

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



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1062028

Luminaire Tested: S125RDR-H375D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062028  
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: S125RDR-H375D850-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

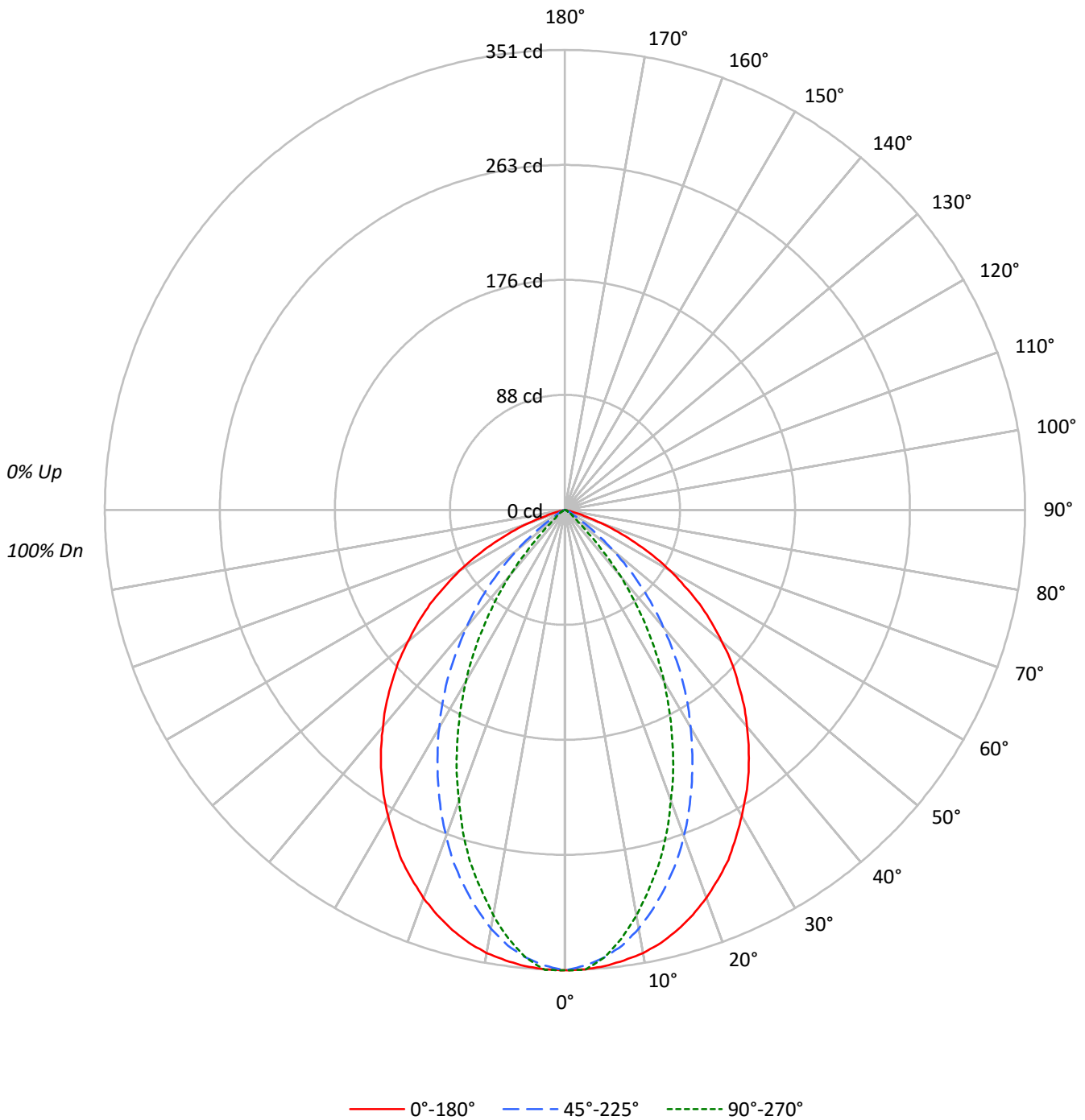
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 454.0 lumens  
Efficiency: N/A  
Efficacy: 38.8 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): 11.7  
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°	2419	2419	2419
5°	2416	2371	2371
10°	2402	2269	2197
15°	2367	2118	1986
20°	2310	1943	1729
25°	2240	1740	1472
30°	2145	1526	1201
35°	2053	1302	900
40°	1941	1050	583
45°	1819	795	253
50°	1673	507	94
55°	1508	222	67
60°	1277	96	44
65°	966	60	23
70°	588	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: 1819 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.4	7.1
10°-20°	84.4	18.6
20°-30°	108.4	23.9
30°-40°	102.1	22.5
40°-50°	71.4	15.7
50°-60°	38.1	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°	225.3	49.6
0°-40°	327.3	72.1
0°-60°	436.8	96.2
0°-90°	454.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	454.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	351	351	351	351	351	
5°	350	349	343	344	343	33
15°	332	321	297	283	279	93
25°	295	269	229	204	194	135
35°	244	205	155	120	107	152
45°	187	140	82	39	26	144
55°	126	77	18	6	6	111
65°	59	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°	351.4	351.4	351.4	351.4	351.4
2.5°	351.0	351.4	348.2	351.0	351.4
5°	349.6	348.6	343.1	344.0	343.1
7.5°	346.8	344.5	335.2	332.0	330.1
10°	343.5	338.4	324.5	317.6	314.3
12.5°	338.4	331.0	311.6	300.9	296.3
15°	332.0	321.3	297.2	283.3	278.6
17.5°	324.1	310.2	282.3	265.2	258.2
20°	315.3	296.7	265.2	244.8	236.0
22.5°	305.1	283.7	247.6	224.9	216.0
25°	294.9	268.9	229.0	204.0	193.8
27.5°	282.3	253.6	210.5	183.6	172.5
30°	269.8	238.3	191.9	162.7	151.1
32.5°	257.3	222.1	173.4	140.9	129.4
35°	244.3	205.4	154.9	119.6	107.1
37.5°	230.4	188.7	134.9	99.2	86.2
40°	216.0	172.5	116.8	79.3	64.9
42.5°	202.1	156.2	98.8	59.8	44.0
45°	186.8	140.0	81.6	39.4	26.0
47.5°	172.5	124.3	64.0	22.7	13.4
50°	156.2	108.0	47.3	12.1	8.8
52.5°	140.9	92.3	31.5	7.9	7.0
55°	125.6	77.0	18.5	6.5	5.6
57.5°	108.0	62.1	10.2	5.1	4.2
60°	92.7	48.7	7.0	3.7	3.2
62.5°	75.1	35.7	5.1	2.8	2.3
65°	59.3	23.6	3.7	1.9	1.4
67.5°	44.0	13.9	2.3	0.9	0.9
70°	29.2	7.4	1.4	0.5	0.5
72.5°	15.3	3.2	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	12.01	13.28	12.38	13.59	13.90	0.00	0.00	0.00	0.00	0.00
	3H	12.60	13.71	12.98	14.04	14.40	0.00	0.00	0.00	0.00	0.00
	4H	12.56	13.59	12.96	13.94	14.33	0.00	0.00	0.00	0.00	0.00
	6H	12.47	13.42	12.89	13.79	14.18	0.00	0.00	0.00	0.00	0.00
	8H	12.43	13.32	12.86	13.71	14.12	0.00	0.00	0.00	0.00	0.00
	12H	12.38	13.23	12.81	13.62	14.05	0.00	0.00	0.00	0.00	0.00
4H	2H	11.78	12.82	12.19	13.17	13.55	0.00	0.00	0.00	0.00	0.00
	3H	12.38	13.21	12.79	13.62	14.02	0.00	0.00	0.00	0.00	0.00
	4H	12.32	13.07	12.76	13.49	13.93	0.00	0.00	0.00	0.00	0.00
	6H	12.24	12.88	12.70	13.32	13.79	0.00	0.00	0.00	0.00	0.00
	8H	12.18	12.77	12.65	13.22	13.69	0.00	0.00	0.00	0.00	0.00
	12H	12.13	12.65	12.61	13.13	13.61	0.00	0.00	0.00	0.00	0.00
8H	4H	12.18	12.77	12.65	13.22	13.69	0.00	0.00	0.00	0.00	0.00
	6H	12.07	12.55	12.58	13.05	13.53	0.00	0.00	0.00	0.00	0.00
	8H	12.00	12.44	12.53	12.95	13.45	0.00	0.00	0.00	0.00	0.00
	12H	11.96	12.34	12.47	12.83	13.41	0.00	0.00	0.00	0.00	0.00
12H	4H	12.13	12.65	12.62	13.13	13.61	0.00	0.00	0.00	0.00	0.00
	6H	12.00	12.44	12.53	12.95	13.45	0.00	0.00	0.00	0.00	0.00
	8H	11.96	12.34	12.47	12.83	13.41	0.00	0.00	0.00	0.00	0.00