

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 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: S125RDRP-S1270D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
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: S125RDRP-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: -

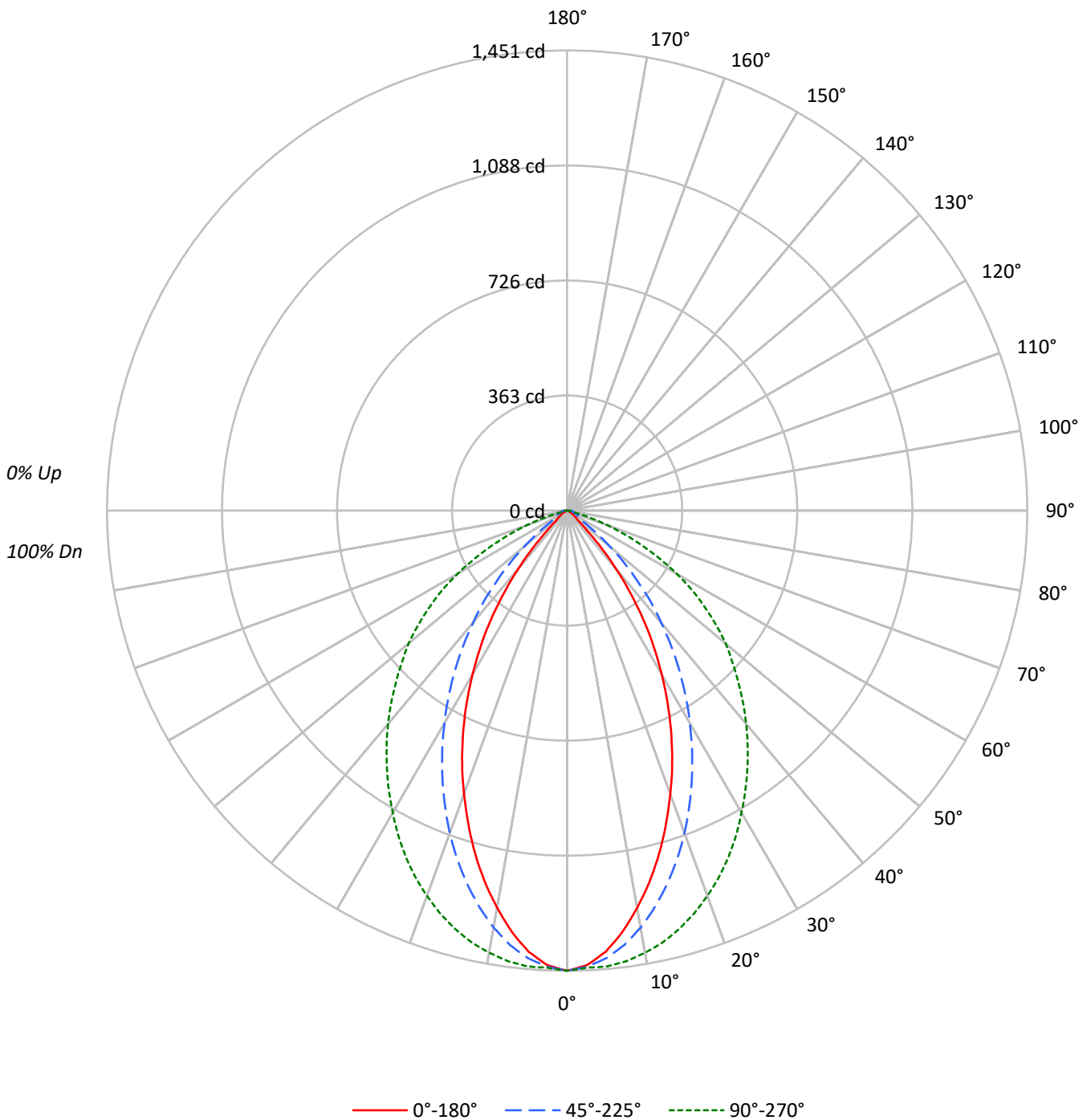
**Summary**

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 (A<sub>in</sub>): 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	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



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.24	0.00	0.55	0.87	17.24	18.53	17.61	18.84	19.16
	3H	0.00	0.56	0.00	0.89	1.25	17.96	19.10	18.34	19.43	19.80
	4H	0.31	1.37	0.71	1.72	2.11	17.98	19.05	18.39	19.40	19.78
	6H	1.56	2.54	1.98	2.91	3.30	17.94	18.91	18.35	19.28	19.68
	8H	2.20	3.12	2.63	3.51	3.92	17.91	18.84	18.34	19.23	19.63
	12H	2.79	3.67	3.22	4.05	4.48	17.90	18.78	18.33	19.16	19.59
4H	2H	1.76	2.82	2.16	3.17	3.55	17.03	18.09	17.44	18.45	18.83
	3H	2.56	3.43	2.98	3.84	4.24	17.79	18.66	18.20	19.06	19.46
	4H	3.57	4.34	4.01	4.76	5.21	17.82	18.59	18.25	19.01	19.46
	6H	4.84	5.51	5.31	5.96	6.42	17.80	18.46	18.26	18.91	19.38
	8H	5.42	6.04	5.89	6.49	6.96	17.78	18.40	18.25	18.85	19.32
	12H	5.98	6.53	6.47	7.01	7.49	17.79	18.34	18.28	18.82	19.30
8H	4H	4.99	5.61	5.46	6.06	6.53	17.70	18.32	18.17	18.77	19.24
	6H	6.54	7.05	7.05	7.55	8.03	17.69	18.20	18.19	18.70	19.18
	8H	7.34	7.79	7.86	8.31	8.80	17.70	18.16	18.23	18.67	19.17
	12H	8.17	8.58	8.69	9.07	9.64	17.76	18.17	18.28	18.66	19.23
12H	4H	5.21	5.76	5.69	6.24	6.71	17.66	18.21	18.15	18.69	19.17
	6H	6.91	7.37	7.44	7.89	8.38	17.64	18.10	18.17	18.62	19.11
	8H	7.90	8.31	8.42	8.80	9.37	17.69	18.09	18.21	18.59	19.16