

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: P1061603

Luminaire Tested: S125RDRP-S375D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061603  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S375D830-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

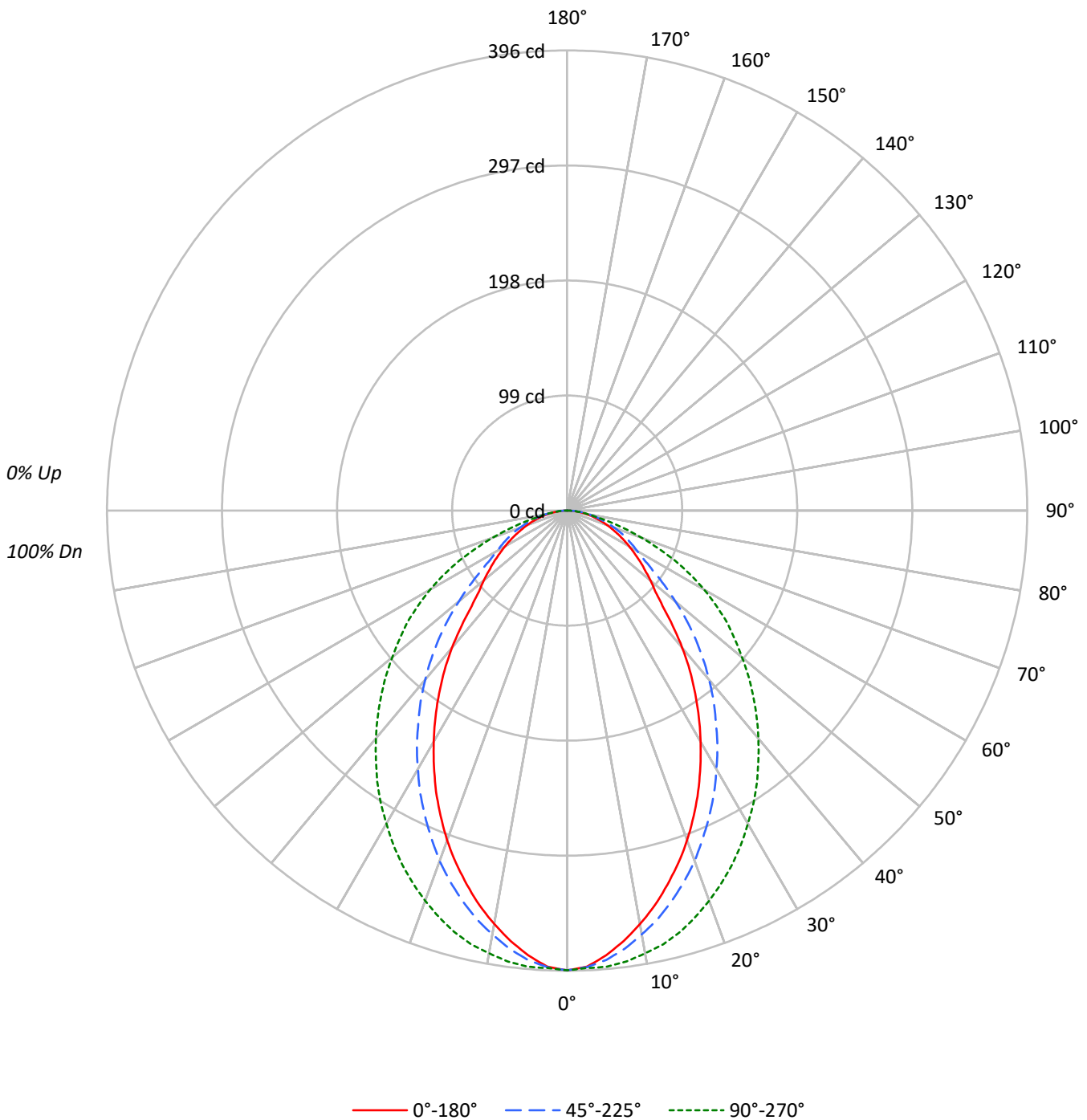
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 741.6 lumens  
Efficiency: N/A  
Efficacy: 59.3 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

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

	0°	45°	90°
0°	2724	2724	2724
5°	2655	2682	2723
10°	2525	2589	2705
15°	2375	2479	2676
20°	2212	2351	2618
25°	2027	2201	2552
30°	1825	2042	2473
35°	1615	1877	2395
40°	1385	1709	2302
45°	1131	1520	2205
50°	1004	1304	2104
55°	921	1082	2017
60°	850	958	1877
65°	792	920	1675
70°	741	876	1369
75°	684	819	1008
80°	642	769	737
85°	592	750	624

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2205 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.6	4.9
10°-20°	98.6	13.3
20°-30°	135.5	18.3
30°-40°	143.6	19.4
40°-50°	125.4	16.9
50°-60°	95.3	12.8
60°-70°	63.8	8.6
70°-80°	32.9	4.4
80°-90°	9.9	1.3
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°	270.8	36.5
0°-40°	414.4	55.9
0°-60°	635.0	85.6
0°-90°	741.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	741.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	384	388	388	391	394	36
15°	333	340	348	363	375	93
25°	267	275	290	314	336	122
35°	192	203	223	255	285	120
45°	116	128	156	193	226	92
55°	77	79	90	132	168	69
65°	49	50	56	76	103	48
75°	26	27	31	33	38	28
85°	8	10	10	9	8	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	395.6	395.6	395.6	395.6	395.6
2.5°	392.8	395.6	393.2	393.2	394.0
5°	384.1	388.1	388.1	390.9	394.0
7.5°	373.5	377.8	380.2	386.5	391.3
10°	361.2	366.0	370.3	379.8	386.9
12.5°	348.2	353.3	360.0	372.3	382.2
15°	333.2	339.5	347.8	363.2	375.4
17.5°	318.1	324.5	334.7	352.9	366.8
20°	301.9	308.7	320.9	340.7	357.3
22.5°	284.5	292.1	305.1	327.6	347.0
25°	266.8	275.1	289.7	313.8	335.9
27.5°	248.2	258.1	273.9	299.6	324.1
30°	229.6	239.5	256.9	284.9	311.0
32.5°	211.0	221.7	240.7	270.3	298.4
35°	192.1	203.1	223.3	254.9	284.9
37.5°	173.5	184.6	207.1	239.9	270.3
40°	154.1	165.6	190.1	224.5	256.1
42.5°	134.4	146.6	173.1	208.7	241.5
45°	116.2	127.7	156.1	193.3	226.5
47.5°	102.8	110.3	139.1	177.4	211.8
50°	93.7	97.6	121.7	162.0	196.4
52.5°	84.6	87.7	105.5	146.2	181.8
55°	76.7	79.0	90.1	132.4	168.0
57.5°	68.8	71.1	78.3	118.6	151.8
60°	61.7	63.6	69.6	103.9	136.3
62.5°	54.9	56.5	62.8	90.1	119.7
65°	48.6	49.8	56.5	75.5	102.8
67.5°	42.3	43.5	50.2	61.7	84.6
70°	36.8	37.1	43.5	50.2	68.0
72.5°	31.2	31.6	36.8	40.7	52.2
75°	25.7	27.3	30.8	32.8	37.9
77.5°	20.9	22.9	24.9	25.7	25.7
80°	16.2	18.6	19.4	19.4	18.6
82.5°	11.9	13.8	14.2	13.4	12.6
85°	7.5	9.5	9.5	8.7	7.9
87.5°	3.6	5.1	5.1	4.7	3.6
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	10.09	11.58	10.45	11.90	12.21	14.02	15.51	14.38	15.83	16.14
	3H	11.66	13.00	12.04	13.33	13.69	15.44	16.78	15.82	17.11	17.47
	4H	12.27	13.53	12.67	13.88	14.26	15.85	17.11	16.25	17.46	17.84
	6H	12.77	13.93	13.18	14.30	14.69	16.07	17.23	16.48	17.60	17.99
	8H	12.94	14.05	13.37	14.44	14.84	16.13	17.24	16.56	17.63	18.03
	12H	13.06	14.12	13.49	14.51	14.94	16.16	17.22	16.59	17.60	18.03
4H	2H	10.82	12.08	11.22	12.43	12.81	14.14	15.40	14.54	15.75	16.13
	3H	12.60	13.65	13.01	14.05	14.45	15.75	16.80	16.16	17.20	17.60
	4H	13.34	14.28	13.77	14.70	15.14	16.28	17.22	16.71	17.64	18.08
	6H	13.97	14.79	14.43	15.24	15.70	16.62	17.44	17.08	17.88	18.34
	8H	14.20	14.97	14.67	15.41	15.88	16.72	17.49	17.19	17.93	18.40
	12H	14.38	15.06	14.86	15.54	16.01	16.79	17.48	17.28	17.96	18.43
8H	4H	13.74	14.50	14.20	14.95	15.42	16.39	17.15	16.85	17.60	18.06
	6H	14.53	15.16	15.02	15.65	16.13	16.83	17.46	17.32	17.95	18.43
	8H	14.85	15.42	15.37	15.93	16.42	16.98	17.55	17.50	18.06	18.55
	12H	15.13	15.63	15.64	16.12	16.68	17.12	17.62	17.63	18.11	18.68
12H	4H	13.78	14.47	14.27	14.95	15.42	16.39	17.07	16.87	17.55	18.02
	6H	14.61	15.18	15.12	15.69	16.18	16.84	17.41	17.36	17.92	18.41
	8H	15.00	15.51	15.51	16.00	16.56	17.05	17.55	17.56	18.04	18.61