

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: P1062214

Luminaire Tested: S125RDR-H850D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062214
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-H850D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

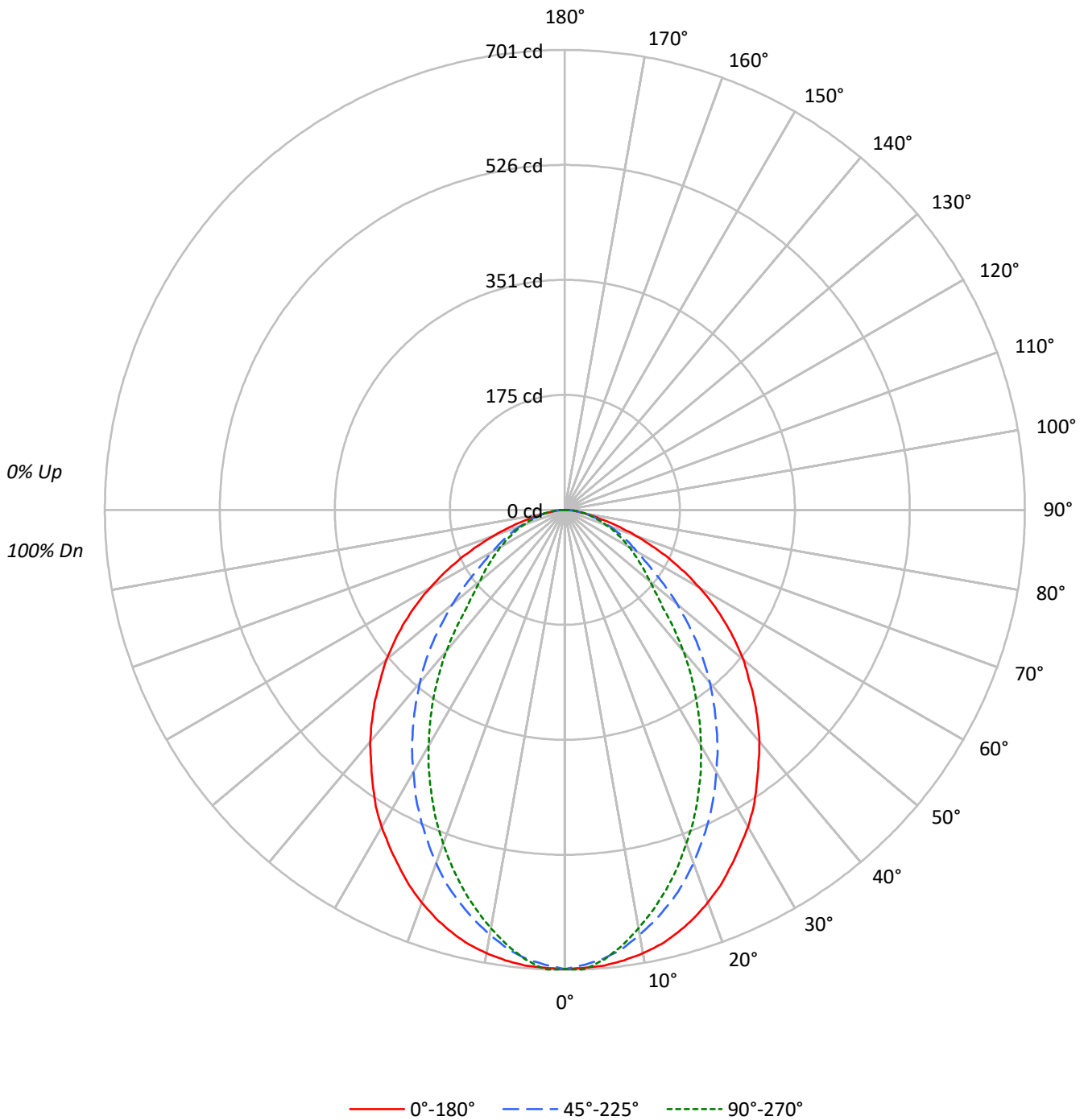
Lumens per Lamp: N/A
Luminaire Lumens: 1326.3 lumens
Efficiency: N/A
Efficacy: 56.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	100	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	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	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	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	
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	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	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	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	
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	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	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4820	4820	4820
5°	4818	4745	4755
10°	4800	4598	4528
15°	4752	4417	4265
20°	4667	4200	3966
25°	4551	3950	3650
30°	4436	3668	3300
35°	4288	3387	2927
40°	4147	3088	2521
45°	3975	2761	2065
50°	3803	2394	1808
55°	3568	1999	1670
60°	3255	1749	1560
65°	2848	1598	1448
70°	2311	1439	1347
75°	1657	1314	1253
80°	1146	1174	1174
85°	837	1019	1082

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3975 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	4.9
10°-20°	176.1	13.3
20°-30°	243.4	18.3
30°-40°	259.2	19.5
40°-50°	227.7	17.2
50°-60°	172.7	13.0
60°-70°	112.1	8.5
70°-80°	55.5	4.2
80°-90°	14.5	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°	484.5	36.5
0°-40°	743.8	56.1
0°-60°	1144.1	86.3
0°-90°	1326.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1326.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	697	696	686	689	688	66
15°	667	652	620	605	598	188
25°	599	566	520	493	480	276
35°	510	463	403	366	348	319
45°	408	351	284	233	212	315
55°	297	239	166	144	139	265
65°	175	130	98	90	89	173
75°	62	55	49	48	47	70
85°	11	12	13	13	14	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	700.1	700.1	700.1	700.1	700.1
2.5°	698.6	700.1	694.1	699.4	700.9
5°	697.1	695.6	686.5	688.7	688.0
7.5°	692.5	689.5	674.3	672.8	669.7
10°	686.5	678.9	657.6	652.3	647.7
12.5°	678.1	665.9	640.1	629.4	624.1
15°	666.7	651.5	619.6	605.1	598.3
17.5°	653.0	631.7	598.3	578.5	570.9
20°	637.0	612.0	573.2	550.4	541.3
22.5°	619.6	589.9	546.6	522.3	512.4
25°	599.0	566.3	520.0	493.4	480.4
27.5°	578.5	542.0	491.9	462.2	448.5
30°	558.0	516.2	461.4	429.5	415.1
32.5°	535.9	489.6	433.3	398.3	381.6
35°	510.1	463.0	402.9	366.4	348.2
37.5°	485.0	434.8	373.3	332.2	314.7
40°	461.4	408.2	343.6	298.8	280.5
42.5°	434.8	380.1	314.0	266.8	246.3
45°	408.2	351.2	283.6	232.6	212.1
47.5°	380.1	323.8	251.6	201.5	187.8
50°	355.0	295.7	223.5	177.9	168.8
52.5°	326.1	268.4	194.6	159.6	153.6
55°	297.2	238.7	166.5	143.7	139.1
57.5°	267.6	212.1	144.4	130.0	125.4
60°	236.4	184.7	127.0	115.6	113.3
62.5°	205.3	156.6	111.7	103.4	100.3
65°	174.8	130.0	98.1	90.5	88.9
67.5°	143.7	105.7	84.4	79.1	78.3
70°	114.8	85.9	71.5	68.4	66.9
72.5°	88.2	68.4	60.1	57.8	57.0
75°	62.3	54.7	49.4	47.9	47.1
77.5°	41.8	41.8	39.5	38.0	38.8
80°	28.9	30.4	29.6	29.6	29.6
82.5°	19.0	20.5	21.3	21.3	21.3
85°	10.6	12.2	12.9	12.9	13.7
87.5°	3.8	4.6	5.3	6.1	6.1
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	16.02	17.51	16.38	17.82	18.14	12.26	13.75	12.62	14.07	14.38
	3H	17.33	18.67	17.71	18.99	19.36	13.84	15.18	14.22	15.51	15.87
	4H	17.70	18.95	18.10	19.30	19.68	14.45	15.70	14.85	16.05	16.43
	6H	17.87	19.03	18.29	19.40	19.79	14.92	16.07	15.33	16.44	16.83
	8H	17.91	19.01	18.34	19.40	19.80	15.08	16.18	15.50	16.57	16.97
	12H	17.92	18.98	18.35	19.36	19.79	15.19	16.24	15.62	16.62	17.05
4H	2H	16.13	17.38	16.53	17.73	18.11	12.92	14.17	13.32	14.52	14.90
	3H	17.62	18.66	18.03	19.06	19.46	14.70	15.74	15.11	16.14	16.54
	4H	18.09	19.03	18.53	19.44	19.88	15.42	16.35	15.85	16.77	17.21
	6H	18.38	19.19	18.84	19.63	20.09	16.01	16.82	16.47	17.26	17.72
	8H	18.45	19.20	18.91	19.65	20.12	16.21	16.97	16.68	17.42	17.88
	12H	18.49	19.16	18.97	19.64	20.11	16.37	17.04	16.85	17.52	18.00
8H	4H	18.18	18.93	18.64	19.38	19.85	15.73	16.49	16.20	16.93	17.40
	6H	18.54	19.16	19.04	19.66	20.13	16.44	17.06	16.94	17.55	18.03
	8H	18.65	19.22	19.17	19.73	20.21	16.72	17.28	17.23	17.79	18.28
	12H	18.74	19.24	19.25	19.73	20.29	16.95	17.44	17.46	17.93	18.50
12H	4H	18.17	18.85	18.65	19.32	19.80	15.76	16.43	16.24	16.91	17.38
	6H	18.54	19.10	19.06	19.61	20.10	16.49	17.05	17.00	17.56	18.05
	8H	18.70	19.20	19.21	19.69	20.25	16.82	17.32	17.34	17.81	18.38