

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: P1061544

Luminaire Tested: S125RDR-S1270D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061544  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S1270D850-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

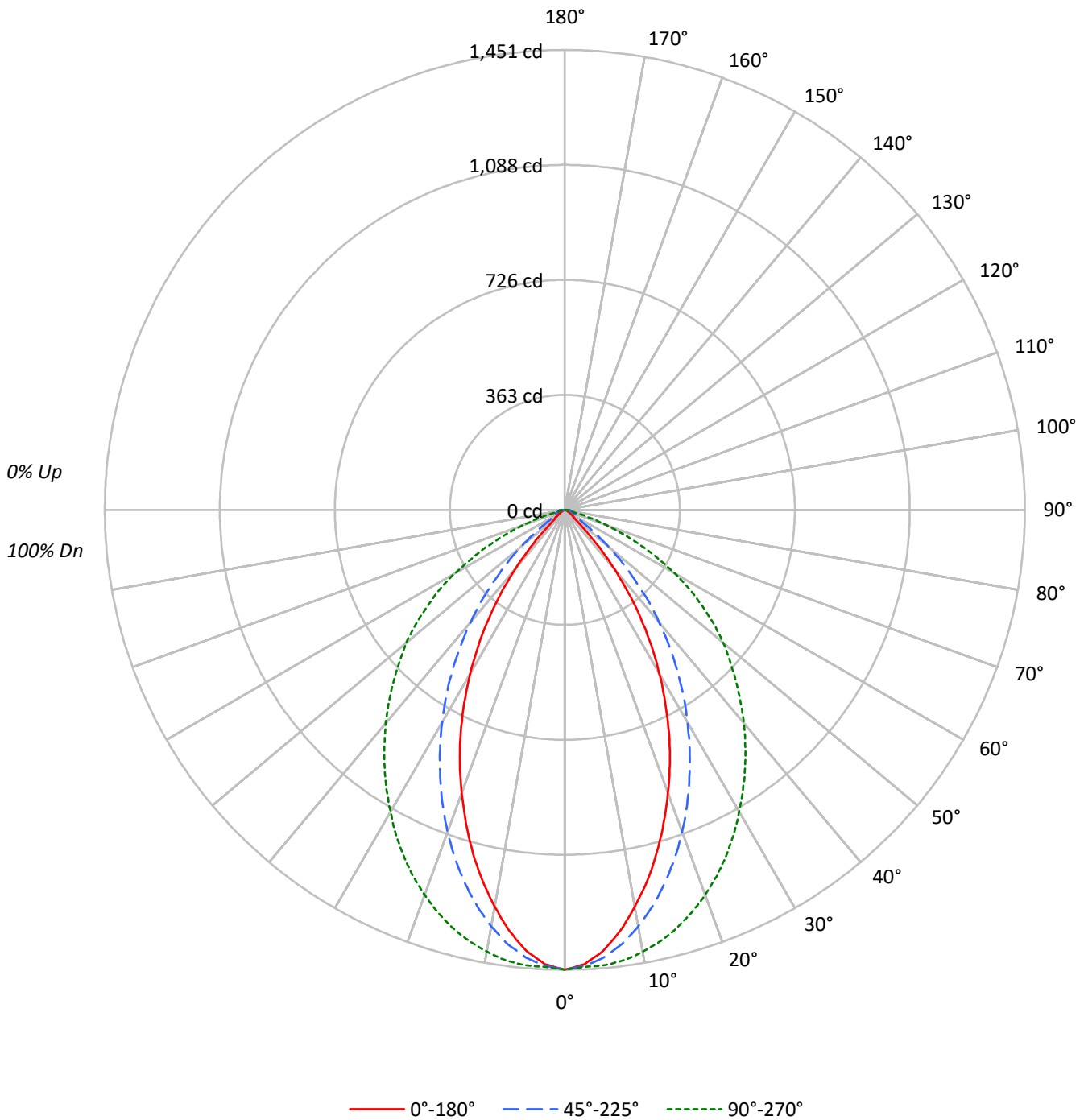
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1877.1 lumens  
Efficiency: N/A  
Efficacy: 44.9 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				

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

	0°	45°	90°
0°	9990	9990	9990
5°	9649	9794	9972
10°	8892	9332	9896
15°	7986	8687	9733
20°	6969	7926	9473
25°	5903	7067	9148
30°	4742	6152	8741
35°	3509	5189	8333
40°	2173	4144	7897
45°	848	3029	7425
50°	397	1899	6994
55°	290	813	6348
60°	200	577	5505
65°	132	604	4282
70°	129	552	2694
75°	170	559	857
80°	254	638	575
85°	379	1272	893

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7425 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.1	7.1
10°-20°	344.7	18.4
20°-30°	439.1	23.4
30°-40°	408.7	21.8
40°-50°	281.3	15.0
50°-60°	159.3	8.5
60°-70°	75.2	4.0
70°-80°	23.5	1.3
80°-90°	12.3	0.7
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°	916.9	48.8
0°-40°	1325.6	70.6
0°-60°	1766.1	94.1
0°-90°	1877.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1877.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1451	1451	1451	1451	1451	
5°	1396	1415	1417	1430	1443	129
15°	1120	1158	1219	1311	1366	312
25°	777	827	930	1087	1204	354
35°	418	476	617	829	991	258
45°	87	139	311	563	762	82
55°	24	27	68	324	529	22
65°	8	10	37	116	263	9
75°	6	14	21	23	32	7
85°	5	13	16	14	11	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1450.9	1450.9	1450.9	1450.9	1450.9
2.5°	1434.8	1449.3	1439.6	1441.2	1442.8
5°	1396.1	1415.4	1417.0	1429.9	1442.8
7.5°	1339.7	1363.8	1381.6	1412.2	1433.2
10°	1271.9	1301.0	1334.8	1384.8	1415.4
12.5°	1199.4	1233.3	1280.0	1350.9	1394.5
15°	1120.4	1157.5	1218.7	1310.6	1365.5
17.5°	1036.6	1078.5	1152.7	1262.3	1331.6
20°	951.1	996.3	1081.7	1207.5	1292.9
22.5°	865.7	912.4	1007.6	1147.8	1251.0
25°	777.0	827.0	930.2	1086.6	1204.2
27.5°	686.8	738.3	852.8	1023.7	1154.3
30°	596.5	651.3	773.8	959.2	1099.5
32.5°	507.8	562.6	696.4	894.7	1046.3
35°	417.5	475.6	617.4	828.6	991.4
37.5°	327.3	390.1	540.1	760.9	935.0
40°	241.8	301.5	461.1	694.8	878.6
42.5°	161.2	219.2	390.1	628.7	820.6
45°	87.1	138.6	311.1	562.6	762.5
47.5°	46.8	74.2	243.4	498.1	706.1
50°	37.1	41.9	177.3	438.5	652.9
52.5°	30.6	33.9	116.1	382.1	591.6
55°	24.2	27.4	67.7	324.0	528.8
57.5°	19.3	22.6	43.5	269.2	467.5
60°	14.5	17.7	41.9	216.0	399.8
62.5°	11.3	12.9	38.7	166.0	328.9
65°	8.1	9.7	37.1	116.1	262.8
67.5°	6.4	8.1	33.9	74.2	196.7
70°	6.4	6.4	27.4	48.4	133.8
72.5°	6.4	11.3	24.2	32.2	80.6
75°	6.4	14.5	21.0	22.6	32.2
77.5°	6.4	16.1	17.7	17.7	17.7
80°	6.4	14.5	16.1	16.1	14.5
82.5°	6.4	12.9	14.5	16.1	12.9
85°	4.8	12.9	16.1	14.5	11.3
87.5°	4.8	12.9	14.5	12.9	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)