

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: P1061466

Luminaire Tested: S125RDRP-S1090D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061466
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-S1090D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

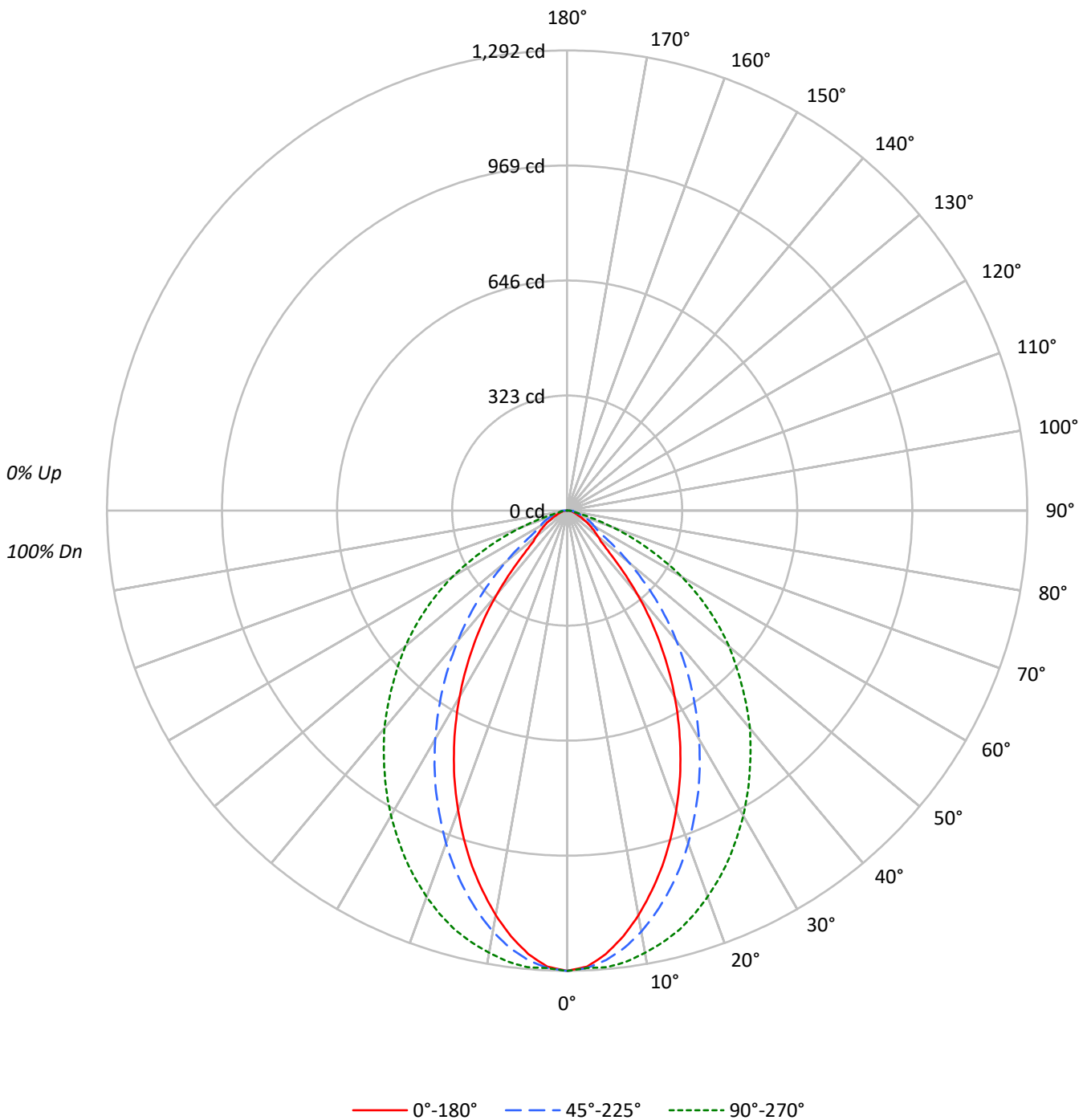
Lumens per Lamp: N/A
Luminaire Lumens: 1872.0 lumens
Efficiency: N/A
Efficacy: 53.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8898	8898	8898
5°	8638	8752	8894
10°	8066	8393	8815
15°	7362	7881	8683
20°	6561	7286	8453
25°	5718	6615	8180
30°	4804	5886	7862
35°	3821	5114	7515
40°	2753	4296	7172
45°	1632	3410	6754
50°	1206	2427	6355
55°	1023	1501	5820
60°	832	1210	5125
65°	648	1119	4050
70°	554	968	2710
75°	511	841	1096
80°	543	872	761
85°	648	1303	869

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6754 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.1	6.4
10°-20°	312.8	16.7
20°-30°	408.9	21.8
30°-40°	398.3	21.3
40°-50°	298.8	16.0
50°-60°	187.3	10.0
60°-70°	97.5	5.2
70°-80°	35.3	1.9
80°-90°	14.0	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°	840.9	44.9
0°-40°	1239.2	66.2
0°-60°	1725.3	92.2
0°-90°	1872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1872.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1292	1292	1292	1292	1292	
5°	1250	1266	1266	1276	1287	116
15°	1033	1063	1106	1174	1218	288
25°	753	794	871	989	1077	344
35°	455	503	608	770	894	282
45°	168	217	350	541	694	141
55°	85	89	125	327	485	76
65°	40	43	69	132	249	41
75°	19	26	32	33	41	21
85°	8	14	16	15	11	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1292.4	1292.4	1292.4	1292.4	1292.4
2.5°	1281.4	1293.8	1285.5	1285.5	1285.5
5°	1249.8	1266.3	1266.3	1275.9	1286.9
7.5°	1205.9	1225.1	1237.5	1260.8	1277.3
10°	1153.7	1177.0	1200.4	1238.8	1260.8
12.5°	1094.6	1122.1	1155.1	1208.6	1241.6
15°	1032.8	1063.0	1105.6	1174.3	1218.2
17.5°	965.5	1001.2	1052.1	1134.5	1188.0
20°	895.5	931.2	994.4	1087.8	1153.7
22.5°	825.4	863.9	932.6	1038.3	1116.6
25°	752.6	793.8	870.8	988.9	1076.8
27.5°	678.5	721.1	806.2	938.1	1032.8
30°	604.3	648.3	740.3	883.1	988.9
32.5°	530.1	576.8	674.4	826.8	942.2
35°	454.6	502.7	608.4	770.5	894.1
37.5°	381.8	429.9	542.5	712.8	846.0
40°	306.3	358.5	478.0	655.1	798.0
42.5°	232.1	285.7	413.4	597.4	745.8
45°	167.6	217.0	350.2	541.1	693.6
47.5°	129.1	156.6	285.7	483.4	642.8
50°	112.6	120.9	226.6	429.9	593.3
52.5°	97.5	103.0	170.3	380.4	539.8
55°	85.2	89.3	125.0	326.9	484.8
57.5°	71.4	76.9	98.9	274.7	428.5
60°	60.4	63.2	87.9	226.6	372.2
62.5°	49.4	52.2	78.3	178.5	309.0
65°	39.8	42.6	68.7	131.8	248.6
67.5°	33.0	34.3	57.7	93.4	190.9
70°	27.5	28.8	48.1	64.6	134.6
72.5°	23.3	27.5	38.5	46.7	85.2
75°	19.2	26.1	31.6	33.0	41.2
77.5°	16.5	24.7	26.1	26.1	23.3
80°	13.7	20.6	22.0	20.6	19.2
82.5°	11.0	16.5	17.9	17.9	15.1
85°	8.2	13.7	16.5	15.1	11.0
87.5°	5.5	12.4	13.7	12.4	8.2
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	7.51	8.86	7.88	9.18	9.49	17.12	18.48	17.49	18.79	19.10
	3H	8.37	9.57	8.75	9.90	10.26	17.97	19.17	18.34	19.50	19.86
	4H	8.79	9.91	9.19	10.26	10.64	18.04	19.16	18.44	19.51	19.89
	6H	9.22	10.25	9.63	10.62	11.01	18.02	19.05	18.44	19.42	19.82
	8H	9.40	10.37	9.83	10.77	11.17	18.01	18.99	18.44	19.38	19.78
	12H	9.56	10.49	9.99	10.88	11.31	18.00	18.93	18.43	19.31	19.74
4H	2H	8.48	9.59	8.88	9.94	10.33	16.99	18.11	17.39	18.46	18.84
	3H	9.53	10.44	9.94	10.85	11.25	17.90	18.82	18.31	19.22	19.62
	4H	10.09	10.91	10.52	11.33	11.77	18.00	18.82	18.44	19.24	19.68
	6H	10.69	11.40	11.15	11.84	12.31	18.03	18.74	18.49	19.18	19.65
	8H	10.93	11.59	11.40	12.03	12.51	18.03	18.69	18.50	19.14	19.61
	12H	11.15	11.74	11.64	12.22	12.69	18.04	18.63	18.53	19.11	19.58
8H	4H	10.56	11.22	11.03	11.67	12.14	17.93	18.59	18.39	19.03	19.50
	6H	11.37	11.92	11.88	12.41	12.89	17.98	18.52	18.48	19.02	19.50
	8H	11.75	12.24	12.28	12.76	13.25	18.01	18.50	18.53	19.01	19.51
	12H	12.15	12.57	12.66	13.07	13.64	18.08	18.51	18.59	19.00	19.57
12H	4H	10.61	11.20	11.10	11.68	12.15	17.89	18.48	18.38	18.96	19.43
	6H	11.50	11.98	12.02	12.50	12.99	17.95	18.43	18.47	18.95	19.44
	8H	11.99	12.42	12.50	12.91	13.48	18.02	18.45	18.53	18.94	19.51