

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: P1061951

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061951
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
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-S
Description: DEFINE 5 SILVER 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

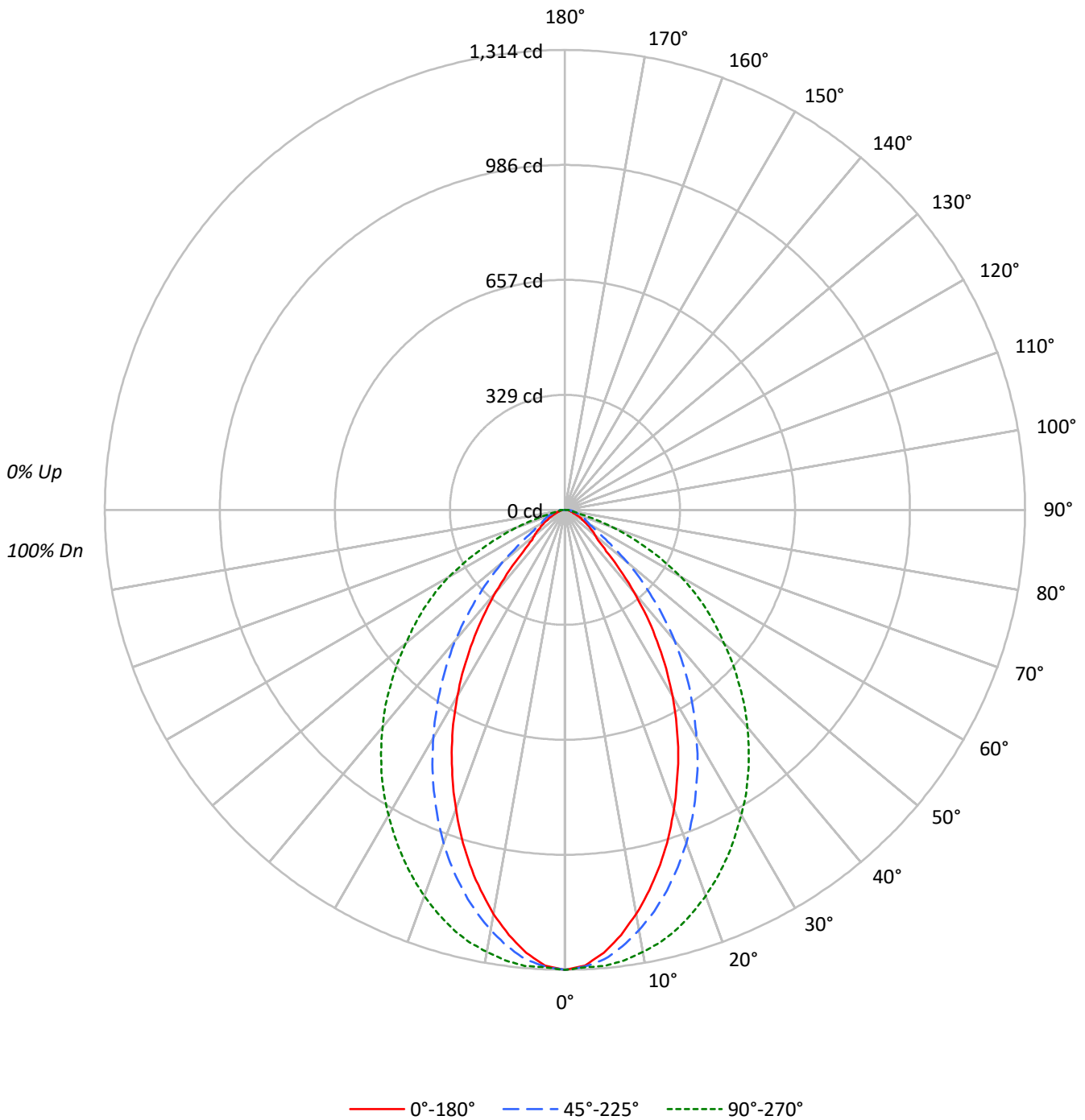
Lumens per Lamp: N/A
Luminaire Lumens: 1897.6 lumens
Efficiency: N/A
Efficacy: 52.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				79
3	96	88	81	76	94	87	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	63				63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	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	41	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9049	9049	9049
5°	8781	8911	9040
10°	8196	8523	8970
15°	7479	8023	8835
20°	6671	7425	8601
25°	5815	6727	8326
30°	4883	5974	8007
35°	3852	5202	7678
40°	2760	4372	7287
45°	1624	3430	6831
50°	1202	2471	6346
55°	1011	1497	5895
60°	815	1095	5259
65°	635	1041	4216
70°	533	972	2857
75°	497	870	1245
80°	496	864	805
85°	616	1106	861

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6831 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.1	6.4
10°-20°	318.1	16.8
20°-30°	415.7	21.9
30°-40°	404.7	21.3
40°-50°	302.4	15.9
50°-60°	187.6	9.9
60°-70°	98.5	5.2
70°-80°	35.9	1.9
80°-90°	13.5	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°	854.9	45.1
0°-40°	1259.6	66.4
0°-60°	1749.6	92.2
0°-90°	1897.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1897.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1314	1314	1314	1314	1314	
5°	1270	1288	1289	1297	1308	118
15°	1049	1080	1126	1194	1239	293
25°	765	804	886	1006	1096	350
35°	458	508	619	784	914	285
45°	167	218	352	550	702	140
55°	84	89	125	324	491	76
65°	39	42	64	137	259	41
75°	19	22	33	36	47	20
85°	8	14	14	14	11	8
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1314.2	1314.2	1314.2	1314.2	1314.2
2.5°	1303.3	1314.2	1306.4	1306.4	1308.0
5°	1270.5	1287.7	1289.3	1297.0	1308.0
7.5°	1225.3	1245.6	1258.1	1281.5	1298.6
10°	1172.3	1195.7	1219.1	1258.1	1283.0
12.5°	1113.1	1141.2	1175.4	1228.5	1264.3
15°	1049.2	1080.4	1125.6	1194.2	1239.4
17.5°	982.1	1014.9	1071.0	1153.6	1208.2
20°	910.4	946.3	1013.3	1106.9	1173.9
22.5°	837.2	877.7	951.0	1057.0	1136.5
25°	765.4	804.4	885.5	1005.5	1095.9
27.5°	690.6	731.1	820.0	952.5	1052.3
30°	614.2	657.9	751.4	898.0	1007.1
32.5°	537.8	583.0	684.4	841.8	961.9
35°	458.3	508.2	618.9	784.2	913.5
37.5°	383.5	436.5	551.9	724.9	862.1
40°	307.1	361.7	486.4	667.2	810.7
42.5°	232.3	288.4	419.4	608.0	759.2
45°	166.8	218.3	352.3	550.3	701.5
47.5°	127.8	157.5	290.0	491.1	650.1
50°	112.2	121.6	230.7	433.4	592.4
52.5°	98.2	104.4	171.5	377.3	542.5
55°	84.2	88.9	124.7	324.3	491.1
57.5°	71.7	76.4	95.1	275.9	438.1
60°	59.2	63.9	79.5	227.6	381.9
62.5°	49.9	51.4	71.7	182.4	319.6
65°	39.0	42.1	63.9	137.2	258.8
67.5°	32.7	34.3	56.1	98.2	199.5
70°	26.5	28.1	48.3	68.6	141.9
72.5°	23.4	23.4	40.5	49.9	90.4
75°	18.7	21.8	32.7	35.9	46.8
77.5°	15.6	21.8	28.1	26.5	24.9
80°	12.5	20.3	21.8	21.8	20.3
82.5°	10.9	17.1	18.7	17.1	15.6
85°	7.8	14.0	14.0	14.0	10.9
87.5°	6.2	12.5	10.9	10.9	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	7.44	8.79	7.80	9.10	9.42	17.14	18.49	17.51	18.81	19.12
	3H	8.28	9.48	8.66	9.81	10.17	18.06	19.25	18.43	19.58	19.95
	4H	8.64	9.75	9.04	10.11	10.49	18.15	19.27	18.56	19.62	20.00
	6H	9.01	10.04	9.43	10.41	10.80	18.14	19.17	18.55	19.54	19.93
	8H	9.19	10.17	9.62	10.56	10.96	18.13	19.10	18.56	19.49	19.90
	12H	9.35	10.28	9.79	10.67	11.10	18.11	19.04	18.55	19.43	19.86
4H	2H	8.27	9.39	8.67	9.74	10.12	16.99	18.11	17.40	18.46	18.84
	3H	9.33	10.24	9.74	10.64	11.05	17.98	18.90	18.40	19.30	19.70
	4H	9.78	10.60	10.22	11.02	11.46	18.11	18.93	18.55	19.35	19.79
	6H	10.34	11.05	10.80	11.49	11.96	18.14	18.85	18.61	19.30	19.76
	8H	10.60	11.26	11.07	11.70	12.18	18.14	18.80	18.61	19.25	19.72
	12H	10.84	11.42	11.33	11.91	12.38	18.15	18.74	18.64	19.22	19.69
8H	4H	10.34	11.00	10.80	11.44	11.91	18.04	18.70	18.51	19.14	19.61
	6H	11.11	11.65	11.62	12.15	12.63	18.10	18.64	18.60	19.13	19.61
	8H	11.53	12.01	12.05	12.53	13.02	18.13	18.61	18.65	19.12	19.62
	12H	11.95	12.37	12.46	12.87	13.44	18.18	18.61	18.69	19.10	19.67
12H	4H	10.40	10.98	10.88	11.46	11.94	18.00	18.59	18.49	19.07	19.54
	6H	11.26	11.74	11.78	12.26	12.75	18.06	18.55	18.58	19.06	19.55
	8H	11.78	12.21	12.30	12.71	13.28	18.13	18.56	18.64	19.05	19.62