

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: P1061598

Luminaire Tested: S125RDRP-S375D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061598  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S375D830-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

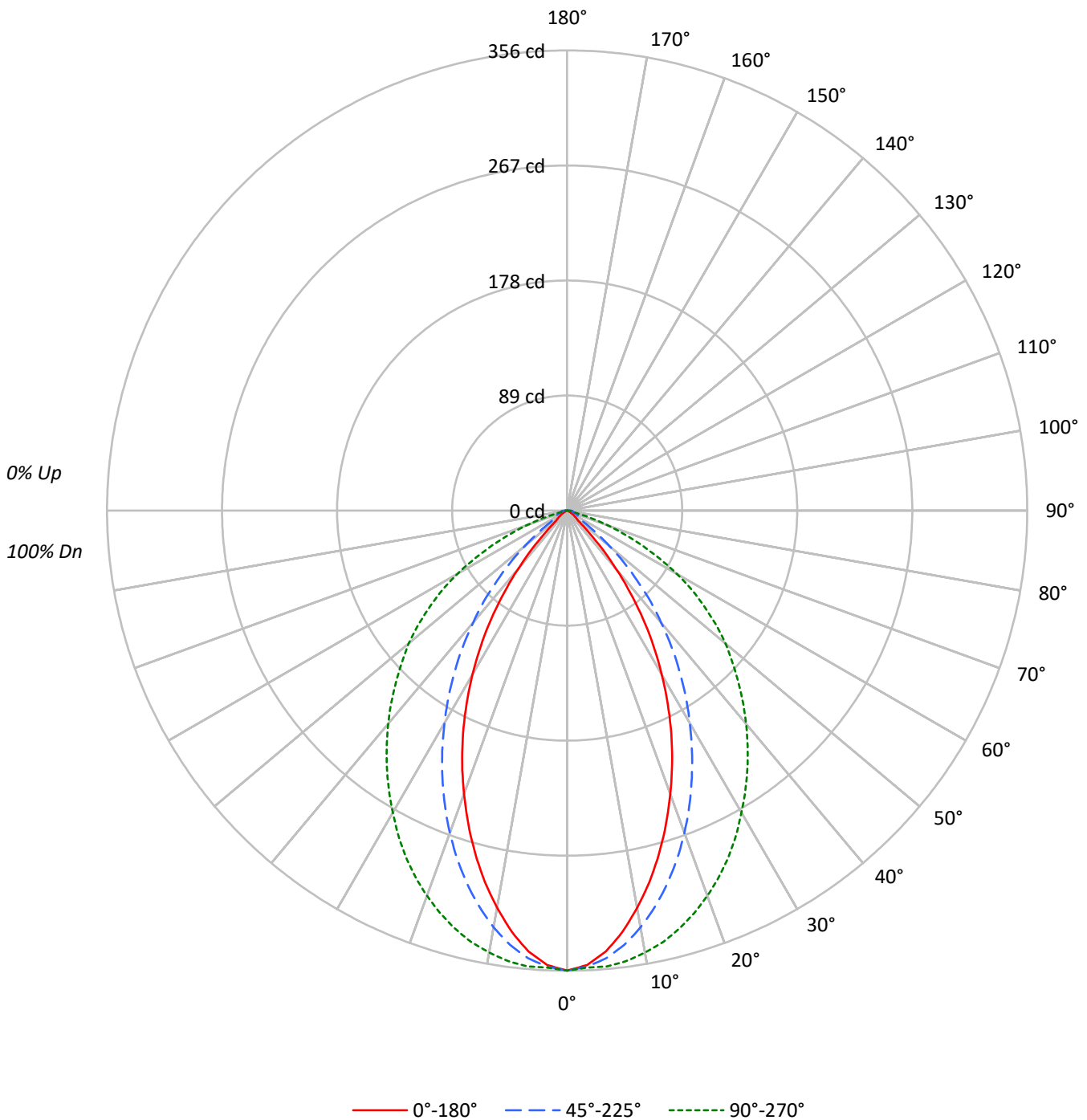
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 460.5 lumens  
Efficiency: N/A  
Efficacy: 36.8 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

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

	0°	45°	90°
0°	2450	2450	2450
5°	2367	2402	2446
10°	2181	2289	2427
15°	1959	2131	2387
20°	1709	1944	2323
25°	1448	1734	2244
30°	1163	1509	2144
35°	861	1273	2044
40°	533	1017	1937
45°	208	743	1821
50°	97	466	1715
55°	71	199	1557
60°	50	142	1351
65°	33	148	1051
70°	32	135	660
75°	43	136	210
80°	63	159	143
85°	95	316	221

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1821 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.6	7.1
10°-20°	84.6	18.4
20°-30°	107.7	23.4
30°-40°	100.2	21.8
40°-50°	69.0	15.0
50°-60°	39.1	8.5
60°-70°	18.5	4.0
70°-80°	5.8	1.3
80°-90°	3.0	0.7
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°	224.9	48.8
0°-40°	325.1	70.6
0°-60°	433.2	94.1
0°-90°	460.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	460.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	356	356	356	356	356	
5°	342	347	348	351	354	32
15°	275	284	299	322	335	77
25°	191	203	228	266	295	87
35°	102	117	151	203	243	63
45°	21	34	76	138	187	20
55°	6	7	17	80	130	5
65°	2	2	9	28	64	2
75°	2	4	5	6	8	2
85°	1	3	4	4	3	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	355.9	355.9	355.9	355.9	355.9
2.5°	351.9	355.5	353.1	353.5	353.9
5°	342.4	347.2	347.6	350.7	353.9
7.5°	328.6	334.5	338.9	346.4	351.5
10°	312.0	319.1	327.4	339.7	347.2
12.5°	294.2	302.5	314.0	331.4	342.0
15°	274.8	283.9	298.9	321.5	334.9
17.5°	254.3	264.5	282.7	309.6	326.6
20°	233.3	244.4	265.3	296.2	317.1
22.5°	212.3	223.8	247.1	281.5	306.8
25°	190.6	202.9	228.2	266.5	295.4
27.5°	168.5	181.1	209.2	251.1	283.1
30°	146.3	159.8	189.8	235.3	269.7
32.5°	124.6	138.0	170.8	219.5	256.6
35°	102.4	116.7	151.4	203.2	243.2
37.5°	80.3	95.7	132.5	186.6	229.3
40°	59.3	73.9	113.1	170.4	215.5
42.5°	39.5	53.8	95.7	154.2	201.3
45°	21.4	34.0	76.3	138.0	187.0
47.5°	11.5	18.2	59.7	122.2	173.2
50°	9.1	10.3	43.5	107.6	160.1
52.5°	7.5	8.3	28.5	93.7	145.1
55°	5.9	6.7	16.6	79.5	129.7
57.5°	4.7	5.5	10.7	66.0	114.7
60°	3.6	4.3	10.3	53.0	98.1
62.5°	2.8	3.2	9.5	40.7	80.7
65°	2.0	2.4	9.1	28.5	64.5
67.5°	1.6	2.0	8.3	18.2	48.2
70°	1.6	1.6	6.7	11.9	32.8
72.5°	1.6	2.8	5.9	7.9	19.8
75°	1.6	3.6	5.1	5.5	7.9
77.5°	1.6	4.0	4.3	4.3	4.3
80°	1.6	3.6	4.0	4.0	3.6
82.5°	1.6	3.2	3.6	4.0	3.2
85°	1.2	3.2	4.0	3.6	2.8
87.5°	1.2	3.2	3.6	3.2	2.0
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	0.00	0.00	0.00	0.00	0.00	12.36	13.65	12.72	13.96	14.27
	3H	0.00	0.00	0.00	0.00	0.00	13.08	14.22	13.46	14.55	14.91
	4H	0.00	0.00	0.00	0.00	0.00	13.10	14.16	13.50	14.51	14.90
	6H	0.00	0.00	0.00	0.00	0.00	13.05	14.03	13.47	14.40	14.79
	8H	0.00	0.00	0.00	0.00	0.00	13.03	13.95	13.46	14.34	14.75
	12H	0.00	0.00	0.00	0.00	0.00	13.01	13.89	13.44	14.28	14.71
4H	2H	0.00	0.00	0.00	0.00	0.00	12.15	13.21	12.55	13.56	13.95
	3H	0.00	0.00	0.00	0.00	0.00	12.90	13.77	13.32	14.18	14.58
	4H	0.00	0.00	0.00	0.00	0.34	12.93	13.71	13.37	14.13	14.57
	6H	0.00	0.67	0.47	1.12	1.59	12.91	13.58	13.37	14.03	14.49
	8H	0.59	1.22	1.06	1.66	2.13	12.90	13.52	13.37	13.97	14.44
	12H	1.16	1.71	1.65	2.19	2.67	12.91	13.45	13.39	13.94	14.41
8H	4H	0.10	0.73	0.57	1.18	1.65	12.82	13.44	13.29	13.89	14.36
	6H	1.70	2.20	2.20	2.70	3.18	12.81	13.31	13.31	13.81	14.29
	8H	2.50	2.96	3.02	3.47	3.97	12.82	13.28	13.34	13.79	14.28
	12H	3.35	3.75	3.86	4.25	4.82	12.88	13.29	13.40	13.78	14.35
12H	4H	0.33	0.88	0.82	1.36	1.84	12.77	13.32	13.26	13.81	14.28
	6H	2.07	2.53	2.59	3.04	3.54	12.76	13.22	13.28	13.73	14.22
	8H	3.07	3.48	3.59	3.97	4.54	12.81	13.21	13.33	13.71	14.28