

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: P1061949

Luminaire Tested: S125RDR-H1270D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061949
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-H1270D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

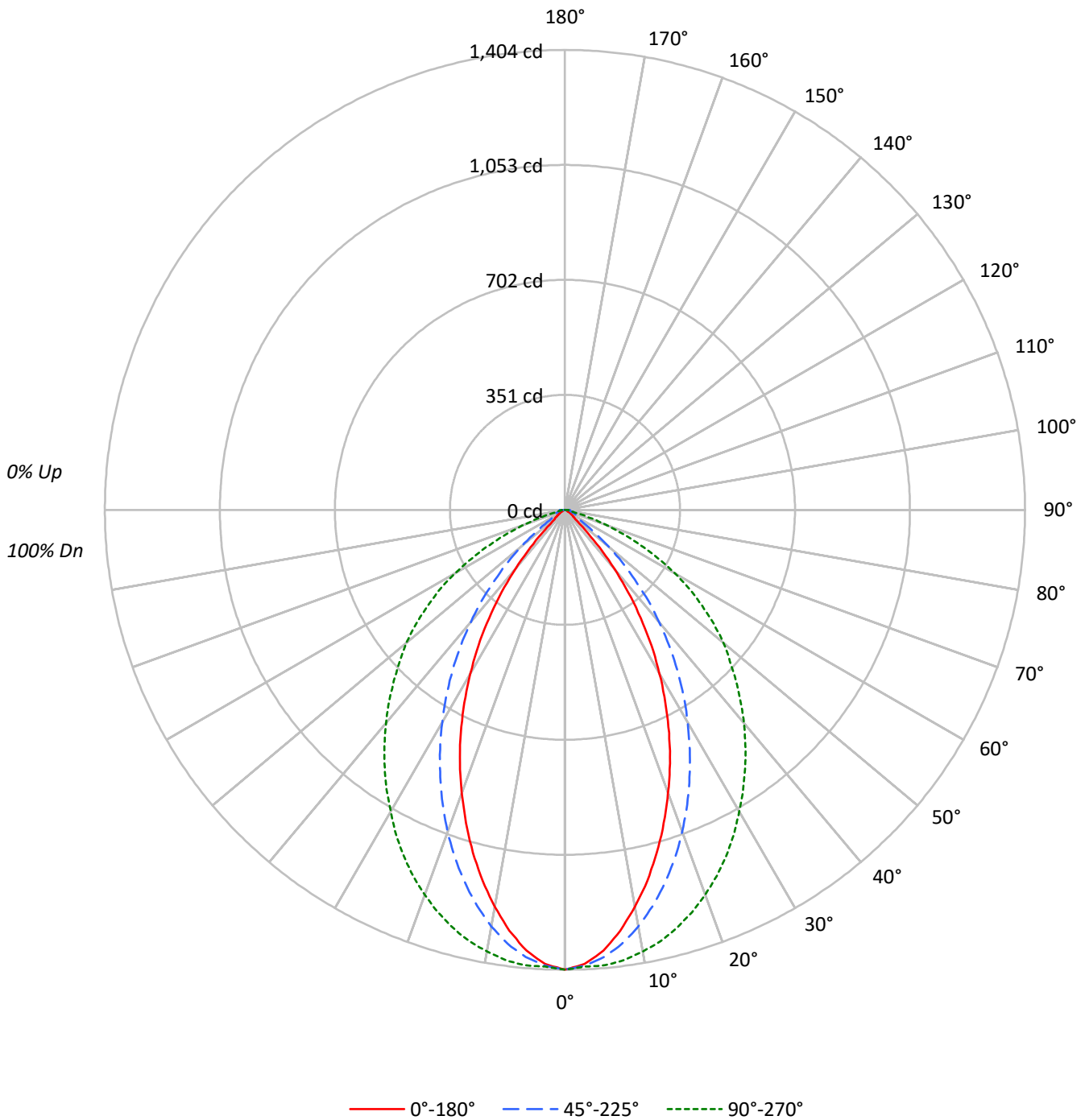
Lumens per Lamp: N/A
Luminaire Lumens: 1815.8 lumens
Efficiency: N/A
Efficacy: 49.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90	
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80			80	
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65			65	
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59			59	
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45			45	
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41			41	
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38			38	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9663	9663	9663
5°	9334	9474	9646
10°	8602	9027	9573
15°	7725	8403	9415
20°	6742	7667	9164
25°	5710	6836	8850
30°	4587	5951	8455
35°	3395	5021	8062
40°	2102	4009	7639
45°	820	2931	7182
50°	385	1837	6765
55°	281	786	6140
60°	193	558	5325
65°	127	585	4141
70°	125	533	2605
75°	165	540	830
80°	246	619	555
85°	371	1232	861

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7182 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.7	7.1
10°-20°	333.5	18.4
20°-30°	424.7	23.4
30°-40°	395.3	21.8
40°-50°	272.1	15.0
50°-60°	154.0	8.5
60°-70°	72.8	4.0
70°-80°	22.7	1.3
80°-90°	11.9	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°	886.9	48.8
0°-40°	1282.3	70.6
0°-60°	1708.4	94.1
0°-90°	1815.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1815.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1404	1404	1404	1404	1404	
5°	1350	1369	1371	1383	1396	125
15°	1084	1120	1179	1268	1321	302
25°	752	800	900	1051	1165	343
35°	404	460	597	802	959	250
45°	84	134	301	544	738	79
55°	23	26	66	313	512	21
65°	8	9	36	112	254	9
75°	6	14	20	22	31	7
85°	5	12	16	14	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1403.5	1403.5	1403.5	1403.5	1403.5
2.5°	1387.9	1401.9	1392.6	1394.1	1395.7
5°	1350.5	1369.2	1370.7	1383.2	1395.7
7.5°	1295.9	1319.3	1336.4	1366.1	1386.3
10°	1230.4	1258.5	1291.2	1339.6	1369.2
12.5°	1160.2	1193.0	1238.2	1306.8	1348.9
15°	1083.8	1119.7	1178.9	1267.8	1320.8
17.5°	1002.7	1043.3	1115.0	1221.0	1288.1
20°	920.1	963.7	1046.4	1168.0	1250.7
22.5°	837.4	882.6	974.6	1110.3	1210.1
25°	751.6	800.0	899.8	1051.1	1164.9
27.5°	664.3	714.2	824.9	990.2	1116.6
30°	577.0	630.0	748.5	927.9	1063.5
32.5°	491.2	544.2	673.7	865.5	1012.1
35°	403.9	460.0	597.3	801.5	959.1
37.5°	316.6	377.4	522.4	736.1	904.5
40°	233.9	291.6	446.0	672.1	849.9
42.5°	155.9	212.1	377.4	608.2	793.8
45°	84.2	134.1	301.0	544.2	737.6
47.5°	45.2	71.7	235.5	481.9	683.0
50°	35.9	40.5	171.5	424.2	631.6
52.5°	29.6	32.7	112.3	369.6	572.3
55°	23.4	26.5	65.5	313.4	511.5
57.5°	18.7	21.8	42.1	260.4	452.2
60°	14.0	17.2	40.5	209.0	386.7
62.5°	10.9	12.5	37.4	160.6	318.1
65°	7.8	9.4	35.9	112.3	254.2
67.5°	6.2	7.8	32.7	71.7	190.3
70°	6.2	6.2	26.5	46.8	129.4
72.5°	6.2	10.9	23.4	31.2	78.0
75°	6.2	14.0	20.3	21.8	31.2
77.5°	6.2	15.6	17.2	17.2	17.2
80°	6.2	14.0	15.6	15.6	14.0
82.5°	6.2	12.5	14.0	15.6	12.5
85°	4.7	12.5	15.6	14.0	10.9
87.5°	4.7	12.5	14.0	12.5	7.8
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	0.11	0.00	0.42	0.74	17.13	18.42	17.49	18.73	19.04
	3H	0.00	0.43	0.00	0.76	1.13	17.85	18.99	18.23	19.32	19.68
	4H	0.18	1.25	0.59	1.60	1.98	17.87	18.93	18.27	19.28	19.67
	6H	1.44	2.42	1.86	2.79	3.18	17.82	18.80	18.24	19.17	19.56
	8H	2.08	3.01	2.51	3.40	3.80	17.80	18.72	18.23	19.11	19.52
	12H	2.68	3.56	3.11	3.94	4.37	17.78	18.66	18.21	19.05	19.48
4H	2H	1.64	2.70	2.04	3.05	3.43	16.92	17.98	17.32	18.33	18.71
	3H	2.44	3.31	2.86	3.72	4.12	17.67	18.54	18.09	18.95	19.35
	4H	3.45	4.22	3.88	4.64	5.09	17.70	18.48	18.14	18.90	19.34
	6H	4.72	5.39	5.19	5.84	6.31	17.68	18.35	18.14	18.79	19.26
	8H	5.30	5.93	5.77	6.38	6.85	17.67	18.29	18.14	18.74	19.21
	12H	5.87	6.42	6.36	6.90	7.38	17.67	18.22	18.16	18.71	19.18
8H	4H	4.87	5.49	5.34	5.94	6.41	17.59	18.21	18.06	18.66	19.13
	6H	6.43	6.94	6.93	7.43	7.91	17.58	18.08	18.08	18.58	19.06
	8H	7.22	7.68	7.74	8.19	8.69	17.59	18.04	18.11	18.56	19.05
	12H	8.07	8.47	8.58	8.96	9.54	17.65	18.05	18.16	18.55	19.12
12H	4H	5.09	5.64	5.58	6.12	6.60	17.54	18.09	18.03	18.58	19.05
	6H	6.80	7.26	7.32	7.77	8.26	17.53	17.99	18.05	18.50	18.99
	8H	7.79	8.19	8.31	8.69	9.26	17.58	17.98	18.09	18.47	19.05