

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: P1061952

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061952
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: S125RDR-H1270D850-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

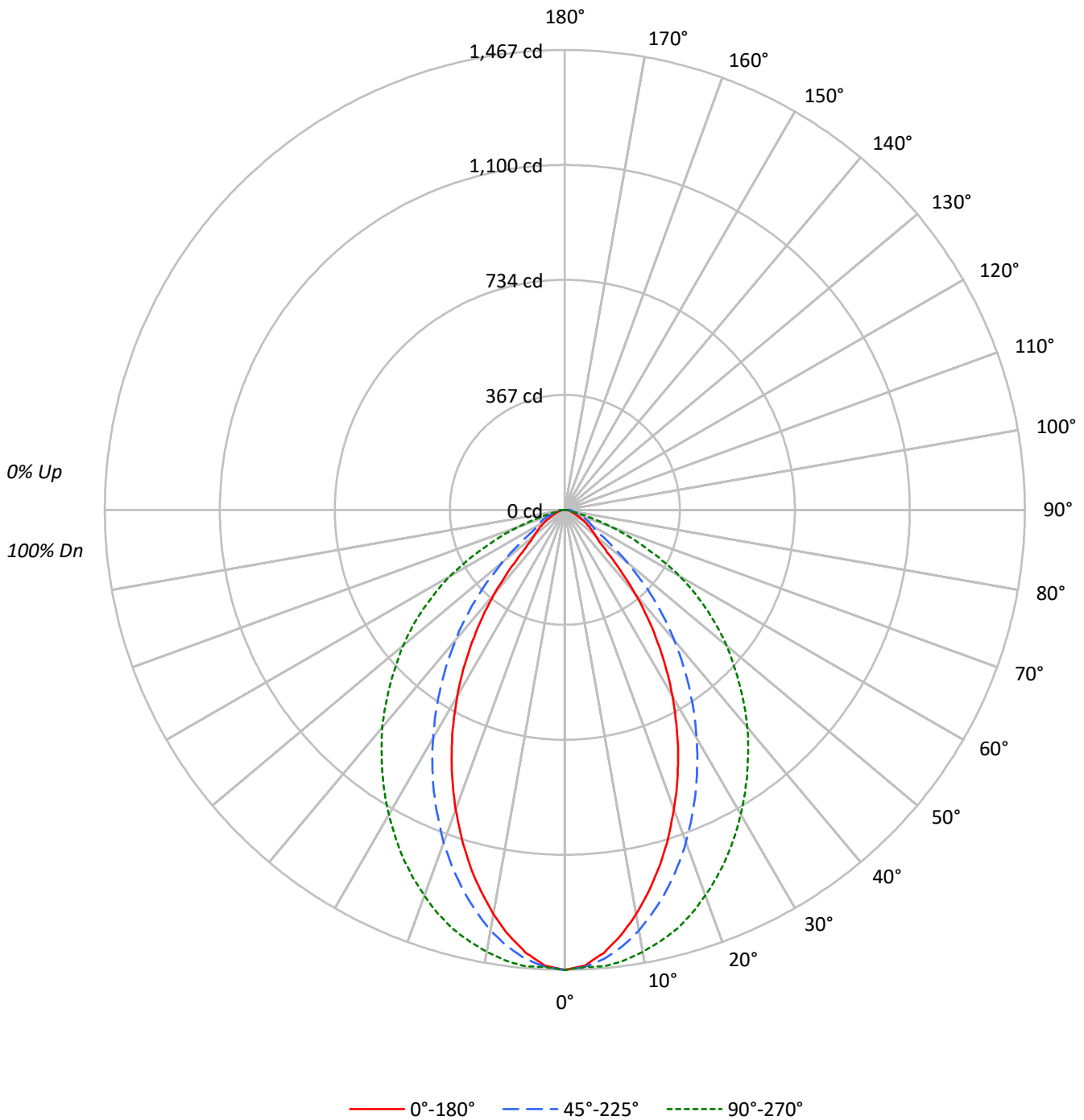
Lumens per Lamp: N/A
Luminaire Lumens: 2125.2 lumens
Efficiency: N/A
Efficacy: 58.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10102	10102	10102
5°	9807	9936	10098
10°	9157	9527	10008
15°	8358	8947	9858
20°	7449	8272	9596
25°	6491	7510	9287
30°	5455	6682	8925
35°	4338	5806	8531
40°	3125	4877	8142
45°	1852	3872	7667
50°	1370	2756	7215
55°	1161	1703	6607
60°	945	1374	5818
65°	736	1271	4598
70°	628	1099	3076
75°	580	955	1245
80°	619	987	864
85°	743	1477	987

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7667 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.2	6.4
10°-20°	355.2	16.7
20°-30°	464.2	21.8
30°-40°	452.2	21.3
40°-50°	339.2	16.0
50°-60°	212.6	10.0
60°-70°	110.7	5.2
70°-80°	40.0	1.9
80°-90°	15.9	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°	954.6	44.9
0°-40°	1406.8	66.2
0°-60°	1958.6	92.2
0°-90°	2125.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2125.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1467	1467	1467	1467	1467	
5°	1419	1438	1438	1448	1461	132
15°	1172	1207	1255	1333	1383	327
25°	854	901	988	1123	1222	390
35°	516	571	691	875	1015	321
45°	190	246	398	614	787	160
55°	97	101	142	371	550	86
65°	45	48	78	150	282	47
75°	22	30	36	37	47	24
85°	9	16	19	17	12	10
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1467.2	1467.2	1467.2	1467.2	1467.2
2.5°	1454.7	1468.8	1459.4	1459.4	1459.4
5°	1418.9	1437.6	1437.6	1448.5	1461.0
7.5°	1369.0	1390.8	1404.8	1431.4	1450.1
10°	1309.7	1336.2	1362.7	1406.4	1431.4
12.5°	1242.7	1273.9	1311.3	1372.1	1409.5
15°	1172.5	1206.8	1255.2	1333.1	1383.0
17.5°	1096.1	1136.7	1194.4	1287.9	1348.7
20°	1016.6	1057.1	1128.9	1234.9	1309.7
22.5°	937.1	980.7	1058.7	1178.8	1267.6
25°	854.4	901.2	988.5	1122.6	1222.4
27.5°	770.2	818.6	915.3	1064.9	1172.5
30°	686.1	735.9	840.4	1002.6	1122.6
32.5°	601.9	654.9	765.6	938.6	1069.6
35°	516.1	570.7	690.7	874.7	1015.0
37.5°	433.5	488.0	615.9	809.2	960.5
40°	347.7	407.0	542.6	743.7	905.9
42.5°	263.5	324.3	469.3	678.3	846.6
45°	190.2	246.4	397.6	614.3	787.4
47.5°	146.6	177.7	324.3	548.8	729.7
50°	127.9	137.2	257.3	488.0	673.6
52.5°	110.7	116.9	193.3	431.9	612.8
55°	96.7	101.3	141.9	371.1	550.4
57.5°	81.1	87.3	112.3	311.8	486.5
60°	68.6	71.7	99.8	257.3	422.5
62.5°	56.1	59.2	88.9	202.7	350.8
65°	45.2	48.3	78.0	149.7	282.2
67.5°	37.4	39.0	65.5	106.0	216.7
70°	31.2	32.7	54.6	73.3	152.8
72.5°	26.5	31.2	43.7	53.0	96.7
75°	21.8	29.6	35.9	37.4	46.8
77.5°	18.7	28.1	29.6	29.6	26.5
80°	15.6	23.4	24.9	23.4	21.8
82.5°	12.5	18.7	20.3	20.3	17.2
85°	9.4	15.6	18.7	17.2	12.5
87.5°	6.2	14.0	15.6	14.0	9.4
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	7.95	9.30	8.32	9.62	9.93	17.56	18.92	17.93	19.23	19.54
	3H	8.81	10.01	9.19	10.34	10.70	18.41	19.61	18.78	19.94	20.30
	4H	9.23	10.35	9.64	10.70	11.09	18.48	19.60	18.88	19.95	20.33
	6H	9.66	10.69	10.08	11.06	11.45	18.46	19.49	18.88	19.86	20.26
	8H	9.84	10.82	10.27	11.21	11.61	18.45	19.43	18.88	19.82	20.22
	12H	10.00	10.94	10.44	11.32	11.75	18.44	19.37	18.87	19.75	20.18
4H	2H	8.92	10.04	9.32	10.39	10.77	17.43	18.55	17.83	18.90	19.28
	3H	9.97	10.89	10.38	11.29	11.69	18.34	19.26	18.75	19.66	20.06
	4H	10.53	11.35	10.96	11.77	12.21	18.44	19.26	18.88	19.68	20.12
	6H	11.13	11.84	11.59	12.28	12.75	18.47	19.18	18.93	19.62	20.09
	8H	11.37	12.03	11.84	12.48	12.95	18.47	19.13	18.94	19.58	20.05
	12H	11.60	12.18	12.08	12.66	13.14	18.48	19.07	18.97	19.55	20.02
8H	4H	11.00	11.66	11.47	12.11	12.58	18.37	19.03	18.83	19.47	19.94
	6H	11.82	12.36	12.32	12.85	13.33	18.42	18.96	18.92	19.46	19.94
	8H	12.20	12.68	12.72	13.20	13.69	18.45	18.94	18.97	19.45	19.95
	12H	12.59	13.02	13.10	13.51	14.08	18.52	18.95	19.03	19.44	20.01
12H	4H	11.05	11.64	11.54	12.12	12.59	18.33	18.92	18.82	19.40	19.87
	6H	11.94	12.42	12.46	12.94	13.43	18.39	18.87	18.91	19.39	19.88
	8H	12.43	12.86	12.94	13.35	13.92	18.46	18.89	18.97	19.38	19.95