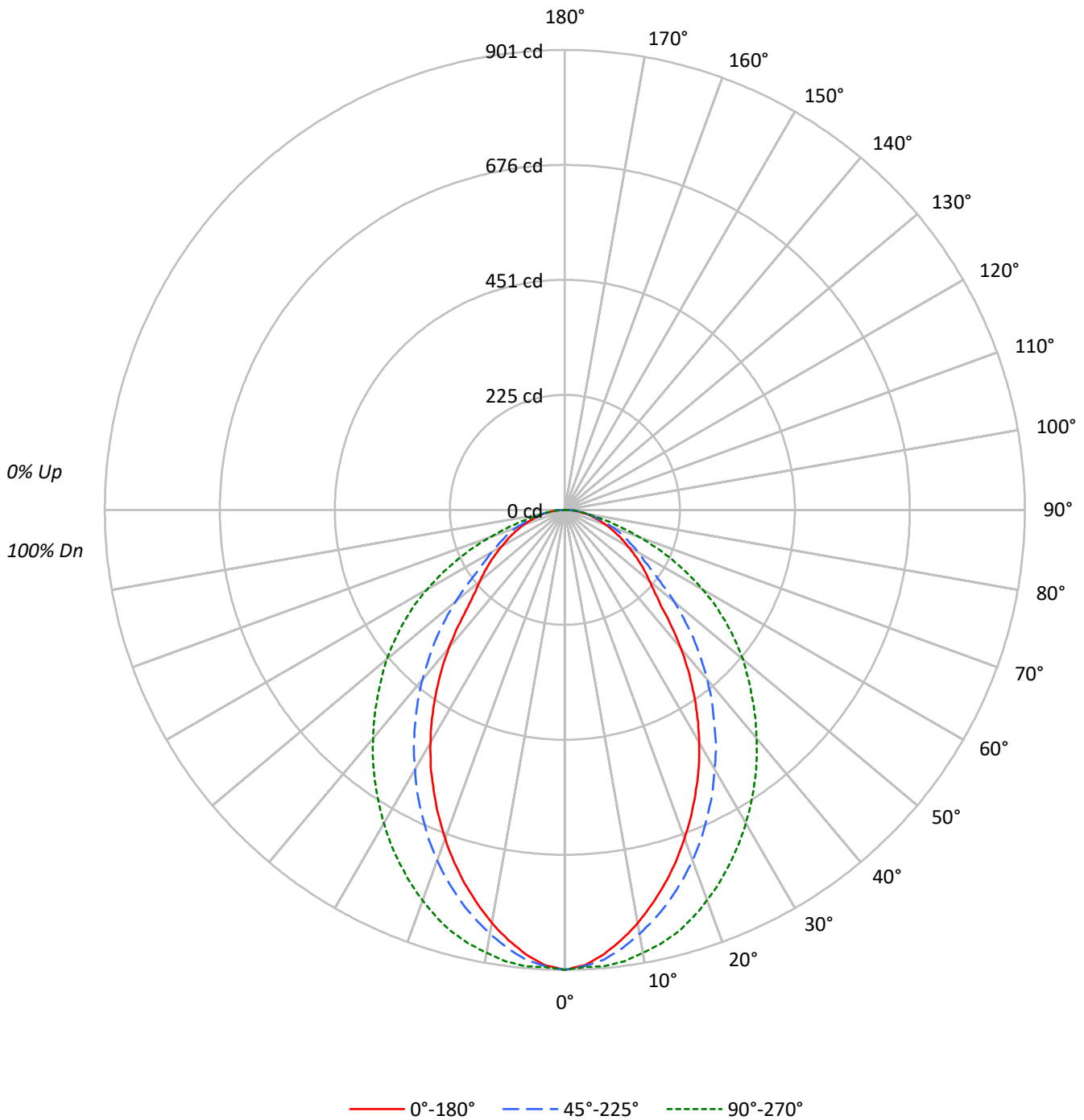
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1697.4 lumens  
Efficiency: N/A  
Efficacy: 65.8 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

TEST NUMBER: P1175390

CATALOG NUMBER: S125RDR-S850D940-X4F0-XX-UDD-WVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1175390

CATALOG NUMBER: S125RDR-S850D940-X4F0-XX-UDD-WVL-W

**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°	6204	6204	6204
5°	6042	6111	6201
10°	5748	5898	6160
15°	5403	5648	6101
20°	5021	5358	5969
25°	4614	5020	5810
30°	4183	4664	5637
35°	3703	4288	5452
40°	3176	3898	5252
45°	2607	3470	5050
50°	2319	2982	4875
55°	2139	2497	4628
60°	1969	2275	4287
65°	1831	2144	3788
70°	1709	2001	3094
75°	1607	1852	2320
80°	1515	1697	1669
85°	1390	1691	1390

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5050 cd/sqm



TEST NUMBER: P1175390

CATALOG NUMBER: S125RDR-S850D940-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.4	4.9
10°-20°	224.8	13.2
20°-30°	309.3	18.2
30°-40°	328.1	19.3
40°-50°	287.1	16.9
50°-60°	220.3	13.0
60°-70°	146.8	8.6
70°-80°	75.2	4.4
80°-90°	22.3	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°	617.5	36.4
0°-40°	945.6	55.7
0°-60°	1453.1	85.6
0°-90°	1697.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1697.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	901	901	901	901	901	
5°	874	886	884	890	897	82
15°	758	776	792	830	856	212
25°	607	628	661	717	765	279
35°	441	461	510	585	649	275
45°	268	290	356	445	519	211
55°	178	182	208	309	386	160
65°	112	113	132	173	232	112
75°	60	64	70	73	87	64
85°	18	20	21	21	18	20
90°	0	0	0	0	0	



TEST NUMBER: P1175390

CATALOG NUMBER: S125RDR-S850D940-X4F0-XX-UDD-WVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	901.0	901.0	901.0	901.0	901.0
2.5°	892.6	901.8	894.9	895.6	896.4
5°	874.2	885.7	884.2	890.3	897.2
7.5°	849.7	862.0	865.8	881.1	891.8
10°	822.2	836.0	843.6	866.6	881.1
12.5°	790.8	806.9	819.1	849.0	870.4
15°	758.0	775.6	792.4	829.9	855.9
17.5°	722.8	740.4	762.5	805.4	836.7
20°	685.3	704.4	731.2	777.1	814.6
22.5°	647.1	666.9	697.5	748.0	790.8
25°	607.3	627.9	660.8	716.7	764.8
27.5°	568.3	587.4	625.6	685.3	738.1
30°	526.2	546.1	586.6	652.4	709.0
32.5°	484.1	504.0	550.7	619.5	679.2
35°	440.6	461.2	510.2	585.1	648.6
37.5°	397.0	418.4	472.7	549.9	617.2
40°	353.4	376.3	433.7	514.7	584.3
42.5°	309.0	333.5	393.9	480.3	552.2
45°	267.7	289.9	356.4	445.1	518.6
47.5°	237.9	250.9	316.6	409.2	486.4
50°	216.5	222.6	278.4	374.8	455.1
52.5°	197.3	201.2	240.9	342.7	420.7
55°	178.2	182.0	208.0	309.0	385.5
57.5°	159.9	162.1	183.6	275.3	350.3
60°	143.0	144.6	165.2	241.7	311.3
62.5°	127.7	128.5	147.6	207.3	272.3
65°	112.4	113.2	131.6	172.9	232.5
67.5°	98.7	98.7	116.3	141.5	194.3
70°	84.9	84.9	99.4	114.7	153.7
72.5°	72.7	74.2	84.1	92.5	120.1
75°	60.4	64.2	69.6	73.4	87.2
77.5°	49.0	53.5	55.8	57.4	58.1
80°	38.2	41.3	42.8	43.6	42.1
82.5°	28.3	30.6	31.4	31.4	29.1
85°	17.6	19.9	21.4	20.7	17.6
87.5°	8.4	11.5	12.2	10.7	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)