

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: P1061625

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061625  
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-S375D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

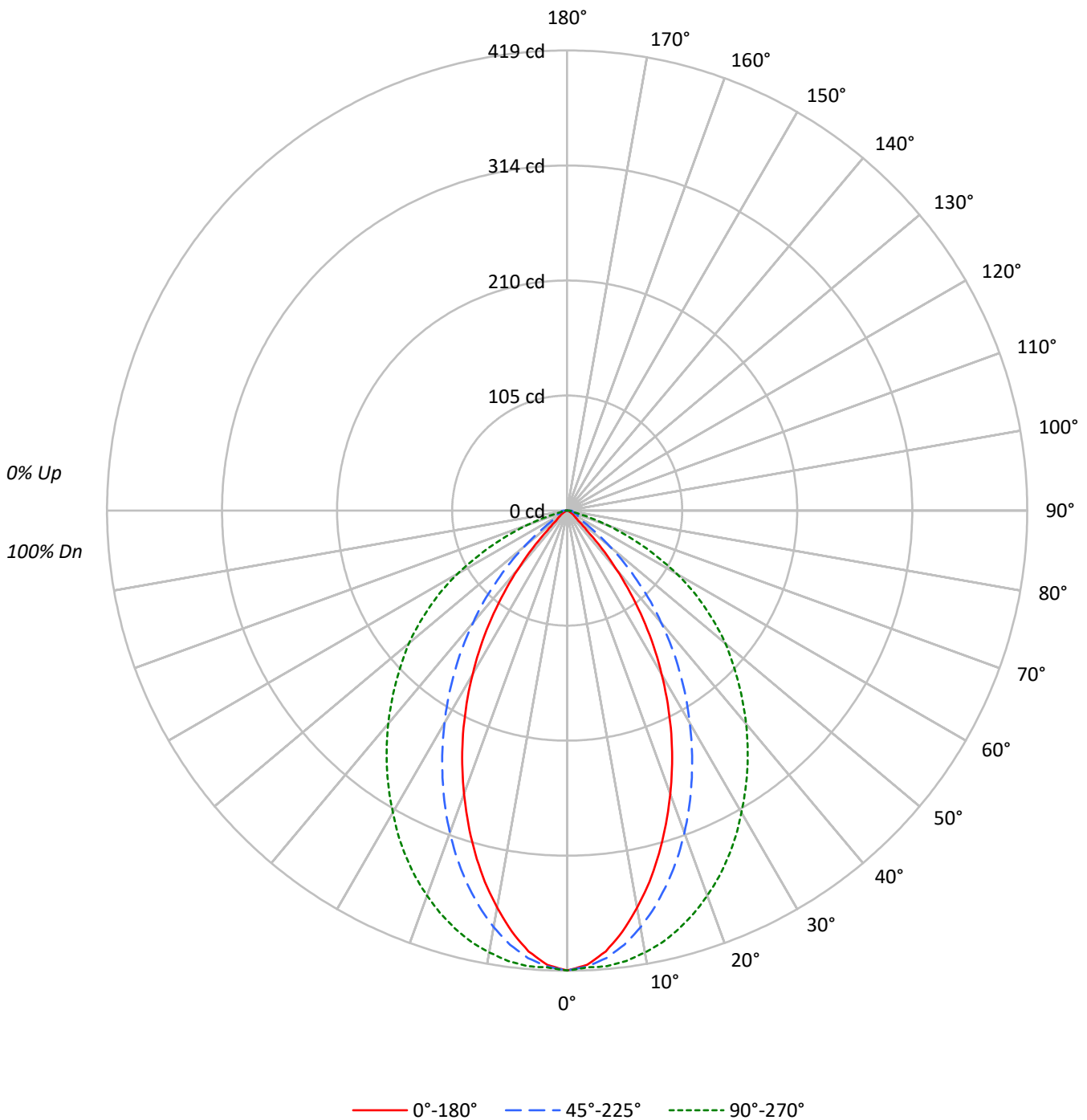
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 541.8 lumens  
Efficiency: N/A  
Efficacy: 43.3 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40

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

	0°	45°	90°
0°	2883	2883	2883
5°	2785	2827	2878
10°	2567	2693	2856
15°	2305	2507	2809
20°	2011	2288	2734
25°	1704	2040	2640
30°	1368	1775	2523
35°	1013	1498	2405
40°	627	1196	2279
45°	244	874	2143
50°	115	548	2018
55°	84	234	1832
60°	58	167	1589
65°	37	174	1235
70°	38	159	777
75°	51	160	247
80°	75	186	167
85°	111	371	261

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2143 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	7.1
10°-20°	99.5	18.4
20°-30°	126.7	23.4
30°-40°	118.0	21.8
40°-50°	81.2	15.0
50°-60°	46.0	8.5
60°-70°	21.7	4.0
70°-80°	6.8	1.3
80°-90°	3.6	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°	264.6	48.8
0°-40°	382.6	70.6
0°-60°	509.7	94.1
0°-90°	541.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	541.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	403	408	409	413	416	37
15°	323	334	352	378	394	90
25°	224	239	268	314	348	102
35°	120	137	178	239	286	75
45°	25	40	90	162	220	24
55°	7	8	20	94	153	6
65°	2	3	11	34	76	3
75°	2	4	6	6	9	2
85°	1	4	5	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	418.7	418.7	418.7	418.7	418.7
2.5°	414.1	418.3	415.5	415.9	416.4
5°	402.9	408.5	409.0	412.7	416.4
7.5°	386.6	393.6	398.7	407.6	413.6
10°	367.1	375.5	385.2	399.7	408.5
12.5°	346.2	355.9	369.4	389.9	402.4
15°	323.4	334.1	351.7	378.3	394.1
17.5°	299.2	311.3	332.7	364.3	384.3
20°	274.5	287.5	312.2	348.5	373.1
22.5°	249.8	263.3	290.8	331.3	361.0
25°	224.3	238.7	268.5	313.6	347.5
27.5°	198.2	213.1	246.1	295.4	333.1
30°	172.1	188.0	223.3	276.8	317.3
32.5°	146.6	162.4	201.0	258.2	302.0
35°	120.5	137.3	178.2	239.1	286.1
37.5°	94.4	112.6	155.9	219.6	269.9
40°	69.8	87.0	133.1	200.5	253.6
42.5°	46.5	63.3	112.6	181.5	236.8
45°	25.1	40.0	89.8	162.4	220.1
47.5°	13.5	21.4	70.3	143.8	203.8
50°	10.7	12.1	51.2	126.6	188.4
52.5°	8.8	9.8	33.5	110.3	170.7
55°	7.0	7.9	19.5	93.5	152.6
57.5°	5.6	6.5	12.6	77.7	134.9
60°	4.2	5.1	12.1	62.3	115.4
62.5°	3.3	3.7	11.2	47.9	94.9
65°	2.3	2.8	10.7	33.5	75.8
67.5°	1.9	2.3	9.8	21.4	56.8
70°	1.9	1.9	7.9	14.0	38.6
72.5°	1.9	3.3	7.0	9.3	23.3
75°	1.9	4.2	6.0	6.5	9.3
77.5°	1.9	4.7	5.1	5.1	5.1
80°	1.9	4.2	4.7	4.7	4.2
82.5°	1.9	3.7	4.2	4.7	3.7
85°	1.4	3.7	4.7	4.2	3.3
87.5°	1.4	3.7	4.2	3.7	2.3
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	12.92	14.21	13.29	14.53	14.84
	3H	0.00	0.00	0.00	0.00	0.00	13.64	14.79	14.02	15.12	15.48
	4H	0.00	0.00	0.00	0.00	0.00	13.67	14.73	14.07	15.08	15.46
	6H	0.00	0.00	0.00	0.00	0.00	13.62	14.59	14.03	14.96	15.36
	8H	0.00	0.00	0.00	0.00	0.00	13.59	14.52	14.03	14.91	15.31
	12H	0.00	0.00	0.00	0.00	0.24	13.58	14.46	14.01	14.84	15.27
4H	2H	0.00	0.00	0.00	0.00	0.00	12.71	13.78	13.12	14.13	14.51
	3H	0.00	0.00	0.00	0.00	0.00	13.47	14.34	13.89	14.74	15.15
	4H	0.00	0.05	0.00	0.47	0.91	13.50	14.28	13.94	14.70	15.14
	6H	0.57	1.24	1.03	1.68	2.15	13.48	14.15	13.94	14.59	15.06
	8H	1.15	1.78	1.62	2.22	2.69	13.46	14.09	13.93	14.53	15.01
	12H	1.71	2.26	2.20	2.75	3.22	13.47	14.02	13.96	14.51	14.98
8H	4H	0.68	1.30	1.15	1.75	2.22	13.38	14.01	13.85	14.45	14.93
	6H	2.26	2.76	2.76	3.26	3.74	13.37	13.88	13.88	14.38	14.86
	8H	3.05	3.50	3.57	4.02	4.51	13.39	13.84	13.91	14.36	14.85
	12H	3.88	4.28	4.39	4.78	5.35	13.45	13.85	13.96	14.35	14.92
12H	4H	0.90	1.45	1.39	1.94	2.41	13.34	13.89	13.83	14.37	14.85
	6H	2.63	3.09	3.15	3.60	4.09	13.33	13.78	13.85	14.30	14.79
	8H	3.61	4.02	4.13	4.51	5.08	13.38	13.78	13.89	14.27	14.85