

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: P1175434

Luminaire Tested: S125RDRP-H850D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175434
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-H850D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

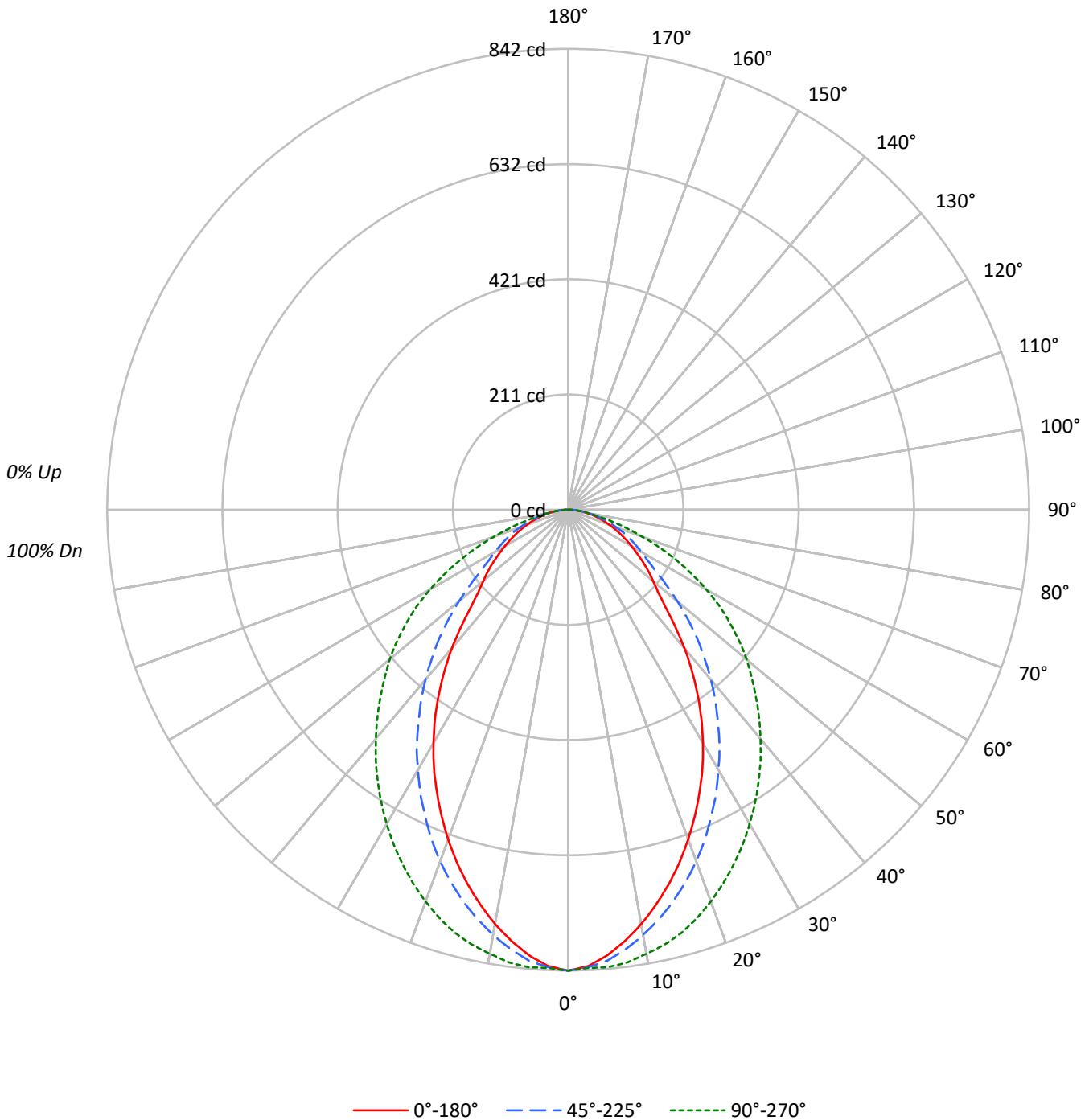
Lumens per Lamp: N/A
Luminaire Lumens: 1587.1 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	5800	5800	5800
5°	5649	5714	5798
10°	5375	5515	5760
15°	5052	5281	5704
20°	4695	5010	5580
25°	4314	4694	5433
30°	3912	4361	5270
35°	3462	4009	5097
40°	2970	3645	4911
45°	2437	3245	4722
50°	2168	2788	4558
55°	2000	2335	4326
60°	1841	2128	4009
65°	1712	2004	3542
70°	1598	1872	2893
75°	1503	1732	2168
80°	1419	1586	1558
85°	1296	1580	1296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4722 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	4.9
10°-20°	210.2	13.2
20°-30°	289.2	18.2
30°-40°	306.7	19.3
40°-50°	268.5	16.9
50°-60°	206.0	13.0
60°-70°	137.2	8.6
70°-80°	70.4	4.4
80°-90°	20.9	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°	577.4	36.4
0°-40°	884.2	55.7
0°-60°	1358.6	85.6
0°-90°	1587.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1587.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	817	828	827	832	839	76
15°	709	725	741	776	800	199
25°	568	587	618	670	715	261
35°	412	431	477	547	606	257
45°	250	271	333	416	485	198
55°	167	170	194	289	360	149
65°	105	106	123	162	217	105
75°	56	60	65	69	82	60
85°	16	19	20	19	16	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	842.4	842.4	842.4	842.4	842.4
2.5°	834.6	843.2	836.7	837.4	838.1
5°	817.4	828.1	826.7	832.4	838.9
7.5°	794.5	806.0	809.5	823.8	833.9
10°	768.8	781.7	788.8	810.3	823.8
12.5°	739.5	754.5	765.9	793.8	813.8
15°	708.7	725.2	740.9	775.9	800.2
17.5°	675.8	692.3	713.0	753.0	782.4
20°	640.8	658.6	683.7	726.6	761.6
22.5°	605.0	623.6	652.2	699.4	739.5
25°	567.8	587.1	617.9	670.1	715.1
27.5°	531.4	549.2	585.0	640.8	690.1
30°	492.0	510.6	548.5	610.0	662.9
32.5°	452.7	471.3	514.9	579.3	635.0
35°	411.9	431.2	477.0	547.1	606.4
37.5°	371.2	391.2	442.0	514.2	577.1
40°	330.4	351.9	405.5	481.3	546.4
42.5°	288.9	311.8	368.3	449.1	516.3
45°	250.3	271.0	333.3	416.2	484.9
47.5°	222.4	234.6	296.1	382.6	454.8
50°	202.4	208.1	260.3	350.4	425.5
52.5°	184.5	188.1	225.3	320.4	393.3
55°	166.6	170.2	194.5	288.9	360.4
57.5°	149.5	151.6	171.6	257.5	327.5
60°	133.7	135.2	154.5	226.0	291.1
62.5°	119.4	120.1	138.0	193.8	254.6
65°	105.1	105.8	123.0	161.6	217.4
67.5°	92.3	92.3	108.7	132.3	181.6
70°	79.4	79.4	93.0	107.3	143.7
72.5°	67.9	69.4	78.7	86.5	112.3
75°	56.5	60.1	65.1	68.7	81.5
77.5°	45.8	50.1	52.2	53.6	54.4
80°	35.8	38.6	40.0	40.8	39.3
82.5°	26.5	28.6	29.3	29.3	27.2
85°	16.4	18.6	20.0	19.3	16.4
87.5°	7.9	10.7	11.4	10.0	7.9
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	12.72	14.22	13.09	14.54	14.85	16.75	18.25	17.11	18.56	18.88
	3H	14.31	15.66	14.69	15.98	16.35	18.14	19.48	18.51	19.81	20.17
	4H	14.95	16.21	15.35	16.56	16.94	18.54	19.80	18.94	20.15	20.53
	6H	15.46	16.63	15.88	17.00	17.39	18.75	19.91	19.16	20.28	20.67
	8H	15.65	16.75	16.07	17.14	17.54	18.80	19.91	19.23	20.30	20.70
	12H	15.77	16.83	16.20	17.21	17.64	18.84	19.90	19.27	20.28	20.71
4H	2H	13.49	14.75	13.89	15.10	15.48	16.88	18.14	17.28	18.49	18.87
	3H	15.28	16.32	15.69	16.72	17.12	18.45	19.49	18.86	19.89	20.30
	4H	16.04	16.99	16.48	17.40	17.84	18.96	19.90	19.39	20.32	20.75
	6H	16.68	17.50	17.14	17.95	18.41	19.28	20.10	19.74	20.55	21.01
	8H	16.91	17.68	17.38	18.12	18.59	19.38	20.15	19.85	20.59	21.06
	12H	17.09	17.77	17.57	18.25	18.72	19.46	20.14	19.94	20.62	21.09
8H	4H	16.43	17.19	16.89	17.64	18.10	19.06	19.82	19.52	20.27	20.74
	6H	17.20	17.84	17.70	18.33	18.81	19.48	20.11	19.97	20.60	21.08
	8H	17.52	18.09	18.04	18.60	19.09	19.64	20.20	20.15	20.71	21.20
	12H	17.78	18.28	18.29	18.78	19.34	19.77	20.28	20.28	20.77	21.33
12H	4H	16.47	17.15	16.95	17.63	18.10	19.06	19.74	19.54	20.22	20.69
	6H	17.28	17.85	17.79	18.36	18.85	19.49	20.06	20.00	20.57	21.06
	8H	17.66	18.16	18.17	18.66	19.22	19.70	20.20	20.21	20.69	21.26