

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: P1061950

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061950
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
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-B
Description: DEFINE 5 BLACK 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

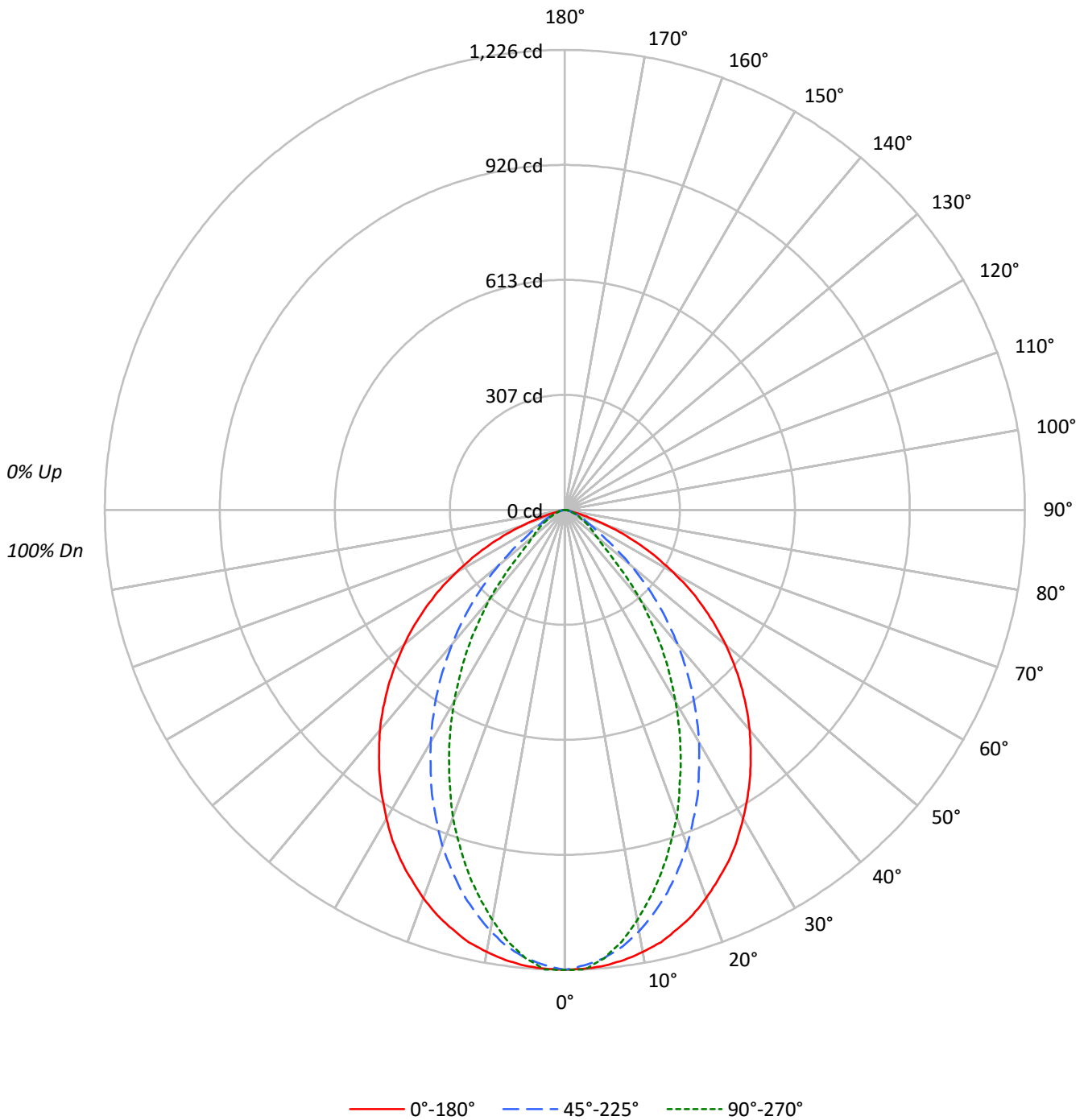
Lumens per Lamp: N/A
Luminaire Lumens: 1773.2 lumens
Efficiency: N/A
Efficacy: 48.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8442	8442	8442
5°	8431	8291	8291
10°	8365	7973	7766
15°	8251	7529	7118
20°	8070	6986	6392
25°	7847	6367	5550
30°	7555	5685	4682
35°	7241	4976	3798
40°	6889	4201	2814
45°	6477	3368	1699
50°	5991	2470	1169
55°	5404	1515	972
60°	4591	1030	773
65°	3630	787	609
70°	2289	564	501
75°	745	415	415
80°	246	309	369
85°	126	245	245

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6477 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.4	6.4
10°-20°	299.5	16.9
20°-30°	393.9	22.2
30°-40°	387.1	21.8
40°-50°	292.8	16.5
50°-60°	177.5	10.0
60°-70°	83.8	4.7
70°-80°	21.9	1.2
80°-90°	3.3	0.2
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°	806.8	45.5
0°-40°	1193.8	67.3
0°-60°	1664.2	93.9
0°-90°	1773.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1773.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1220	1217	1200	1201	1200	116
15°	1158	1126	1056	1016	999	326
25°	1033	955	838	760	731	475
35°	862	746	592	488	452	538
45°	665	523	346	220	174	512
55°	450	308	126	86	81	401
65°	223	114	48	40	37	220
75°	28	19	16	16	16	43
85°	2	2	3	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1224.5	1224.5	1215.1	1226.1	1226.1
5°	1219.8	1216.7	1199.6	1201.1	1199.6
7.5°	1210.5	1204.2	1174.6	1166.9	1160.6
10°	1196.5	1184.0	1140.4	1121.7	1110.8
12.5°	1180.9	1159.1	1099.9	1073.4	1056.2
15°	1157.5	1126.4	1056.2	1015.7	998.6
17.5°	1132.6	1087.4	1004.8	956.5	934.7
20°	1101.4	1048.5	953.4	894.2	872.4
22.5°	1067.2	1004.8	894.2	828.8	799.2
25°	1032.9	955.0	838.1	760.2	730.6
27.5°	993.9	905.1	774.3	693.3	660.5
30°	950.3	855.3	715.1	630.9	588.9
32.5°	906.7	803.9	652.8	560.8	518.8
35°	861.5	746.2	592.0	487.6	451.8
37.5°	813.2	691.7	529.7	420.6	378.6
40°	766.5	637.2	467.4	352.1	313.1
42.5°	716.6	582.6	405.0	285.1	241.5
45°	665.2	523.4	345.9	219.7	174.5
47.5°	612.2	470.5	286.7	162.0	130.9
50°	559.3	414.4	230.6	120.0	109.1
52.5°	504.8	359.9	174.5	99.7	95.0
55°	450.2	308.5	126.2	85.7	81.0
57.5°	394.1	252.4	95.0	73.2	68.5
60°	333.4	202.5	74.8	60.8	56.1
62.5°	277.3	158.9	60.8	49.9	46.7
65°	222.8	113.7	48.3	40.5	37.4
67.5°	166.7	76.3	37.4	31.2	31.2
70°	113.7	49.9	28.0	24.9	24.9
72.5°	68.5	29.6	20.3	20.3	20.3
75°	28.0	18.7	15.6	15.6	15.6
77.5°	9.3	10.9	10.9	12.5	12.5
80°	6.2	6.2	7.8	9.3	9.3
82.5°	3.1	4.7	4.7	6.2	6.2
85°	1.6	1.6	3.1	3.1	3.1
87.5°	0.0	0.0	0.0	1.6	1.6
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	16.74	18.07	17.11	18.38	18.70	7.39	8.73	7.76	9.04	9.35
	3H	17.45	18.62	17.83	18.95	19.32	8.18	9.35	8.56	9.68	10.05
	4H	17.46	18.56	17.87	18.91	19.29	8.43	9.52	8.83	9.87	10.26
	6H	17.39	18.40	17.81	18.77	19.16	8.61	9.61	9.02	9.98	10.38
	8H	17.35	18.30	17.78	18.70	19.10	8.65	9.60	9.08	9.99	10.40
	12H	17.31	18.22	17.74	18.60	19.03	8.66	9.57	9.09	9.95	10.38
4H	2H	16.57	17.67	16.97	18.02	18.40	7.88	8.98	8.28	9.33	9.71
	3H	17.32	18.21	17.73	18.61	19.02	8.79	9.68	9.20	10.09	10.49
	4H	17.34	18.13	17.77	18.55	18.99	9.10	9.90	9.54	10.32	10.76
	6H	17.27	17.96	17.74	18.40	18.87	9.36	10.05	9.83	10.49	10.96
	8H	17.22	17.86	17.69	18.31	18.78	9.43	10.07	9.90	10.51	10.98
	12H	17.18	17.74	17.67	18.22	18.70	9.45	10.02	9.94	10.50	10.97
8H	4H	17.22	17.86	17.69	18.30	18.77	9.22	9.86	9.69	10.30	10.77
	6H	17.14	17.66	17.65	18.16	18.64	9.54	10.05	10.04	10.55	11.03
	8H	17.09	17.56	17.61	18.07	18.56	9.64	10.10	10.16	10.62	11.11
	12H	17.05	17.46	17.56	17.95	18.53	9.70	10.11	10.22	10.61	11.18
12H	4H	17.17	17.74	17.66	18.22	18.69	9.19	9.75	9.68	10.23	10.71
	6H	17.09	17.55	17.61	18.07	18.56	9.51	9.97	10.03	10.49	10.98
	8H	17.05	17.46	17.57	17.96	18.53	9.64	10.06	10.16	10.55	11.12