

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: P1061602

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061602  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
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-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

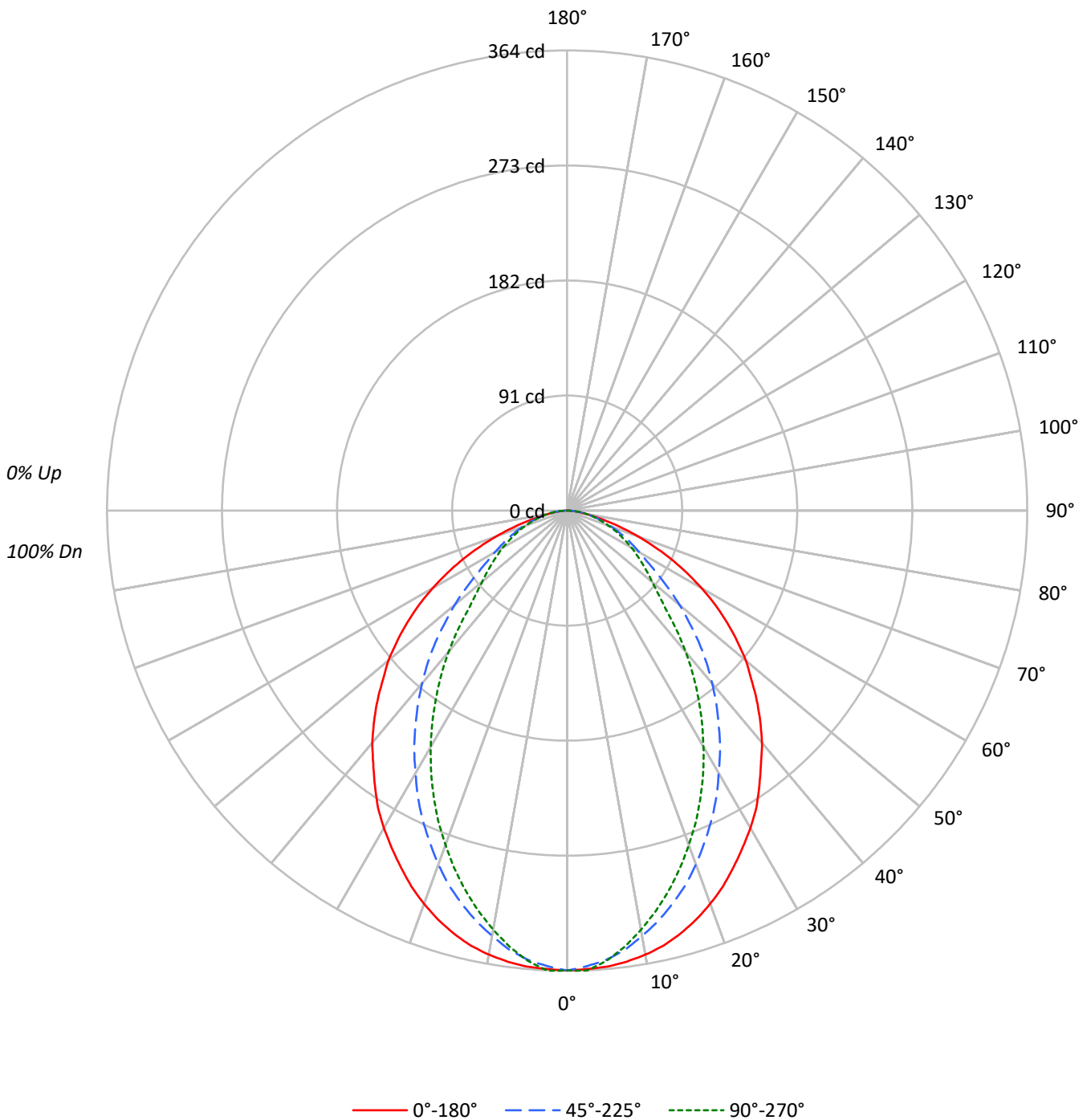
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 689.2 lumens  
Efficiency: N/A  
Efficacy: 55.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
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	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	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°	2505	2505	2505
5°	2503	2465	2471
10°	2494	2389	2353
15°	2469	2295	2216
20°	2425	2182	2061
25°	2365	2053	1897
30°	2305	1907	1715
35°	2228	1760	1521
40°	2155	1604	1310
45°	2065	1434	1073
50°	1976	1244	939
55°	1855	1038	868
60°	1692	909	811
65°	1481	831	753
70°	1200	747	701
75°	862	684	652
80°	595	611	611
85°	434	529	561

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2065 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.8	4.9
10°-20°	91.5	13.3
20°-30°	126.5	18.3
30°-40°	134.7	19.5
40°-50°	118.3	17.2
50°-60°	89.7	13.0
60°-70°	58.3	8.5
70°-80°	28.9	4.2
80°-90°	7.6	1.1
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°	251.8	36.5
0°-40°	386.5	56.1
0°-60°	594.5	86.3
0°-90°	689.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	689.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	364	364	364	364	364	
5°	362	361	357	358	358	34
15°	346	338	322	314	311	98
25°	311	294	270	256	250	143
35°	265	241	209	190	181	166
45°	212	182	147	121	110	164
55°	154	124	86	75	72	138
65°	91	68	51	47	46	90
75°	32	28	26	25	24	36
85°	6	6	7	7	7	7
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	363.8	363.8	363.8	363.8	363.8
2.5°	363.0	363.8	360.7	363.4	364.2
5°	362.2	361.4	356.7	357.9	357.5
7.5°	359.9	358.3	350.4	349.6	348.0
10°	356.7	352.8	341.7	338.9	336.6
12.5°	352.4	346.0	332.6	327.1	324.3
15°	346.4	338.5	321.9	314.4	310.9
17.5°	339.3	328.3	310.9	300.6	296.7
20°	331.0	318.0	297.8	286.0	281.3
22.5°	321.9	306.5	284.0	271.4	266.2
25°	311.3	294.3	270.2	256.4	249.7
27.5°	300.6	281.6	255.6	240.2	233.1
30°	289.9	268.2	239.8	223.2	215.7
32.5°	278.5	254.4	225.2	207.0	198.3
35°	265.1	240.6	209.4	190.4	180.9
37.5°	252.0	226.0	194.0	172.6	163.5
40°	239.8	212.1	178.5	155.2	145.8
42.5°	226.0	197.5	163.1	138.7	128.0
45°	212.1	182.5	147.3	120.9	110.2
47.5°	197.5	168.3	130.8	104.7	97.6
50°	184.5	153.7	116.1	92.4	87.7
52.5°	169.5	139.4	101.1	83.0	79.8
55°	154.5	124.0	86.5	74.7	72.3
57.5°	139.0	110.2	75.1	67.5	65.2
60°	122.9	96.0	66.0	60.0	58.9
62.5°	106.7	81.4	58.1	53.7	52.1
65°	90.9	67.5	51.0	47.0	46.2
67.5°	74.7	54.9	43.8	41.1	40.7
70°	59.6	44.6	37.1	35.6	34.8
72.5°	45.8	35.6	31.2	30.0	29.6
75°	32.4	28.4	25.7	24.9	24.5
77.5°	21.7	21.7	20.5	19.8	20.1
80°	15.0	15.8	15.4	15.4	15.4
82.5°	9.9	10.7	11.1	11.1	11.1
85°	5.5	6.3	6.7	6.7	7.1
87.5°	2.0	2.4	2.8	3.2	3.2
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	13.74	15.23	14.11	15.55	15.86	9.98	11.47	10.35	11.79	12.10
	3H	15.05	16.39	15.43	16.72	17.08	11.57	12.90	11.95	13.23	13.59
	4H	15.42	16.68	15.82	17.03	17.40	12.17	13.42	12.57	13.77	14.15
	6H	15.60	16.75	16.01	17.12	17.51	12.64	13.80	13.05	14.16	14.56
	8H	15.64	16.74	16.06	17.13	17.53	12.80	13.90	13.23	14.29	14.69
	12H	15.65	16.70	16.08	17.08	17.51	12.91	13.97	13.35	14.35	14.78
4H	2H	13.86	15.11	14.26	15.46	15.84	10.64	11.90	11.04	12.25	12.63
	3H	15.34	16.38	15.75	16.78	17.18	12.43	13.47	12.84	13.87	14.27
	4H	15.82	16.75	16.25	17.17	17.61	13.15	14.08	13.58	14.50	14.94
	6H	16.10	16.91	16.56	17.36	17.82	13.74	14.55	14.19	14.99	15.45
	8H	16.17	16.93	16.64	17.37	17.84	13.94	14.70	14.41	15.14	15.61
	12H	16.21	16.89	16.69	17.37	17.84	14.10	14.77	14.58	15.25	15.72
8H	4H	15.90	16.66	16.36	17.10	17.57	13.46	14.21	13.92	14.66	15.13
	6H	16.26	16.89	16.76	17.38	17.86	14.16	14.79	14.66	15.28	15.76
	8H	16.38	16.94	16.89	17.45	17.94	14.44	15.01	14.96	15.52	16.00
	12H	16.47	16.96	16.98	17.45	18.02	14.67	15.17	15.18	15.66	16.23
12H	4H	15.89	16.57	16.38	17.05	17.52	13.48	14.16	13.97	14.64	15.11
	6H	16.27	16.83	16.78	17.34	17.83	14.21	14.78	14.73	15.29	15.78
	8H	16.43	16.92	16.94	17.41	17.98	14.55	15.05	15.06	15.54	16.11