

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: P1175404

Luminaire Tested: S125RDRP-H1270D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1175404  
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: S125RDRP-H1270D850-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

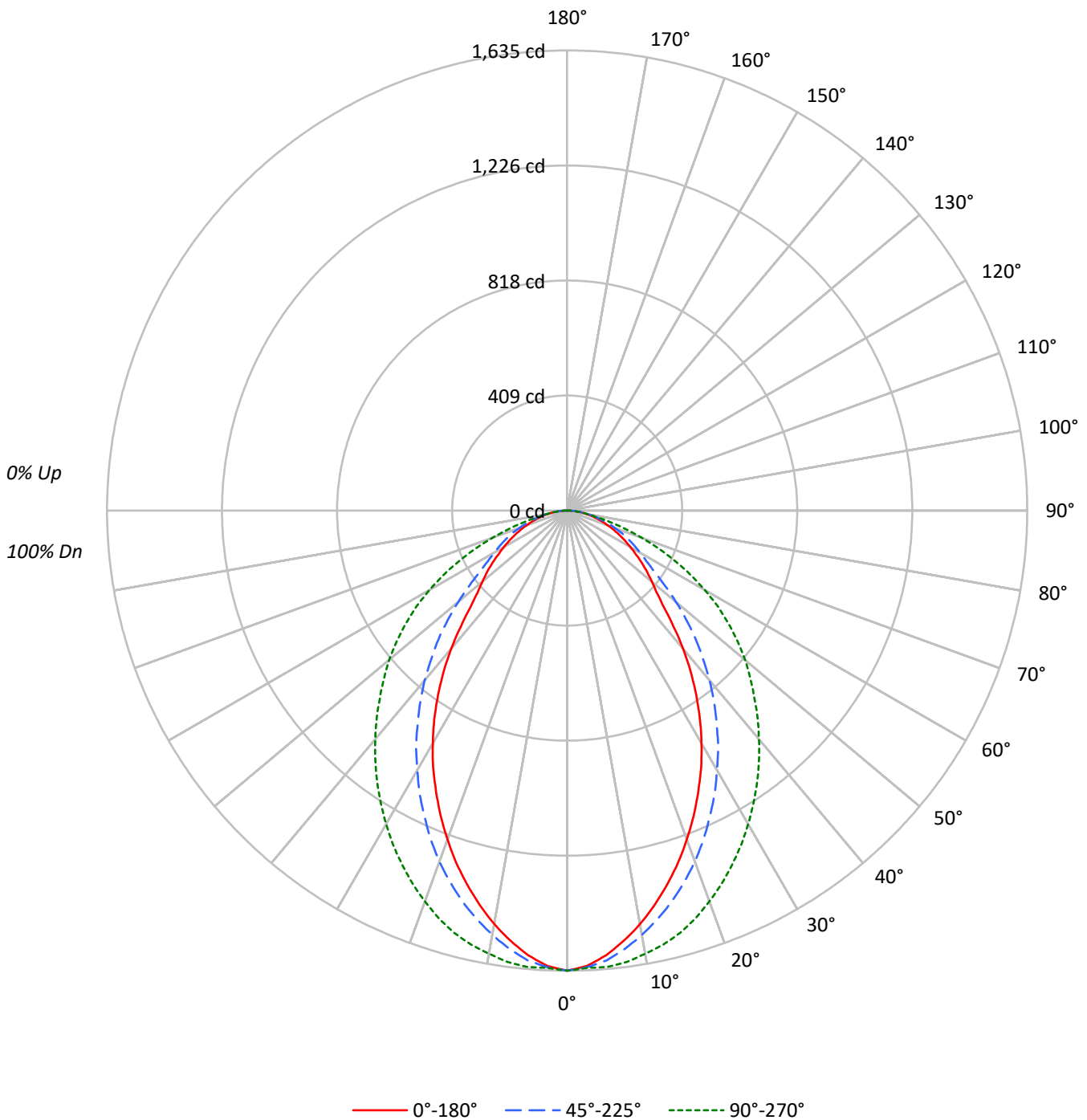
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3079.7 lumens  
Efficiency: N/A  
Efficacy: 84.4 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): 36.5  
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	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	107	104	100	97	99	97	94	96	93	91	92	90	88	86												86																
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74												74																
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64												64																
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56												56																
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50												50																
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44												44																
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40												40																
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36												36																
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33												33																
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30												30																

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

	0°	45°	90°
0°	11255	11255	11255
5°	10963	11087	11251
10°	10430	10702	11177
15°	9803	10248	11069
20°	9111	9721	10829
25°	8370	9109	10542
30°	7590	8462	10227
35°	6718	7780	9891
40°	5762	7072	9529
45°	4729	6297	9162
50°	4206	5410	8845
55°	3881	4532	8396
60°	3573	4127	7778
65°	3324	3889	6874
70°	3100	3632	5615
75°	2916	3360	4209
80°	2752	3081	3025
85°	2520	3073	2520

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9162 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.4	4.9
10°-20°	407.9	13.2
20°-30°	561.2	18.2
30°-40°	595.2	19.3
40°-50°	521.0	16.9
50°-60°	399.7	13.0
60°-70°	266.3	8.6
70°-80°	136.5	4.4
80°-90°	40.5	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°	1120.5	36.4
0°-40°	1715.7	55.7
0°-60°	2636.4	85.6
0°-90°	3079.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3079.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1635	1635	1635	1635	1635	
5°	1586	1607	1604	1615	1628	148
15°	1375	1407	1438	1506	1553	385
25°	1102	1139	1199	1300	1388	506
35°	799	837	926	1062	1177	498
45°	486	526	647	808	941	384
55°	323	330	378	561	699	290
65°	204	205	239	314	422	203
75°	110	117	126	133	158	117
85°	32	36	39	38	32	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1634.7	1634.7	1634.7	1634.7	1634.7
2.5°	1619.5	1636.1	1623.6	1625.0	1626.4
5°	1586.2	1607.0	1604.2	1615.3	1627.8
7.5°	1541.8	1564.0	1570.9	1598.7	1618.1
10°	1491.8	1516.8	1530.7	1572.3	1598.7
12.5°	1434.9	1464.0	1486.2	1540.4	1579.2
15°	1375.2	1407.1	1437.7	1505.7	1552.9
17.5°	1311.4	1343.3	1383.6	1461.3	1518.2
20°	1243.4	1278.1	1326.7	1409.9	1477.9
22.5°	1174.0	1210.1	1265.6	1357.2	1434.9
25°	1101.8	1139.3	1199.0	1300.3	1387.7
27.5°	1031.1	1065.8	1135.2	1243.4	1339.1
30°	954.7	990.8	1064.4	1183.7	1286.4
32.5°	878.4	914.5	999.2	1124.1	1232.3
35°	799.3	836.8	925.6	1061.6	1176.8
37.5°	720.2	759.1	857.6	997.8	1119.9
40°	641.1	682.8	786.8	933.9	1060.2
42.5°	560.6	605.0	714.7	871.5	1001.9
45°	485.7	525.9	646.7	807.7	940.9
47.5°	431.6	455.2	574.5	742.4	882.6
50°	392.7	403.8	505.1	680.0	825.7
52.5°	358.0	365.0	437.1	621.7	763.2
55°	323.3	330.3	377.5	560.6	699.4
57.5°	290.0	294.2	333.1	499.6	635.6
60°	259.5	262.3	299.7	438.5	564.8
62.5°	231.7	233.1	267.8	376.1	494.0
65°	204.0	205.4	238.7	313.6	421.9
67.5°	179.0	179.0	210.9	256.7	352.5
70°	154.0	154.0	180.4	208.2	278.9
72.5°	131.8	134.6	152.6	167.9	217.9
75°	109.6	116.6	126.3	133.2	158.2
77.5°	88.8	97.1	101.3	104.1	105.5
80°	69.4	74.9	77.7	79.1	76.3
82.5°	51.3	55.5	56.9	56.9	52.7
85°	31.9	36.1	38.9	37.5	31.9
87.5°	15.3	20.8	22.2	19.4	15.3
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	15.03	16.53	15.39	16.84	17.15	19.05	20.55	19.42	20.86	21.18
	3H	16.61	17.96	16.99	18.28	18.65	20.44	21.78	20.82	22.11	22.47
	4H	17.26	18.52	17.66	18.87	19.24	20.84	22.11	21.24	22.45	22.83
	6H	17.77	18.93	18.18	19.30	19.69	21.05	22.21	21.46	22.58	22.97
	8H	17.95	19.05	18.37	19.44	19.85	21.11	22.22	21.53	22.61	23.01
	12H	18.07	19.13	18.50	19.51	19.94	21.14	22.20	21.57	22.58	23.01
4H	2H	15.80	17.06	16.20	17.41	17.78	19.18	20.44	19.58	20.79	21.17
	3H	17.58	18.62	17.99	19.02	19.43	20.75	21.80	21.16	22.20	22.60
	4H	18.35	19.29	18.78	19.70	20.14	21.26	22.20	21.69	22.62	23.06
	6H	18.99	19.80	19.44	20.25	20.71	21.59	22.41	22.04	22.85	23.31
	8H	19.21	19.98	19.68	20.42	20.89	21.69	22.45	22.15	22.90	23.36
	12H	19.39	20.07	19.87	20.55	21.02	21.76	22.44	22.24	22.92	23.39
8H	4H	18.73	19.49	19.19	19.94	20.41	21.36	22.13	21.82	22.57	23.04
	6H	19.51	20.14	20.00	20.63	21.11	21.78	22.41	22.28	22.90	23.38
	8H	19.82	20.39	20.34	20.90	21.39	21.94	22.51	22.45	23.02	23.51
	12H	20.08	20.59	20.59	21.08	21.64	22.08	22.58	22.59	23.07	23.64
12H	4H	18.77	19.45	19.25	19.93	20.40	21.36	22.04	21.84	22.52	22.99
	6H	19.58	20.15	20.09	20.66	21.15	21.79	22.36	22.31	22.87	23.36
	8H	19.96	20.47	20.47	20.96	21.52	22.00	22.50	22.51	23.00	23.56