

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: P1061953

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061953
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D850-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

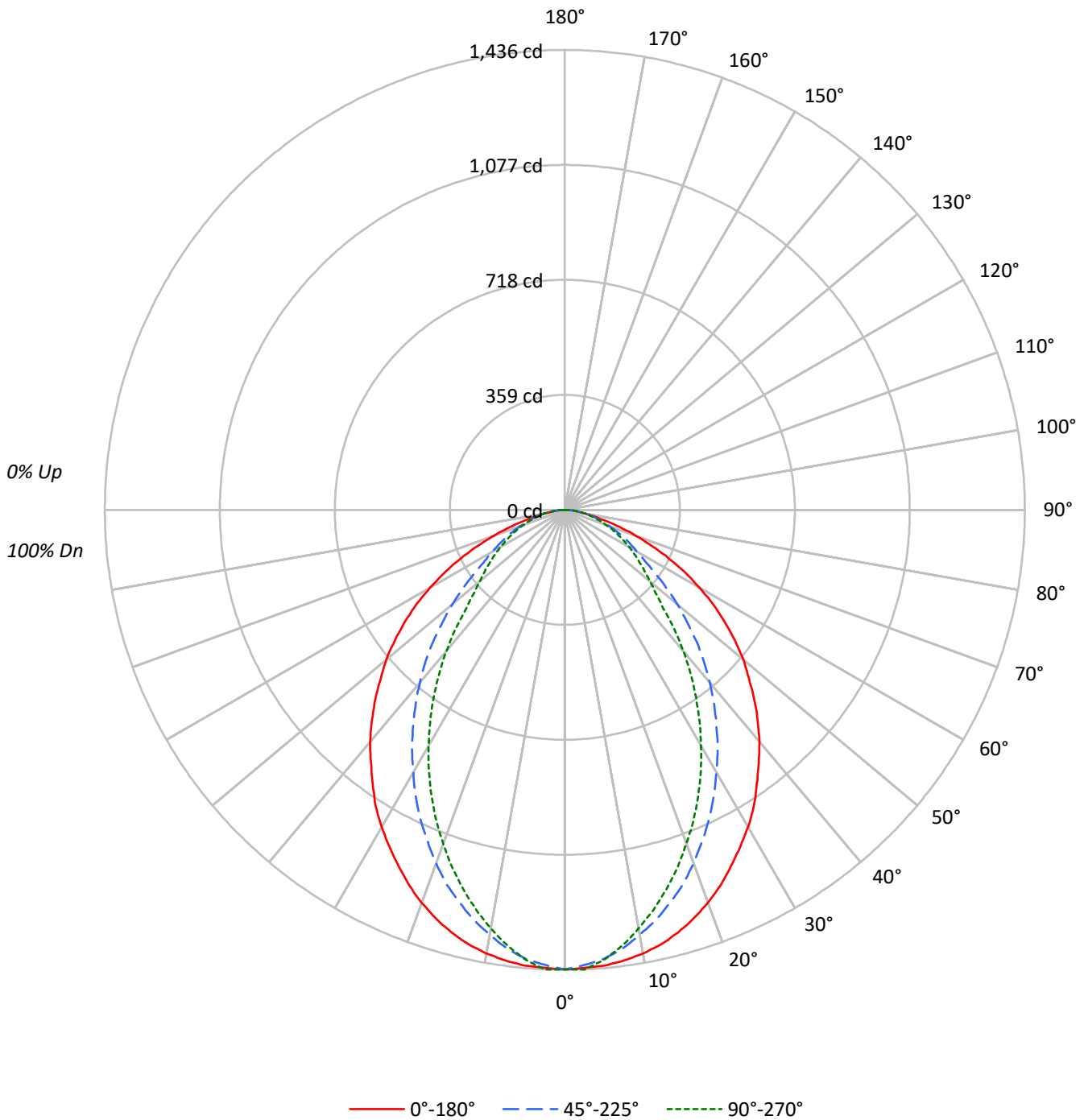
Lumens per Lamp: N/A
Luminaire Lumens: 2718.0 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061953

CATALOG NUMBER: S125RDR-H1270D850-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	75	75	75														
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65	65	65	65	65	65	65														
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57	57	57	57	57	57	57														
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50	50	50	50	50	50	50														
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45	45	45	45	45	45	45														
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40	40	40	40	40	40	40														
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36	36	36	36	36	36	36														
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33	33	33	33	33	33	33														
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30	30	30	30	30	30	30														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9879	9879	9879
5°	9873	9722	9744
10°	9835	9421	9280
15°	9738	9050	8739
20°	9566	8606	8127
25°	9326	8095	7480
30°	9091	7518	6763
35°	8786	6940	5997
40°	8499	6328	5166
45°	8146	5658	4232
50°	7793	4906	3704
55°	7312	4096	3422
60°	6672	3583	3196
65°	5837	3275	2970
70°	4735	2947	2760
75°	3397	2695	2570
80°	2347	2411	2411
85°	1722	2093	2212

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8146 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.4	4.9
10°-20°	360.8	13.3
20°-30°	498.7	18.3
30°-40°	531.2	19.5
40°-50°	466.6	17.2
50°-60°	353.8	13.0
60°-70°	229.7	8.5
70°-80°	113.8	4.2
80°-90°	29.8	1.1
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°	992.9	36.5
0°-40°	1524.1	56.1
0°-60°	2344.6	86.3
0°-90°	2718.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2718.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1435	1435	1435	1435	1435	
5°	1428	1425	1407	1411	1410	136
15°	1366	1335	1270	1240	1226	385
25°	1228	1161	1066	1011	985	566
35°	1045	949	826	751	714	654
45°	837	720	581	477	435	645
55°	609	489	341	294	285	543
65°	358	266	201	185	182	354
75°	128	112	101	98	97	142
85°	22	25	26	26	28	27
90°	0	0	0	0	0	

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CATALOG NUMBER: S125RDR-H1270D850-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1434.8	1434.8	1434.8	1434.8	1434.8
2.5°	1431.7	1434.8	1422.3	1433.2	1436.3
5°	1428.5	1425.4	1406.7	1411.4	1409.8
7.5°	1419.2	1413.0	1381.8	1378.7	1372.5
10°	1406.7	1391.1	1347.5	1336.6	1327.3
12.5°	1389.6	1364.7	1311.7	1289.9	1279.0
15°	1366.2	1335.1	1269.6	1240.0	1226.0
17.5°	1338.2	1294.6	1226.0	1185.5	1169.9
20°	1305.5	1254.1	1174.6	1127.9	1109.2
22.5°	1269.6	1208.9	1120.1	1070.2	1050.0
25°	1227.6	1160.6	1065.6	1011.0	984.6
27.5°	1185.5	1110.7	1007.9	947.2	919.1
30°	1143.5	1057.8	945.6	880.2	850.6
32.5°	1098.3	1003.2	888.0	816.3	782.0
35°	1045.3	948.7	825.7	750.9	713.5
37.5°	993.9	891.1	764.9	680.8	644.9
40°	945.6	836.6	704.1	612.2	574.8
42.5°	891.1	778.9	643.4	546.8	504.7
45°	836.6	719.7	581.1	476.7	434.6
47.5°	778.9	663.6	515.6	412.8	384.8
50°	727.5	606.0	458.0	364.5	345.8
52.5°	668.3	549.9	398.8	327.1	314.7
55°	609.1	489.2	341.2	294.4	285.1
57.5°	548.4	434.6	296.0	266.4	257.0
60°	484.5	378.6	260.2	236.8	232.1
62.5°	420.6	320.9	229.0	211.9	205.6
65°	358.3	266.4	201.0	185.4	182.3
67.5°	294.4	216.5	172.9	162.0	160.5
70°	235.2	176.0	146.4	140.2	137.1
72.5°	180.7	140.2	123.1	118.4	116.8
75°	127.7	112.2	101.3	98.1	96.6
77.5°	85.7	85.7	81.0	77.9	79.4
80°	59.2	62.3	60.8	60.8	60.8
82.5°	38.9	42.1	43.6	43.6	43.6
85°	21.8	24.9	26.5	26.5	28.0
87.5°	7.8	9.3	10.9	12.5	12.5
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	18.51	20.00	18.88	20.32	20.63	14.75	16.24	15.12	16.56	16.87
	3H	19.82	21.16	20.20	21.49	21.85	16.34	17.67	16.71	18.00	18.36
	4H	20.19	21.44	20.59	21.79	22.17	16.94	18.19	17.34	18.54	18.92
	6H	20.37	21.52	20.78	21.89	22.28	17.41	18.57	17.82	18.93	19.33
	8H	20.40	21.50	20.83	21.89	22.30	17.57	18.67	18.00	19.06	19.46
	12H	20.42	21.47	20.85	21.85	22.28	17.68	18.73	18.11	19.12	19.55
4H	2H	18.62	19.88	19.02	20.22	20.60	15.41	16.67	15.81	17.02	17.39
	3H	20.11	21.15	20.52	21.55	21.95	17.20	18.23	17.61	18.63	19.04
	4H	20.59	21.52	21.02	21.93	22.37	17.91	18.85	18.35	19.26	19.70
	6H	20.87	21.68	21.33	22.12	22.59	18.50	19.31	18.96	19.76	20.22
	8H	20.94	21.70	21.40	22.14	22.61	18.71	19.46	19.17	19.91	20.38
	12H	20.98	21.66	21.46	22.13	22.61	18.86	19.54	19.34	20.02	20.49
8H	4H	20.67	21.43	21.13	21.87	22.34	18.22	18.98	18.69	19.43	19.89
	6H	21.03	21.66	21.53	22.15	22.63	18.93	19.56	19.43	20.05	20.53
	8H	21.15	21.71	21.66	22.22	22.71	19.21	19.77	19.73	20.28	20.77
	12H	21.23	21.73	21.74	22.22	22.79	19.44	19.93	19.95	20.43	20.99
12H	4H	20.66	21.34	21.14	21.82	22.29	18.25	18.93	18.73	19.40	19.88
	6H	21.03	21.60	21.55	22.11	22.60	18.98	19.54	19.50	20.05	20.54
	8H	21.19	21.69	21.70	22.18	22.75	19.32	19.81	19.83	20.31	20.87