

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061920

Luminaire Tested: S125RDR-H1270D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061920  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1270D830-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

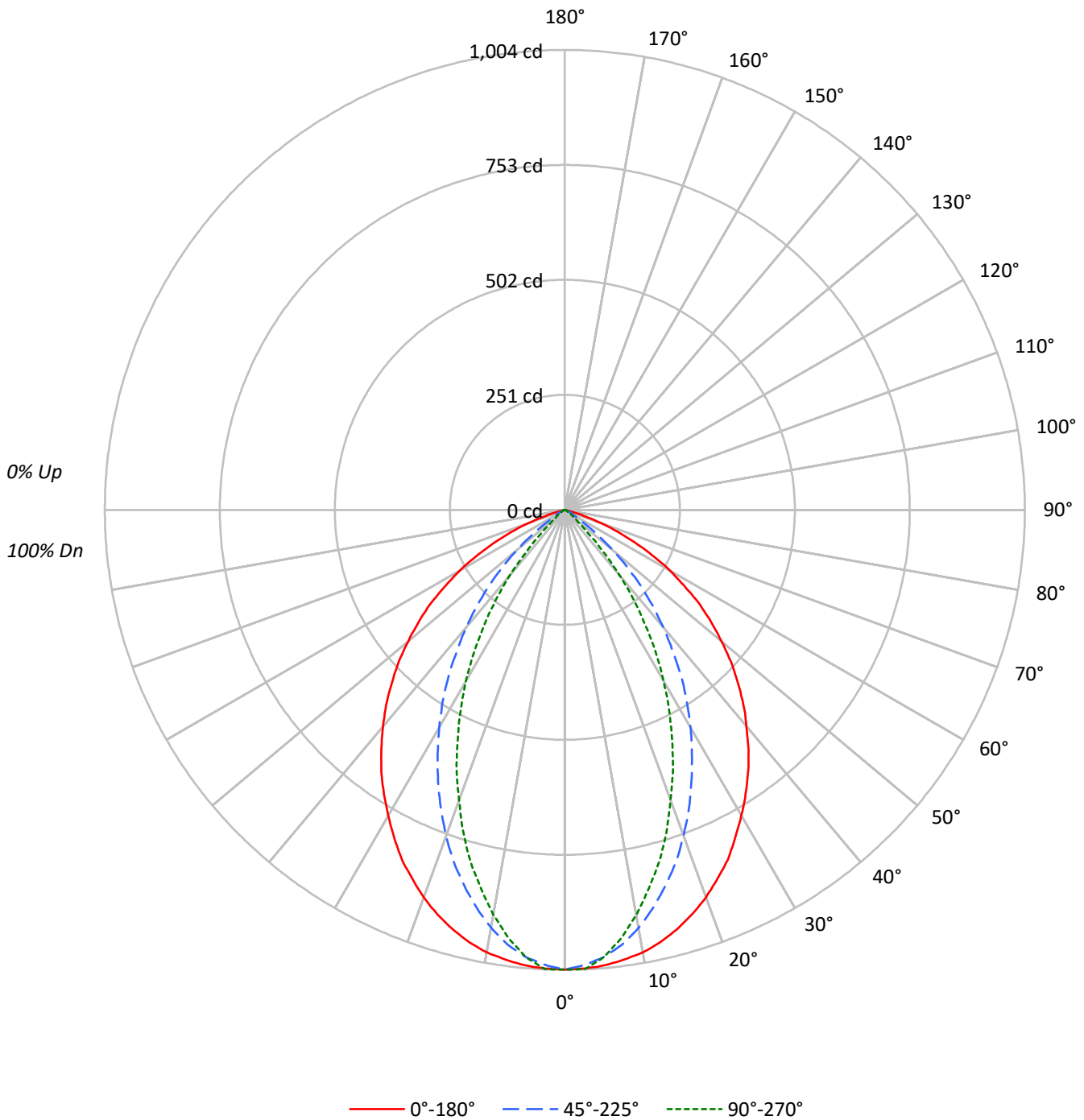
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1296.5 lumens  
Efficiency: N/A  
Efficacy: 35.5 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.5  
Input Voltage (V): 120  
Input Current (Ain): 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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	6910	6910	6910
5°	6900	6771	6771
10°	6859	6480	6276
15°	6757	6050	5672
20°	6597	5549	4938
25°	6397	4968	4204
30°	6126	4358	3431
35°	5864	3717	2570
40°	5546	2998	1666
45°	5196	2269	722
50°	4779	1446	270
55°	4307	636	191
60°	3646	274	128
65°	2761	173	65
70°	1679	81	26
75°	351	35	35
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5196 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.5	7.1
10°-20°	241.2	18.6
20°-30°	309.6	23.9
30°-40°	291.5	22.5
40°-50°	203.8	15.7
50°-60°	108.9	8.4
60°-70°	43.4	3.3
70°-80°	5.6	0.4
80°-90°	0.0	0.0
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°	643.3	49.6
0°-40°	934.8	72.1
0°-60°	1247.4	96.2
0°-90°	1296.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1296.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1004	1004	1004	1004	1004	
5°	998	996	980	982	980	95
15°	948	918	849	809	796	267
25°	842	768	654	582	553	386
35°	698	586	442	342	306	435
45°	534	400	233	112	74	412
55°	359	220	53	18	16	318
65°	170	68	11	5	4	169
75°	13	4	1	1	1	26
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1003.6	1003.6	1003.6	1003.6	1003.6
2.5°	1002.2	1003.6	994.3	1002.2	1003.6
5°	998.3	995.6	979.7	982.4	979.7
7.5°	990.3	983.7	957.2	948.0	942.7
10°	981.1	966.5	926.8	906.9	897.6
12.5°	966.5	945.3	889.7	859.3	846.0
15°	948.0	917.5	848.7	808.9	795.7
17.5°	925.5	885.7	806.3	757.3	737.4
20°	900.3	847.3	757.3	699.1	673.9
22.5°	871.2	810.3	707.0	642.1	617.0
25°	842.0	767.9	654.0	582.5	553.4
27.5°	806.3	724.2	601.1	524.3	492.5
30°	770.5	680.5	548.1	464.7	431.6
32.5°	734.8	634.2	495.2	402.5	369.4
35°	697.7	586.5	442.2	341.6	305.8
37.5°	658.0	538.9	385.3	283.3	246.3
40°	617.0	492.5	333.6	226.4	185.4
42.5°	577.2	446.2	282.0	170.8	125.8
45°	533.6	399.8	233.0	112.5	74.1
47.5°	492.5	354.8	182.7	64.9	38.4
50°	446.2	308.5	135.0	34.4	25.2
52.5°	402.5	263.5	90.0	22.5	19.9
55°	358.8	219.8	53.0	18.5	15.9
57.5°	308.5	177.4	29.1	14.6	11.9
60°	264.8	139.0	19.9	10.6	9.3
62.5°	214.5	101.9	14.6	7.9	6.6
65°	169.5	67.5	10.6	5.3	4.0
67.5°	125.8	39.7	6.6	2.6	2.6
70°	83.4	21.2	4.0	1.3	1.3
72.5°	43.7	9.3	2.6	1.3	1.3
75°	13.2	4.0	1.3	1.3	1.3
77.5°	0.0	1.3	0.0	0.0	1.3
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	15.66	16.92	16.02	17.24	17.55	0.00	0.00	0.00	0.00	0.00
	3H	16.24	17.36	16.62	17.69	18.05	0.00	0.00	0.00	0.00	0.00
	4H	16.21	17.24	16.61	17.59	17.98	0.00	0.00	0.00	0.00	0.00
	6H	16.12	17.07	16.54	17.44	17.83	0.00	0.00	0.00	0.00	0.00
	8H	16.08	16.97	16.51	17.36	17.77	0.00	0.00	0.00	0.00	0.00
	12H	16.03	16.88	16.46	17.27	17.70	0.00	0.00	0.00	0.00	0.00
4H	2H	15.43	16.46	15.84	16.82	17.20	0.00	0.00	0.00	0.00	0.00
	3H	16.02	16.86	16.44	17.26	17.67	0.00	0.00	0.00	0.00	0.00
	4H	15.97	16.72	16.41	17.14	17.58	0.00	0.00	0.00	0.00	0.00
	6H	15.89	16.52	16.35	16.97	17.44	0.00	0.00	0.00	0.00	0.00
	8H	15.83	16.42	16.30	16.87	17.34	0.00	0.00	0.00	0.00	0.00
	12H	15.78	16.30	16.26	16.78	17.26	0.00	0.00	0.00	0.00	0.00
8H	4H	15.83	16.42	16.30	16.87	17.34	0.00	0.00	0.00	0.00	0.00
	6H	15.72	16.20	16.22	16.70	17.18	0.00	0.00	0.00	0.00	0.00
	8H	15.65	16.09	16.18	16.60	17.10	0.00	0.00	0.00	0.00	0.00
	12H	15.60	15.99	16.12	16.48	17.06	0.00	0.00	0.00	0.00	0.00
12H	4H	15.78	16.30	16.26	16.78	17.26	0.00	0.00	0.00	0.00	0.00
	6H	15.65	16.09	16.18	16.60	17.10	0.00	0.00	0.00	0.00	0.00
	8H	15.60	15.99	16.12	16.48	17.06	0.00	0.00	0.00	0.00	0.00