

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: P1061629

Luminaire Tested: S125RDRP-S375D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061629  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S375D850-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

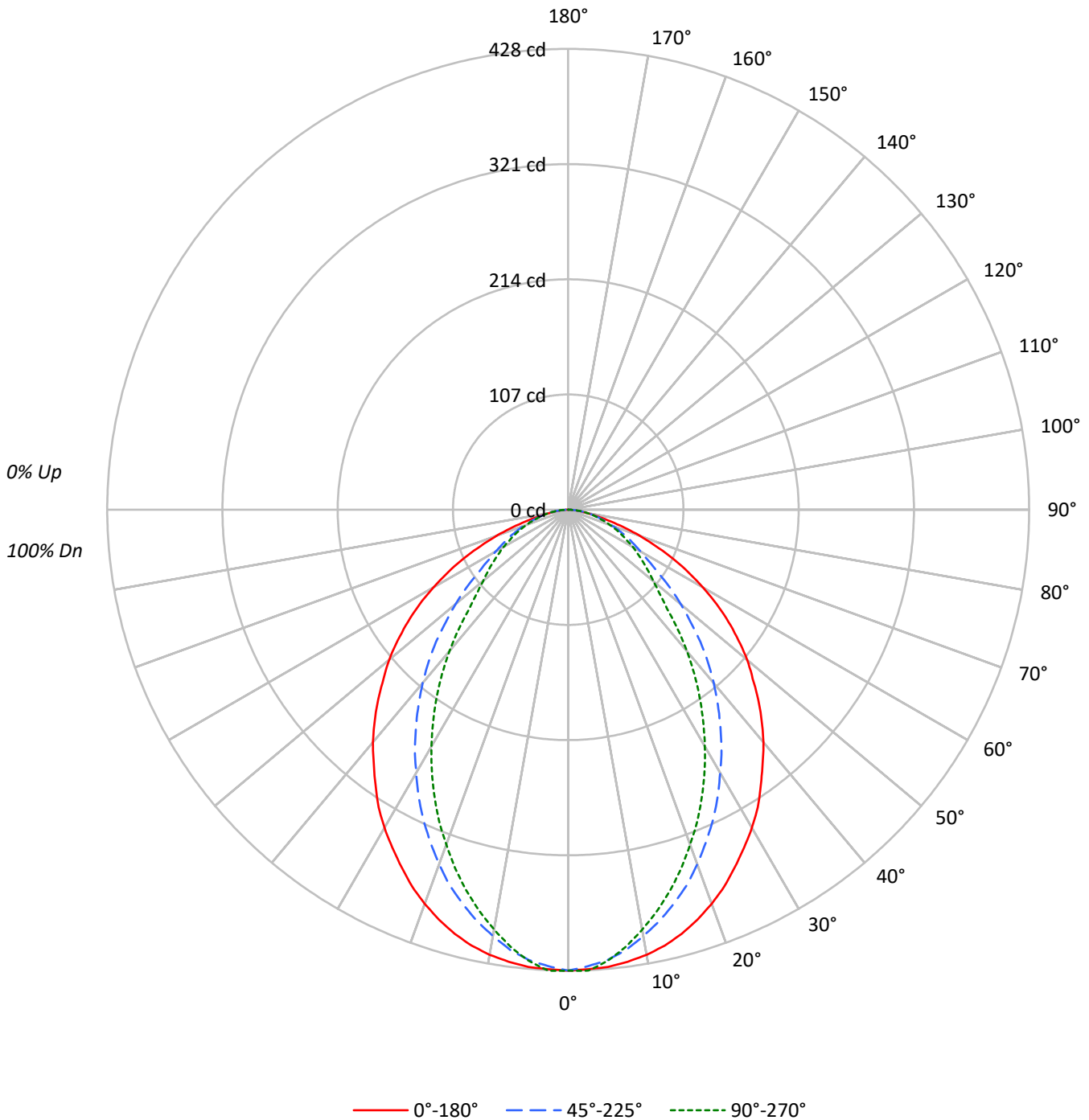
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 810.9 lumens  
Efficiency: N/A  
Efficacy: 64.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
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	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	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

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

	0°	45°	90°
0°	2948	2948	2948
5°	2946	2901	2907
10°	2934	2811	2769
15°	2905	2700	2607
20°	2854	2567	2425
25°	2782	2415	2231
30°	2713	2243	2018
35°	2622	2070	1789
40°	2536	1888	1541
45°	2430	1688	1263
50°	2325	1463	1105
55°	2181	1222	1022
60°	1990	1069	954
65°	1742	978	886
70°	1413	880	823
75°	1014	803	766
80°	702	718	718
85°	513	624	664

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2430 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.8	4.9
10°-20°	107.6	13.3
20°-30°	148.8	18.3
30°-40°	158.5	19.5
40°-50°	139.2	17.2
50°-60°	105.6	13.0
60°-70°	68.5	8.5
70°-80°	34.0	4.2
80°-90°	8.9	1.1
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°	296.2	36.5
0°-40°	454.7	56.1
0°-60°	699.5	86.3
0°-90°	810.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	810.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	428	428	428	428	428	
5°	426	425	420	421	421	40
15°	408	398	379	370	366	115
25°	366	346	318	302	294	169
35°	312	283	246	224	213	195
45°	250	215	173	142	130	192
55°	182	146	102	88	85	162
65°	107	80	60	55	54	106
75°	38	34	30	29	29	43
85°	6	7	8	8	8	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	428.1	428.1	428.1	428.1	428.1
2.5°	427.1	428.1	424.3	427.6	428.5
5°	426.2	425.3	419.7	421.1	420.6
7.5°	423.4	421.6	412.3	411.3	409.5
10°	419.7	415.1	402.0	398.8	396.0
12.5°	414.6	407.1	391.3	384.8	381.6
15°	407.6	398.3	378.8	370.0	365.8
17.5°	399.2	386.2	365.8	353.7	349.1
20°	389.5	374.1	350.4	336.5	330.9
22.5°	378.8	360.7	334.2	319.3	313.3
25°	366.2	346.3	317.9	301.6	293.7
27.5°	353.7	331.4	300.7	282.6	274.2
30°	341.2	315.6	282.1	262.6	253.8
32.5°	327.7	299.3	264.9	243.5	233.3
35°	311.9	283.1	246.3	224.0	212.9
37.5°	296.5	265.9	228.2	203.1	192.4
40°	282.1	249.6	210.1	182.7	171.5
42.5°	265.9	232.4	192.0	163.1	150.6
45°	249.6	214.7	173.4	142.2	129.7
47.5°	232.4	198.0	153.8	123.2	114.8
50°	217.1	180.8	136.6	108.8	103.2
52.5°	199.4	164.1	119.0	97.6	93.9
55°	181.7	145.9	101.8	87.8	85.1
57.5°	163.6	129.7	88.3	79.5	76.7
60°	144.5	112.9	77.6	70.6	69.3
62.5°	125.5	95.7	68.3	63.2	61.4
65°	106.9	79.5	60.0	55.3	54.4
67.5°	87.8	64.6	51.6	48.3	47.9
70°	70.2	52.5	43.7	41.8	40.9
72.5°	53.9	41.8	36.7	35.3	34.9
75°	38.1	33.5	30.2	29.3	28.8
77.5°	25.6	25.6	24.2	23.2	23.7
80°	17.7	18.6	18.1	18.1	18.1
82.5°	11.6	12.5	13.0	13.0	13.0
85°	6.5	7.4	7.9	7.9	8.4
87.5°	2.3	2.8	3.3	3.7	3.7
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	14.31	15.80	14.67	16.11	16.43	10.55	12.04	10.92	12.36	12.67
	3H	15.62	16.96	16.00	17.28	17.65	12.13	13.47	12.51	13.80	14.16
	4H	15.99	17.24	16.39	17.59	17.97	12.74	13.99	13.14	14.34	14.72
	6H	16.17	17.32	16.58	17.69	18.08	13.21	14.36	13.62	14.73	15.12
	8H	16.20	17.30	16.63	17.69	18.09	13.37	14.47	13.79	14.86	15.26
	12H	16.22	17.27	16.65	17.65	18.08	13.48	14.53	13.91	14.91	15.34
4H	2H	14.42	15.67	14.82	16.02	16.40	11.21	12.47	11.61	12.82	13.19
	3H	15.91	16.95	16.32	17.35	17.75	12.99	14.03	13.40	14.43	14.83
	4H	16.38	17.32	16.82	17.73	18.17	13.71	14.64	14.14	15.06	15.50
	6H	16.67	17.48	17.13	17.92	18.38	14.30	15.11	14.76	15.55	16.01
	8H	16.74	17.50	17.20	17.94	18.41	14.50	15.26	14.97	15.71	16.17
	12H	16.78	17.45	17.26	17.93	18.41	14.66	15.33	15.14	15.81	16.29
8H	4H	16.47	17.22	16.93	17.67	18.14	14.02	14.78	14.49	15.22	15.69
	6H	16.83	17.46	17.33	17.95	18.43	14.73	15.35	15.23	15.84	16.32
	8H	16.95	17.51	17.46	18.02	18.51	15.01	15.57	15.52	16.08	16.57
	12H	17.03	17.53	17.54	18.02	18.59	15.24	15.73	15.75	16.22	16.79
12H	4H	16.46	17.14	16.94	17.62	18.09	14.05	14.72	14.53	15.20	15.67
	6H	16.83	17.39	17.35	17.91	18.39	14.78	15.34	15.29	15.85	16.34
	8H	16.99	17.49	17.50	17.98	18.55	15.11	15.61	15.62	16.10	16.67