

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: P1061542

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061542  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
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-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

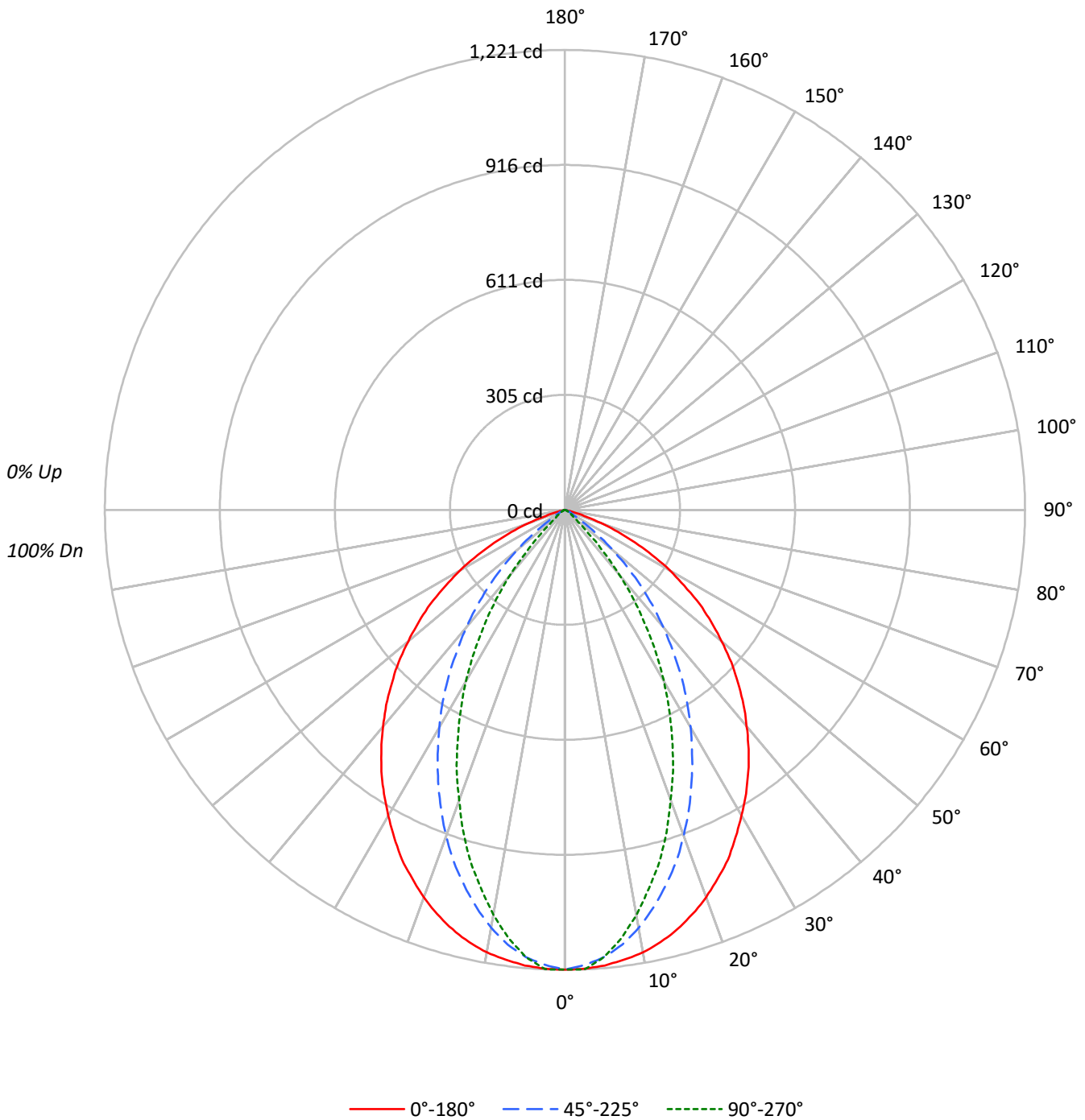
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1577.0 lumens  
Efficiency: N/A  
Efficacy: 37.7 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
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				100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66				66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54				54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				39

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

	0°	45°	90°
0°	8405	8405	8405
5°	8392	8236	8236
10°	8343	7881	7633
15°	8219	7358	6899
20°	8024	6749	6006
25°	7781	6043	5114
30°	7451	5301	4174
35°	7134	4521	3127
40°	6745	3647	2027
45°	6319	2760	878
50°	5813	1760	328
55°	5239	773	232
60°	4435	333	156
65°	3358	210	78
70°	2043	97	32
75°	428	43	43
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6319 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.5	7.1
10°-20°	293.3	18.6
20°-30°	376.6	23.9
30°-40°	354.5	22.5
40°-50°	247.9	15.7
50°-60°	132.4	8.4
60°-70°	52.8	3.3
70°-80°	6.8	0.4
80°-90°	0.0	0.0
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°	782.5	49.6
0°-40°	1137.0	72.1
0°-60°	1517.3	96.2
0°-90°	1577.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1577.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1221	1221	1221	1221	1221	
5°	1214	1211	1192	1195	1192	115
15°	1153	1116	1032	984	968	324
25°	1024	934	796	709	673	470
35°	849	713	538	416	372	530
45°	649	486	283	137	90	501
55°	436	267	64	22	19	387
65°	206	82	13	6	5	205
75°	16	5	2	2	2	31
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1220.7	1220.7	1220.7	1220.7	1220.7
2.5°	1219.1	1220.7	1209.4	1219.1	1220.7
5°	1214.2	1211.0	1191.7	1194.9	1191.7
7.5°	1204.6	1196.5	1164.3	1153.0	1146.6
10°	1193.3	1175.6	1127.3	1103.1	1091.8
12.5°	1175.6	1149.8	1082.2	1045.1	1029.0
15°	1153.0	1116.0	1032.3	983.9	967.8
17.5°	1125.7	1077.4	980.7	921.1	897.0
20°	1095.1	1030.7	921.1	850.3	819.7
22.5°	1059.6	985.6	859.9	781.0	750.4
25°	1024.2	934.0	795.5	708.6	673.1
27.5°	980.7	880.9	731.1	637.7	599.1
30°	937.2	827.7	666.7	565.2	525.0
32.5°	893.8	771.4	602.3	489.6	449.3
35°	848.7	713.4	537.9	415.5	372.0
37.5°	800.4	655.4	468.6	344.6	299.5
40°	750.4	599.1	405.8	275.4	225.5
42.5°	702.1	542.7	343.0	207.7	153.0
45°	649.0	486.3	283.4	136.9	90.2
47.5°	599.1	431.6	222.2	78.9	46.7
50°	542.7	375.2	164.3	41.9	30.6
52.5°	489.6	320.5	109.5	27.4	24.2
55°	436.4	267.3	64.4	22.5	19.3
57.5°	375.2	215.8	35.4	17.7	14.5
60°	322.1	169.1	24.2	12.9	11.3
62.5°	260.9	124.0	17.7	9.7	8.1
65°	206.1	82.1	12.9	6.4	4.8
67.5°	153.0	48.3	8.1	3.2	3.2
70°	101.5	25.8	4.8	1.6	1.6
72.5°	53.1	11.3	3.2	1.6	1.6
75°	16.1	4.8	1.6	1.6	1.6
77.5°	0.0	1.6	0.0	0.0	1.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)