

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: P1175428

Luminaire Tested: S125RDRP-H850D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175428
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-H850D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

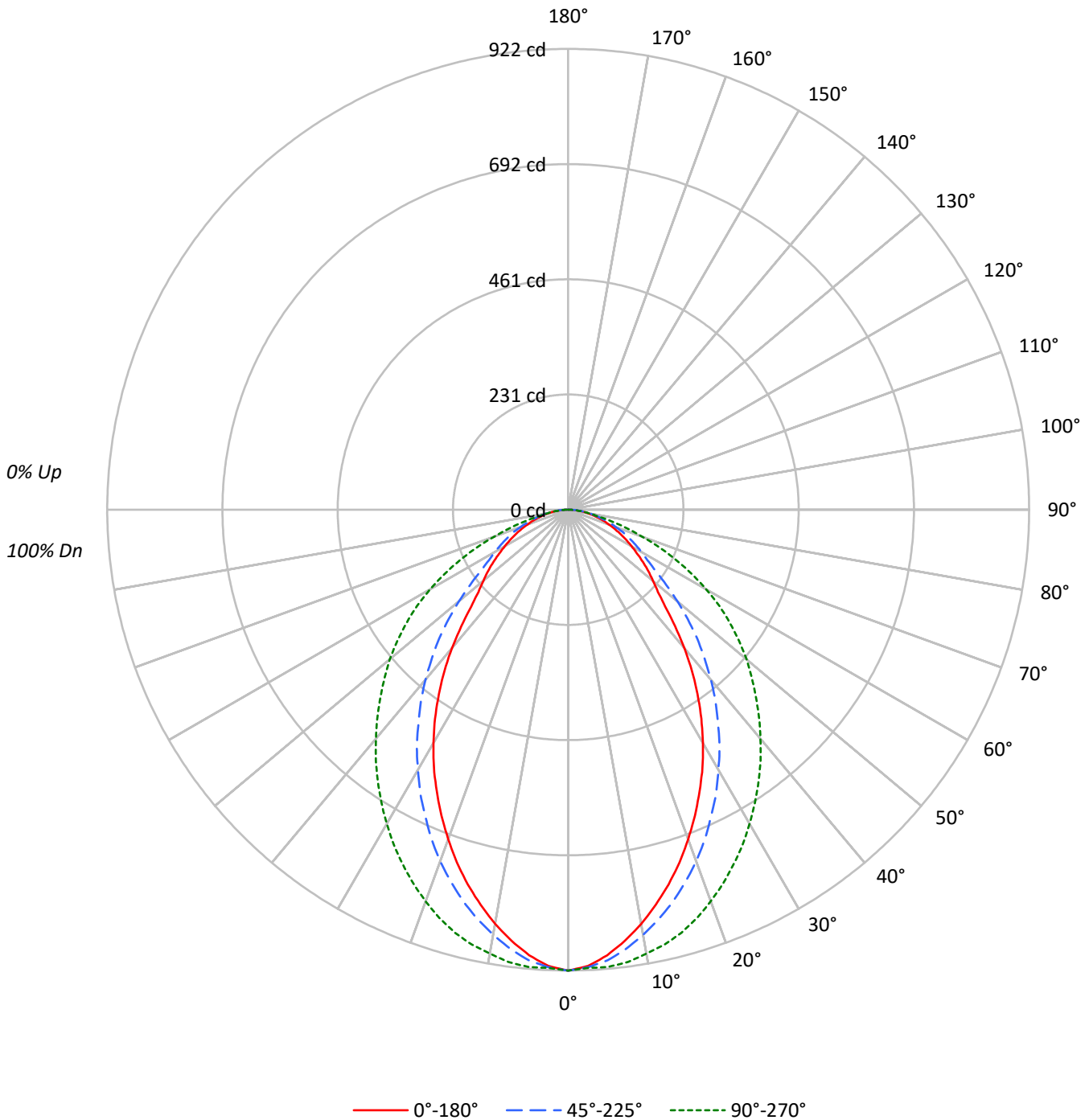
Lumens per Lamp: N/A
Luminaire Lumens: 1737.4 lumens
Efficiency: N/A
Efficacy: 73.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6350	6350	6350
5°	6184	6255	6347
10°	5884	6037	6306
15°	5530	5782	6244
20°	5140	5484	6109
25°	4722	5139	5948
30°	4282	4774	5770
35°	3790	4389	5580
40°	3251	3990	5376
45°	2668	3552	5169
50°	2374	3053	4989
55°	2190	2556	4737
60°	2016	2329	4387
65°	1875	2195	3877
70°	1749	2049	3169
75°	1644	1894	2373
80°	1550	1737	1709
85°	1422	1730	1422

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5169 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	4.9
10°-20°	230.1	13.2
20°-30°	316.6	18.2
30°-40°	335.8	19.3
40°-50°	293.9	16.9
50°-60°	225.5	13.0
60°-70°	150.2	8.6
70°-80°	77.0	4.4
80°-90°	22.9	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°	632.1	36.4
0°-40°	967.9	55.7
0°-60°	1487.3	85.6
0°-90°	1737.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1737.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	895	907	905	911	918	84
15°	776	794	811	849	876	217
25°	622	643	676	734	783	285
35°	451	472	522	599	664	281
45°	274	297	365	456	531	216
55°	182	186	213	316	395	164
65°	115	116	135	177	238	115
75°	62	66	71	75	89	66
85°	18	20	22	21	18	20
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	922.2	922.2	922.2	922.2	922.2
2.5°	913.6	923.0	916.0	916.7	917.5
5°	894.8	906.6	905.0	911.3	918.3
7.5°	869.8	882.3	886.2	901.9	912.8
10°	841.6	855.7	863.5	887.0	901.9
12.5°	809.5	825.9	838.5	869.0	890.9
15°	775.8	793.8	811.1	849.4	876.0
17.5°	739.8	757.8	780.5	824.4	856.5
20°	701.5	721.0	748.4	795.4	833.8
22.5°	662.3	682.7	714.0	765.7	809.5
25°	621.6	642.7	676.4	733.6	782.9
27.5°	581.7	601.2	640.4	701.5	755.5
30°	538.6	559.0	600.5	667.8	725.7
32.5°	495.6	515.9	563.7	634.1	695.2
35°	450.9	472.1	522.2	598.9	663.9
37.5°	406.3	428.2	483.8	562.9	631.8
40°	361.7	385.2	443.9	526.9	598.1
42.5°	316.3	341.3	403.2	491.6	565.2
45°	274.0	296.7	364.8	455.6	530.8
47.5°	243.5	256.8	324.1	418.8	497.9
50°	221.6	227.8	285.0	383.6	465.8
52.5°	202.0	205.9	246.6	350.7	430.6
55°	182.4	186.3	212.9	316.3	394.6
57.5°	163.6	166.0	187.9	281.8	358.6
60°	146.4	148.0	169.1	247.4	318.6
62.5°	130.7	131.5	151.1	212.2	278.7
65°	115.1	115.9	134.7	176.9	238.0
67.5°	101.0	101.0	119.0	144.8	198.8
70°	86.9	86.9	101.8	117.4	157.4
72.5°	74.4	75.9	86.1	94.7	122.9
75°	61.8	65.8	71.2	75.2	89.2
77.5°	50.1	54.8	57.1	58.7	59.5
80°	39.1	42.3	43.8	44.6	43.1
82.5°	29.0	31.3	32.1	32.1	29.7
85°	18.0	20.4	21.9	21.1	18.0
87.5°	8.6	11.7	12.5	11.0	8.6
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	13.04	14.54	13.40	14.85	15.17	17.06	18.56	17.43	18.87	19.19
	3H	14.63	15.97	15.00	16.30	16.66	18.45	19.79	18.83	20.12	20.48
	4H	15.27	16.53	15.67	16.88	17.26	18.85	20.12	19.25	20.46	20.84
	6H	15.78	16.94	16.19	17.31	17.70	19.06	20.23	19.47	20.59	20.98
	8H	15.96	17.07	16.38	17.46	17.86	19.12	20.23	19.55	20.62	21.02
	12H	16.08	17.14	16.51	17.53	17.96	19.15	20.21	19.58	20.59	21.02
4H	2H	13.81	15.07	14.21	15.42	15.80	17.19	18.45	17.59	18.80	19.18
	3H	15.59	16.64	16.00	17.04	17.44	18.76	19.81	19.17	20.21	20.61
	4H	16.36	17.30	16.79	17.72	18.15	19.27	20.21	19.70	20.63	21.07
	6H	17.00	17.82	17.46	18.26	18.72	19.60	20.42	20.06	20.86	21.32
	8H	17.23	17.99	17.69	18.44	18.90	19.70	20.46	20.16	20.91	21.37
	12H	17.40	18.08	17.88	18.56	19.03	19.77	20.45	20.25	20.93	21.40
8H	4H	16.74	17.51	17.20	17.95	18.42	19.37	20.14	19.84	20.58	21.05
	6H	17.52	18.15	18.02	18.64	19.12	19.79	20.42	20.29	20.91	21.39
	8H	17.83	18.40	18.35	18.91	19.40	19.95	20.52	20.46	21.03	21.52
	12H	18.10	18.60	18.61	19.09	19.66	20.09	20.59	20.60	21.08	21.65
12H	4H	16.78	17.46	17.26	17.94	18.41	19.37	20.05	19.85	20.53	21.00
	6H	17.59	18.16	18.11	18.67	19.16	19.80	20.37	20.32	20.88	21.37
	8H	17.98	18.48	18.49	18.97	19.54	20.01	20.51	20.52	21.01	21.57