

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: P1175368

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

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1175368  
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-S375D850-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

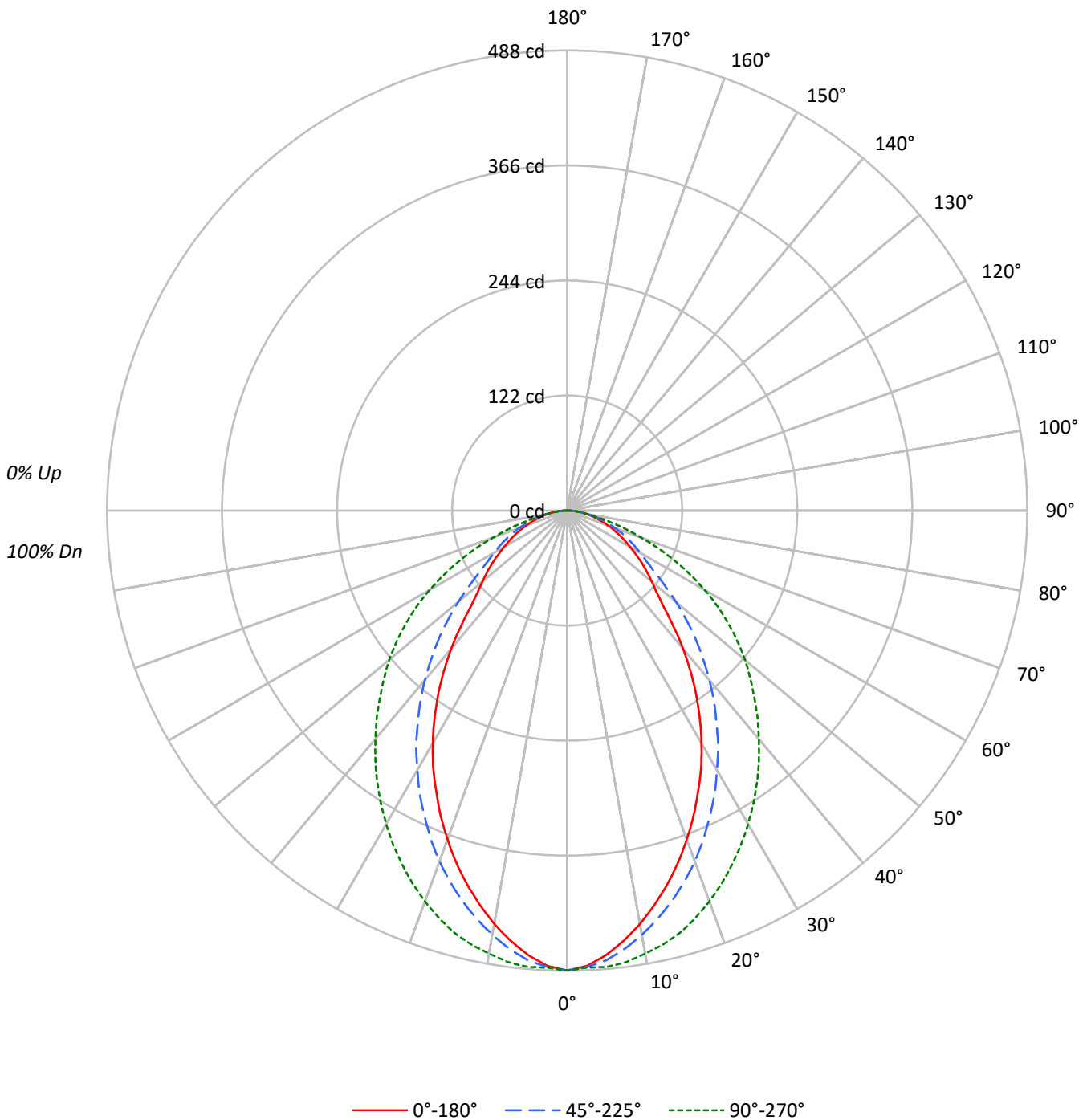
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 918.9 lumens  
Efficiency: N/A  
Efficacy: 73.5 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): 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	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

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

	0°	45°	90°
0°	3358	3358	3358
5°	3271	3308	3357
10°	3112	3193	3335
15°	2925	3057	3302
20°	2718	2900	3231
25°	2497	2717	3145
30°	2265	2525	3051
35°	2005	2322	2951
40°	1719	2110	2843
45°	1411	1878	2733
50°	1255	1614	2638
55°	1158	1352	2505
60°	1066	1231	2320
65°	992	1160	2051
70°	926	1083	1675
75°	870	1003	1256
80°	821	920	904
85°	750	916	750

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2733 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.2	4.9
10°-20°	121.7	13.2
20°-30°	167.4	18.2
30°-40°	177.6	19.3
40°-50°	155.4	16.9
50°-60°	119.3	13.0
60°-70°	79.4	8.6
70°-80°	40.7	4.4
80°-90°	12.1	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°	334.3	36.4
0°-40°	511.9	55.7
0°-60°	786.6	85.6
0°-90°	918.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	918.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	488	488	488	488	488	
5°	473	479	479	482	486	44
15°	410	420	429	449	463	115
25°	329	340	358	388	414	151
35°	238	250	276	317	351	149
45°	145	157	193	241	281	114
55°	96	98	113	167	209	86
65°	61	61	71	94	126	61
75°	33	35	38	40	47	35
85°	10	11	12	11	10	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	487.7	487.7	487.7	487.7	487.7
2.5°	483.2	488.1	484.4	484.8	485.2
5°	473.2	479.4	478.6	481.9	485.7
7.5°	460.0	466.6	468.7	477.0	482.8
10°	445.1	452.5	456.7	469.1	477.0
12.5°	428.1	436.8	443.4	459.6	471.2
15°	410.3	419.8	428.9	449.2	463.3
17.5°	391.3	400.8	412.8	436.0	452.9
20°	371.0	381.3	395.8	420.7	440.9
22.5°	350.3	361.0	377.6	404.9	428.1
25°	328.7	339.9	357.7	387.9	414.0
27.5°	307.6	318.0	338.7	371.0	399.5
30°	284.9	295.6	317.6	353.2	383.8
32.5°	262.1	272.8	298.1	335.4	367.7
35°	238.5	249.7	276.2	316.7	351.1
37.5°	214.9	226.5	255.9	297.7	334.1
40°	191.3	203.7	234.8	278.6	316.3
42.5°	167.3	180.5	213.2	260.0	298.9
45°	144.9	156.9	192.9	241.0	280.7
47.5°	128.8	135.8	171.4	221.5	263.3
50°	117.2	120.5	150.7	202.9	246.3
52.5°	106.8	108.9	130.4	185.5	227.7
55°	96.5	98.5	112.6	167.3	208.7
57.5°	86.5	87.8	99.4	149.0	189.6
60°	77.4	78.3	89.4	130.8	168.5
62.5°	69.1	69.6	79.9	112.2	147.4
65°	60.9	61.3	71.2	93.6	125.9
67.5°	53.4	53.4	62.9	76.6	105.2
70°	46.0	46.0	53.8	62.1	83.2
72.5°	39.3	40.2	45.5	50.1	65.0
75°	32.7	34.8	37.7	39.7	47.2
77.5°	26.5	29.0	30.2	31.1	31.5
80°	20.7	22.4	23.2	23.6	22.8
82.5°	15.3	16.6	17.0	17.0	15.7
85°	9.5	10.8	11.6	11.2	9.5
87.5°	4.6	6.2	6.6	5.8	4.6
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	10.83	12.32	11.19	12.64	12.95	14.85	16.35	15.21	16.66	16.97
	3H	12.41	13.76	12.79	14.08	14.45	16.24	17.58	16.61	17.91	18.27
	4H	13.06	14.32	13.46	14.67	15.04	16.64	17.90	17.04	18.25	18.63
	6H	13.56	14.73	13.98	15.10	15.49	16.85	18.01	17.26	18.38	18.77
	8H	13.75	14.85	14.17	15.24	15.65	16.90	18.01	17.33	18.40	18.80
	12H	13.87	14.93	14.30	15.31	15.74	16.94	18.00	17.37	18.38	18.81
4H	2H	11.59	12.85	11.99	13.20	13.58	14.98	16.24	15.38	16.59	16.97
	3H	13.38	14.42	13.79	14.82	15.22	16.55	17.59	16.96	17.99	18.40
	4H	14.14	15.09	14.58	15.50	15.94	17.06	18.00	17.49	18.41	18.85
	6H	14.79	15.60	15.24	16.05	16.51	17.38	18.20	17.84	18.65	19.11
	8H	15.01	15.78	15.48	16.22	16.69	17.48	18.25	17.95	18.69	19.16
	12H	15.19	15.87	15.67	16.35	16.82	17.56	18.24	18.04	18.72	19.19
8H	4H	14.53	15.29	14.99	15.74	16.21	17.16	17.92	17.62	18.37	18.83
	6H	15.31	15.94	15.80	16.43	16.91	17.58	18.21	18.07	18.70	19.18
	8H	15.62	16.19	16.14	16.70	17.19	17.74	18.30	18.25	18.81	19.30
	12H	15.89	16.39	16.40	16.88	17.44	17.87	18.38	18.38	18.87	19.43
12H	4H	14.57	15.25	15.05	15.73	16.20	17.16	17.84	17.64	18.32	18.79
	6H	15.38	15.95	15.90	16.46	16.95	17.59	18.16	18.10	18.67	19.16
	8H	15.77	16.27	16.28	16.76	17.32	17.80	18.30	18.31	18.79	19.36