

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: P1061623

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061623  
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: S125RDRP-S375D850-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**

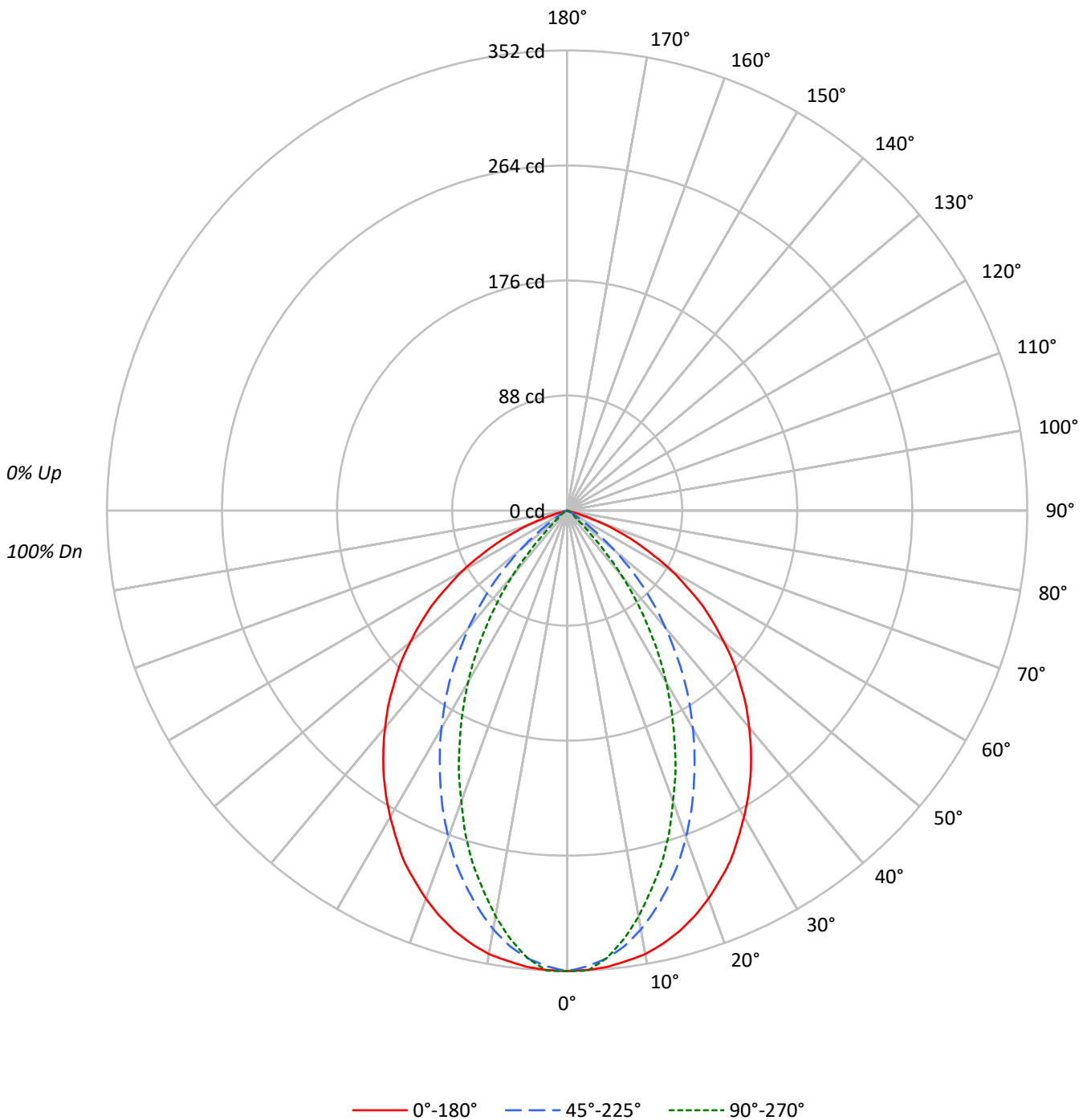
Lumens per Lamp: N/A  
Luminaire Lumens: 455.1 lumens  
Efficiency: N/A  
Efficacy: 36.4 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 12.5  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	2426	2426	2426
5°	2422	2377	2377
10°	2408	2274	2203
15°	2372	2123	1991
20°	2315	1948	1734
25°	2246	1744	1476
30°	2151	1530	1204
35°	2058	1305	903
40°	1947	1052	585
45°	1824	797	253
50°	1677	508	94
55°	1513	223	67
60°	1281	96	45
65°	969	60	23
70°	590	28	10
75°	122	13	13
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1824 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.5	7.1
10°-20°	84.7	18.6
20°-30°	108.7	23.9
30°-40°	102.3	22.5
40°-50°	71.5	15.7
50°-60°	38.2	8.4
60°-70°	15.2	3.3
70°-80°	2.0	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°	225.8	49.6
0°-40°	328.1	72.1
0°-60°	437.9	96.2
0°-90°	455.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	455.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	352	352	352	352	352	
5°	350	350	344	345	344	33
15°	333	322	298	284	279	94
25°	296	270	230	204	194	136
35°	245	206	155	120	107	153
45°	187	140	82	40	26	144
55°	126	77	19	6	6	112
65°	60	24	4	2	1	59
75°	5	1	0	0	0	9
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	352.3	352.3	352.3	352.3	352.3
2.5°	351.8	352.3	349.0	351.8	352.3
5°	350.4	349.5	343.9	344.9	343.9
7.5°	347.6	345.3	336.0	332.8	330.9
10°	344.4	339.3	325.3	318.4	315.1
12.5°	339.3	331.8	312.3	301.6	297.0
15°	332.8	322.1	297.9	284.0	279.3
17.5°	324.9	310.9	283.0	265.8	258.9
20°	316.0	297.4	265.8	245.4	236.6
22.5°	305.8	284.4	248.2	225.4	216.6
25°	295.6	269.6	229.6	204.5	194.3
27.5°	283.0	254.2	211.0	184.0	172.9
30°	270.5	238.9	192.4	163.1	151.5
32.5°	257.9	222.6	173.8	141.3	129.7
35°	244.9	205.9	155.2	119.9	107.4
37.5°	231.0	189.2	135.2	99.5	86.4
40°	216.6	172.9	117.1	79.5	65.1
42.5°	202.6	156.6	99.0	60.0	44.2
45°	187.3	140.4	81.8	39.5	26.0
47.5°	172.9	124.6	64.1	22.8	13.5
50°	156.6	108.3	47.4	12.1	8.8
52.5°	141.3	92.5	31.6	7.9	7.0
55°	126.0	77.2	18.6	6.5	5.6
57.5°	108.3	62.3	10.2	5.1	4.2
60°	93.0	48.8	7.0	3.7	3.3
62.5°	75.3	35.8	5.1	2.8	2.3
65°	59.5	23.7	3.7	1.9	1.4
67.5°	44.2	13.9	2.3	0.9	0.9
70°	29.3	7.4	1.4	0.5	0.5
72.5°	15.3	3.3	0.9	0.5	0.5
75°	4.6	1.4	0.5	0.5	0.5
77.5°	0.0	0.5	0.0	0.0	0.5
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



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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	12.02	13.29	12.39	13.60	13.92	0.00	0.00	0.00	0.00	0.00
	3H	12.61	13.72	12.99	14.05	14.42	0.00	0.00	0.00	0.00	0.00
	4H	12.57	13.60	12.97	13.95	14.34	0.00	0.00	0.00	0.00	0.00
	6H	12.49	13.43	12.90	13.80	14.20	0.00	0.00	0.00	0.00	0.00
	8H	12.44	13.33	12.87	13.72	14.13	0.00	0.00	0.00	0.00	0.00
	12H	12.39	13.25	12.83	13.63	14.06	0.00	0.00	0.00	0.00	0.00
4H	2H	11.80	12.83	12.20	13.18	13.57	0.00	0.00	0.00	0.00	0.00
	3H	12.39	13.22	12.80	13.63	14.03	0.00	0.00	0.00	0.00	0.00
	4H	12.34	13.08	12.77	13.50	13.95	0.00	0.00	0.00	0.00	0.00
	6H	12.25	12.89	12.72	13.34	13.80	0.00	0.00	0.00	0.00	0.00
	8H	12.19	12.78	12.66	13.23	13.70	0.00	0.00	0.00	0.00	0.00
	12H	12.14	12.66	12.63	13.15	13.62	0.00	0.00	0.00	0.00	0.00
8H	4H	12.19	12.78	12.66	13.23	13.70	0.00	0.00	0.00	0.00	0.00
	6H	12.08	12.56	12.59	13.06	13.55	0.00	0.00	0.00	0.00	0.00
	8H	12.02	12.45	12.54	12.97	13.46	0.00	0.00	0.00	0.00	0.00
	12H	11.97	12.35	12.49	12.85	13.42	0.00	0.00	0.00	0.00	0.00
12H	4H	12.14	12.66	12.63	13.15	13.62	0.00	0.00	0.00	0.00	0.00
	6H	12.02	12.45	12.54	12.97	13.46	0.00	0.00	0.00	0.00	0.00
	8H	11.97	12.35	12.49	12.85	13.42	0.00	0.00	0.00	0.00	0.00