

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: P1061619

Luminaire Tested: S125RDRP-S375D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061619  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S375D840-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

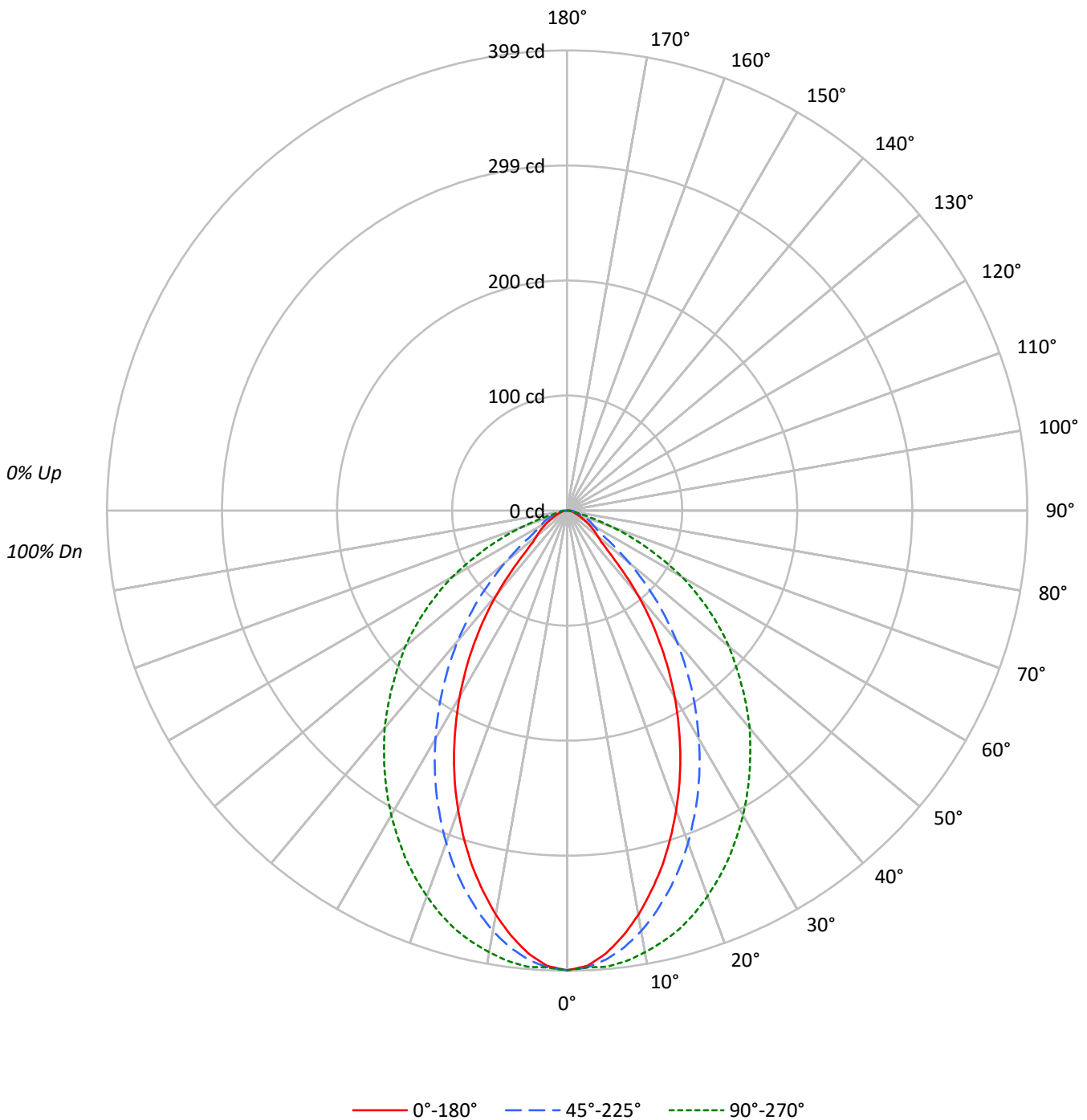
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 577.4 lumens  
Efficiency: N/A  
Efficacy: 46.2 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

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

	0°	45°	90°
0°	2744	2744	2744
5°	2664	2700	2743
10°	2488	2588	2719
15°	2271	2431	2678
20°	2024	2247	2607
25°	1763	2041	2523
30°	1482	1815	2425
35°	1178	1578	2318
40°	849	1325	2212
45°	503	1052	2083
50°	372	749	1960
55°	316	462	1795
60°	256	373	1581
65°	200	345	1250
70°	171	298	835
75°	157	258	338
80°	167	270	234
85°	197	403	269

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2083 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.7	6.4
10°-20°	96.5	16.7
20°-30°	126.1	21.8
30°-40°	122.9	21.3
40°-50°	92.1	16.0
50°-60°	57.8	10.0
60°-70°	30.1	5.2
70°-80°	10.9	1.9
80°-90°	4.3	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°	259.3	44.9
0°-40°	382.2	66.2
0°-60°	532.1	92.2
0°-90°	577.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	577.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	399	399	399	399	399	
5°	386	391	391	394	397	36
15°	319	328	341	362	376	89
25°	232	245	269	305	332	106
35°	140	155	188	238	276	87
45°	52	67	108	167	214	43
55°	26	28	38	101	150	23
65°	12	13	21	41	77	13
75°	6	8	10	10	13	6
85°	2	4	5	5	3	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	398.6	398.6	398.6	398.6	398.6
2.5°	395.2	399.0	396.5	396.5	396.5
5°	385.5	390.6	390.6	393.5	396.9
7.5°	371.9	377.9	381.7	388.9	394.0
10°	355.8	363.0	370.2	382.1	388.9
12.5°	337.6	346.1	356.3	372.8	382.9
15°	318.6	327.9	341.0	362.2	375.7
17.5°	297.8	308.8	324.5	349.9	366.4
20°	276.2	287.2	306.7	335.5	355.8
22.5°	254.6	266.4	287.6	320.2	344.4
25°	232.1	244.8	268.6	305.0	332.1
27.5°	209.3	222.4	248.7	289.3	318.6
30°	186.4	199.9	228.3	272.4	305.0
32.5°	163.5	177.9	208.0	255.0	290.6
35°	140.2	155.0	187.7	237.6	275.8
37.5°	117.8	132.6	167.3	219.9	260.9
40°	94.5	110.6	147.4	202.1	246.1
42.5°	71.6	88.1	127.5	184.3	230.0
45°	51.7	66.9	108.0	166.9	213.9
47.5°	39.8	48.3	88.1	149.1	198.2
50°	34.7	37.3	69.9	132.6	183.0
52.5°	30.1	31.8	52.5	117.3	166.5
55°	26.3	27.5	38.5	100.8	149.5
57.5°	22.0	23.7	30.5	84.7	132.2
60°	18.6	19.5	27.1	69.9	114.8
62.5°	15.2	16.1	24.1	55.1	95.3
65°	12.3	13.1	21.2	40.7	76.7
67.5°	10.2	10.6	17.8	28.8	58.9
70°	8.5	8.9	14.8	19.9	41.5
72.5°	7.2	8.5	11.9	14.4	26.3
75°	5.9	8.0	9.7	10.2	12.7
77.5°	5.1	7.6	8.0	8.0	7.2
80°	4.2	6.4	6.8	6.4	5.9
82.5°	3.4	5.1	5.5	5.5	4.7
85°	2.5	4.2	5.1	4.7	3.4
87.5°	1.7	3.8	4.2	3.8	2.5
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	3.42	4.77	3.78	5.08	5.40	13.04	14.39	13.40	14.70	15.02
	3H	4.28	5.48	4.66	5.81	6.18	13.88	15.08	14.26	15.41	15.77
	4H	4.70	5.82	5.11	6.17	6.56	13.95	15.07	14.36	15.42	15.81
	6H	5.13	6.16	5.55	6.53	6.92	13.94	14.96	14.35	15.33	15.73
	8H	5.31	6.29	5.74	6.68	7.08	13.92	14.90	14.35	15.29	15.69
	12H	5.47	6.40	5.90	6.79	7.22	13.91	14.84	14.34	15.23	15.66
4H	2H	4.39	5.50	4.79	5.85	6.24	12.90	14.02	13.30	14.37	14.75
	3H	5.44	6.36	5.85	6.76	7.16	13.81	14.73	14.22	15.13	15.53
	4H	6.00	6.82	6.43	7.24	7.68	13.91	14.73	14.35	15.15	15.59
	6H	6.60	7.31	7.06	7.75	8.22	13.94	14.65	14.40	15.09	15.56
	8H	6.84	7.50	7.31	7.95	8.42	13.94	14.60	14.41	15.05	15.52
	12H	7.06	7.65	7.55	8.13	8.60	13.96	14.54	14.44	15.02	15.50
8H	4H	6.47	7.13	6.94	7.58	8.05	13.84	14.50	14.31	14.95	15.42
	6H	7.29	7.83	7.79	8.32	8.80	13.89	14.43	14.39	14.93	15.41
	8H	7.67	8.15	8.19	8.67	9.16	13.93	14.41	14.45	14.93	15.42
	12H	8.05	8.48	8.57	8.98	9.55	13.99	14.42	14.51	14.92	15.49
12H	4H	6.52	7.11	7.01	7.59	8.06	13.81	14.39	14.29	14.87	15.35
	6H	7.41	7.89	7.93	8.41	8.90	13.86	14.35	14.38	14.86	15.35
	8H	7.90	8.33	8.41	8.82	9.39	13.93	14.36	14.45	14.86	15.43