

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1175430

Luminaire Tested: S125RDRP-H850D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175430
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H850D840-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

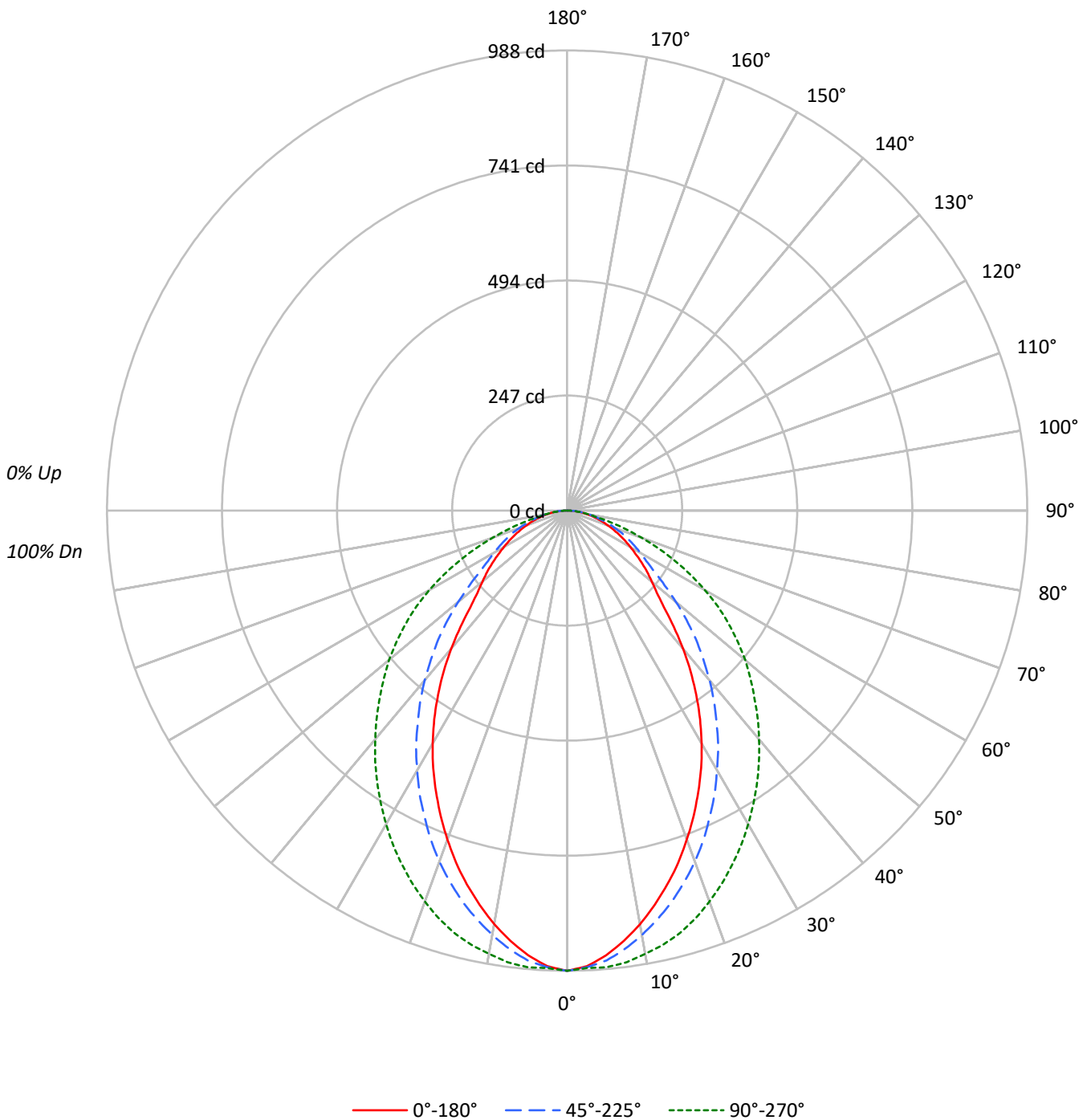
Lumens per Lamp: N/A
Luminaire Lumens: 1861.5 lumens
Efficiency: N/A
Efficacy: 79.2 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (A_{in}): 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6803	6803	6803
5°	6626	6701	6800
10°	6304	6468	6756
15°	5925	6194	6690
20°	5507	5876	6545
25°	5060	5506	6372
30°	4588	5115	6182
35°	4061	4703	5979
40°	3483	4275	5760
45°	2859	3806	5538
50°	2543	3270	5346
55°	2346	2739	5075
60°	2161	2495	4701
65°	2009	2351	4154
70°	1874	2194	3394
75°	1764	2030	2543
80°	1661	1864	1828
85°	1525	1856	1525

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5538 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	4.9
10°-20°	246.6	13.2
20°-30°	339.2	18.2
30°-40°	359.8	19.3
40°-50°	314.9	16.9
50°-60°	241.6	13.0
60°-70°	161.0	8.6
70°-80°	82.5	4.4
80°-90°	24.5	1.3
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°	677.2	36.4
0°-40°	1037.0	55.7
0°-60°	1593.6	85.6
0°-90°	1861.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1861.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	988	988	988	988	988	
5°	959	971	970	976	984	90
15°	831	850	869	910	939	233
25°	666	689	725	786	839	306
35°	483	506	560	642	711	301
45°	294	318	391	488	569	232
55°	195	200	228	339	423	175
65°	123	124	144	190	255	123
75°	66	70	76	80	96	70
85°	19	22	24	23	19	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	988.1	988.1	988.1	988.1	988.1
2.5°	978.9	988.9	981.4	982.2	983.1
5°	958.7	971.3	969.6	976.4	983.9
7.5°	931.9	945.3	949.5	966.3	978.0
10°	901.7	916.8	925.2	950.4	966.3
12.5°	867.3	884.9	898.3	931.1	954.5
15°	831.2	850.5	869.0	910.1	938.6
17.5°	792.7	812.0	836.3	883.2	917.6
20°	751.6	772.5	801.9	852.2	893.3
22.5°	709.6	731.4	765.0	820.3	867.3
25°	666.0	688.6	724.7	785.9	838.8
27.5°	623.2	644.2	686.1	751.6	809.4
30°	577.1	598.9	643.4	715.5	777.6
32.5°	531.0	552.8	603.9	679.4	744.8
35°	483.1	505.8	559.5	641.7	711.3
37.5°	435.3	458.8	518.4	603.1	676.9
40°	387.5	412.7	475.6	564.5	640.8
42.5°	338.9	365.7	432.0	526.8	605.6
45°	293.6	317.9	390.9	488.2	568.7
47.5°	260.9	275.1	347.3	448.8	533.5
50°	237.4	244.1	305.3	411.0	499.1
52.5°	216.4	220.6	264.2	375.8	461.3
55°	195.4	199.6	228.2	338.9	422.8
57.5°	175.3	177.8	201.3	302.0	384.2
60°	156.9	158.5	181.2	265.1	341.4
62.5°	140.1	140.9	161.9	227.3	298.6
65°	123.3	124.1	144.3	189.6	255.0
67.5°	108.2	108.2	127.5	155.2	213.1
70°	93.1	93.1	109.0	125.8	168.6
72.5°	79.7	81.4	92.3	101.5	131.7
75°	66.3	70.5	76.3	80.5	95.6
77.5°	53.7	58.7	61.2	62.9	63.7
80°	41.9	45.3	47.0	47.8	46.1
82.5°	31.0	33.6	34.4	34.4	31.9
85°	19.3	21.8	23.5	22.6	19.3
87.5°	9.2	12.6	13.4	11.7	9.2
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	13.28	14.78	13.64	15.09	15.40	17.30	18.80	17.67	19.12	19.43
	3H	14.86	16.21	15.24	16.54	16.90	18.69	20.03	19.07	20.36	20.72
	4H	15.51	16.77	15.91	17.12	17.50	19.10	20.36	19.50	20.71	21.08
	6H	16.02	17.18	16.43	17.55	17.94	19.30	20.47	19.71	20.83	21.22
	8H	16.20	17.31	16.62	17.70	18.10	19.36	20.47	19.79	20.86	21.26
	12H	16.32	17.38	16.75	17.77	18.20	19.39	20.45	19.82	20.83	21.26
4H	2H	14.05	15.31	14.45	15.66	16.03	17.43	18.69	17.83	19.04	19.42
	3H	15.83	16.87	16.24	17.28	17.68	19.00	20.05	19.41	20.45	20.85
	4H	16.60	17.54	17.03	17.95	18.39	19.51	20.45	19.94	20.87	21.31
	6H	17.24	18.06	17.69	18.50	18.96	19.84	20.66	20.30	21.10	21.56
	8H	17.47	18.23	17.93	18.68	19.14	19.94	20.70	20.40	21.15	21.61
	12H	17.64	18.32	18.12	18.80	19.27	20.01	20.69	20.49	21.17	21.64
8H	4H	16.98	17.75	17.44	18.19	18.66	19.61	20.38	20.08	20.82	21.29
	6H	17.76	18.39	18.25	18.88	19.36	20.03	20.66	20.53	21.15	21.63
	8H	18.07	18.64	18.59	19.15	19.64	20.19	20.76	20.70	21.27	21.76
	12H	18.34	18.84	18.85	19.33	19.90	20.33	20.83	20.84	21.32	21.89
12H	4H	17.02	17.70	17.50	18.18	18.65	19.61	20.29	20.09	20.77	21.24
	6H	17.83	18.40	18.35	18.91	19.40	20.04	20.61	20.56	21.12	21.61
	8H	18.22	18.72	18.73	19.21	19.78	20.25	20.75	20.76	21.25	21.81