

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: P1061850

Luminaire Tested: S125RDR-H1090D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061850
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: S125RDR-H1090D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

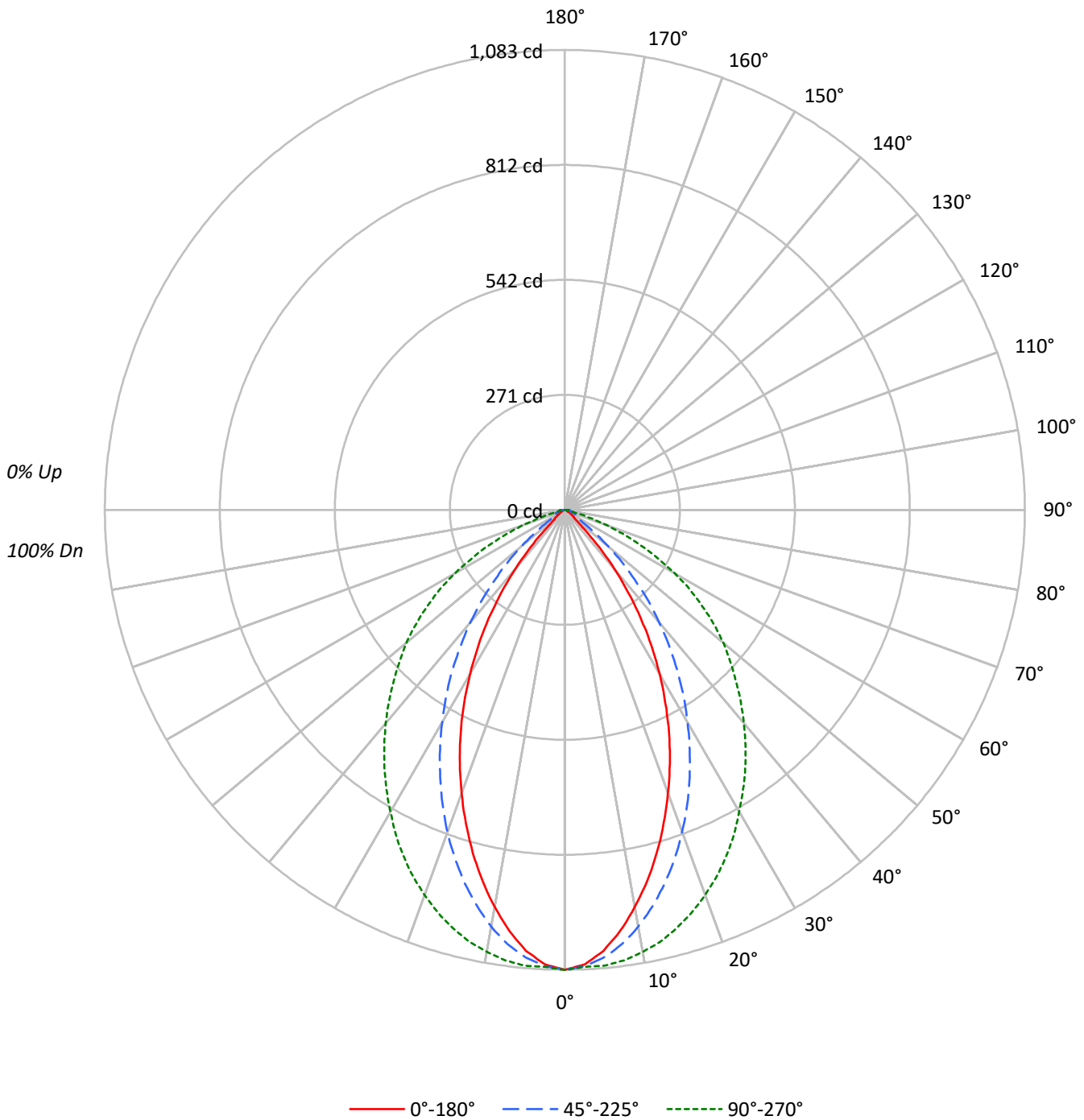
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1401.6 lumens
Efficiency: N/A
Efficacy: 44.9 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): 31.2
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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7459	7459	7459
5°	7205	7313	7446
10°	6640	6968	7389
15°	5963	6487	7267
20°	5204	5918	7074
25°	4408	5276	6831
30°	3541	4594	6526
35°	2621	3875	6222
40°	1623	3095	5896
45°	633	2262	5544
50°	297	1418	5222
55°	217	607	4739
60°	149	431	4110
65°	98	451	3196
70°	97	413	2011
75°	128	415	641
80°	190	476	428
85°	284	948	664

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5544 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.3	7.1
10°-20°	257.4	18.4
20°-30°	327.9	23.4
30°-40°	305.2	21.8
40°-50°	210.0	15.0
50°-60°	118.9	8.5
60°-70°	56.2	4.0
70°-80°	17.5	1.3
80°-90°	9.1	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°	684.6	48.8
0°-40°	989.8	70.6
0°-60°	1318.7	94.1
0°-90°	1401.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1401.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1083	1083	1083	1083	1083	
5°	1042	1057	1058	1068	1077	97
15°	837	864	910	979	1020	233
25°	580	618	694	811	899	265
35°	312	355	461	619	740	193
45°	65	104	232	420	569	61
55°	18	20	51	242	395	17
65°	6	7	28	87	196	7
75°	5	11	16	17	24	5
85°	4	10	12	11	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1083.3	1083.3	1083.3	1083.3	1083.3
2.5°	1071.3	1082.1	1074.9	1076.1	1077.3
5°	1042.4	1056.9	1058.1	1067.7	1077.3
7.5°	1000.3	1018.3	1031.6	1054.5	1070.1
10°	949.7	971.4	996.7	1034.0	1056.9
12.5°	895.6	920.8	955.8	1008.7	1041.2
15°	836.6	864.3	910.0	978.6	1019.5
17.5°	774.0	805.3	860.7	942.5	994.3
20°	710.2	743.9	807.7	901.6	965.4
22.5°	646.4	681.3	752.3	857.0	934.1
25°	580.2	617.5	694.5	811.3	899.2
27.5°	512.8	551.3	636.8	764.4	861.9
30°	445.4	486.3	577.8	716.2	820.9
32.5°	379.2	420.1	520.0	668.1	781.2
35°	311.8	355.1	461.0	618.7	740.3
37.5°	244.4	291.3	403.2	568.2	698.2
40°	180.6	225.1	344.3	518.8	656.0
42.5°	120.4	163.7	291.3	469.4	612.7
45°	65.0	103.5	232.3	420.1	569.4
47.5°	34.9	55.4	181.8	371.9	527.2
50°	27.7	31.3	132.4	327.4	487.5
52.5°	22.9	25.3	86.7	285.3	441.8
55°	18.1	20.5	50.6	241.9	394.8
57.5°	14.4	16.9	32.5	201.0	349.1
60°	10.8	13.2	31.3	161.3	298.5
62.5°	8.4	9.6	28.9	124.0	245.6
65°	6.0	7.2	27.7	86.7	196.2
67.5°	4.8	6.0	25.3	55.4	146.9
70°	4.8	4.8	20.5	36.1	99.9
72.5°	4.8	8.4	18.1	24.1	60.2
75°	4.8	10.8	15.6	16.9	24.1
77.5°	4.8	12.0	13.2	13.2	13.2
80°	4.8	10.8	12.0	12.0	10.8
82.5°	4.8	9.6	10.8	12.0	9.6
85°	3.6	9.6	12.0	10.8	8.4
87.5°	3.6	9.6	10.8	9.6	6.0
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	0.00	0.00	0.00	0.00	0.00	16.23	17.52	16.59	17.83	18.14
	3H	0.00	0.00	0.00	0.00	0.24	16.95	18.09	17.33	18.42	18.78
	4H	0.00	0.36	0.00	0.71	1.10	16.97	18.03	17.37	18.38	18.77
	6H	0.55	1.53	0.97	1.90	2.30	16.92	17.90	17.34	18.27	18.66
	8H	1.19	2.12	1.62	2.51	2.91	16.90	17.82	17.33	18.21	18.62
	12H	1.78	2.66	2.21	3.05	3.48	16.88	17.76	17.31	18.15	18.58
4H	2H	0.74	1.81	1.15	2.16	2.54	16.02	17.08	16.42	17.43	17.81
	3H	1.55	2.42	1.97	2.82	3.23	16.77	17.64	17.19	18.05	18.45
	4H	2.55	3.33	2.99	3.75	4.19	16.80	17.58	17.24	18.00	18.44
	6H	3.83	4.49	4.29	4.94	5.41	16.78	17.45	17.25	17.90	18.36
	8H	4.41	5.03	4.88	5.48	5.95	16.77	17.39	17.24	17.84	18.31
	12H	4.97	5.52	5.45	6.00	6.47	16.77	17.32	17.26	17.81	18.28
8H	4H	3.97	4.59	4.44	5.04	5.51	16.69	17.31	17.16	17.76	18.23
	6H	5.52	6.03	6.03	6.53	7.01	16.68	17.18	17.18	17.68	18.16
	8H	6.31	6.77	6.84	7.29	7.78	16.69	17.14	17.21	17.66	18.15
	12H	7.15	7.55	7.67	8.05	8.62	16.75	17.15	17.26	17.65	18.22
12H	4H	4.19	4.74	4.67	5.22	5.69	16.64	17.19	17.13	17.68	18.15
	6H	5.89	6.35	6.41	6.86	7.36	16.63	17.09	17.15	17.60	18.09
	8H	6.88	7.28	7.40	7.78	8.35	16.68	17.08	17.19	17.57	18.15