

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: P1062237

Luminaire Tested: S125RDRP-H850D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1062237
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H850D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

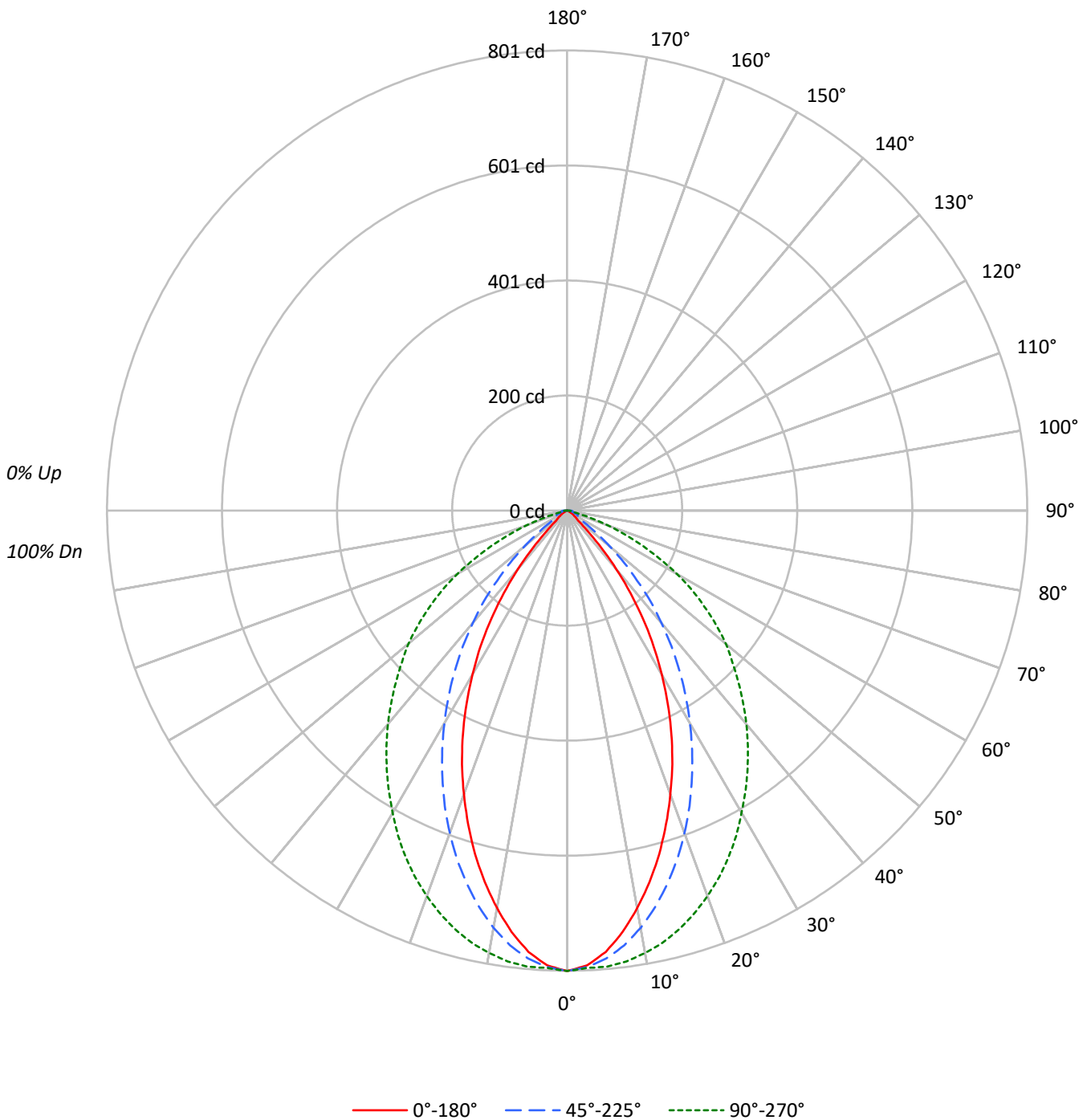
Lumens per Lamp: N/A
Luminaire Lumens: 1036.9 lumens
Efficiency: N/A
Efficacy: 44.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5518	5518	5518
5°	5329	5410	5508
10°	4912	5155	5466
15°	4412	4799	5376
20°	3850	4378	5232
25°	3261	3903	5054
30°	2620	3398	4828
35°	1938	2866	4603
40°	1201	2289	4362
45°	468	1674	4101
50°	220	1049	3863
55°	161	449	3506
60°	110	319	3041
65°	73	334	2364
70°	72	304	1488
75°	96	309	474
80°	143	353	317
85°	213	703	490

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4101 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.5	7.1
10°-20°	190.4	18.4
20°-30°	242.5	23.4
30°-40°	225.7	21.8
40°-50°	155.4	15.0
50°-60°	88.0	8.5
60°-70°	41.6	4.0
70°-80°	13.0	1.3
80°-90°	6.8	0.7
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°	506.4	48.8
0°-40°	732.2	70.6
0°-60°	975.5	94.1
0°-90°	1036.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1036.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	771	782	783	790	797	71
15°	619	639	673	724	754	172
25°	429	457	514	600	665	196
35°	231	263	341	458	548	143
45°	48	77	172	311	421	45
55°	13	15	37	179	292	12
65°	4	5	20	64	145	5
75°	4	8	12	12	18	4
85°	3	7	9	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	801.4	801.4	801.4	801.4	801.4
2.5°	792.5	800.5	795.2	796.1	796.9
5°	771.1	781.8	782.7	789.8	796.9
7.5°	740.0	753.3	763.1	780.0	791.6
10°	702.6	718.6	737.3	764.9	781.8
12.5°	662.5	681.2	707.0	746.2	770.2
15°	618.9	639.3	673.2	723.9	754.2
17.5°	572.6	595.7	636.7	697.2	735.5
20°	525.4	550.3	597.5	666.9	714.1
22.5°	478.2	504.0	556.5	634.0	691.0
25°	429.2	456.8	513.8	600.2	665.2
27.5°	379.3	407.8	471.0	565.4	637.6
30°	329.5	359.7	427.4	529.8	607.3
32.5°	280.5	310.8	384.7	494.2	577.9
35°	230.6	262.7	341.0	457.7	547.6
37.5°	180.8	215.5	298.3	420.3	516.5
40°	133.6	166.5	254.7	383.8	485.3
42.5°	89.0	121.1	215.5	347.3	453.2
45°	48.1	76.6	171.9	310.8	421.2
47.5°	25.8	41.0	134.5	275.1	390.0
50°	20.5	23.2	97.9	242.2	360.6
52.5°	16.9	18.7	64.1	211.0	326.8
55°	13.4	15.1	37.4	179.0	292.1
57.5°	10.7	12.5	24.0	148.7	258.2
60°	8.0	9.8	23.2	119.3	220.8
62.5°	6.2	7.1	21.4	91.7	181.7
65°	4.5	5.3	20.5	64.1	145.1
67.5°	3.6	4.5	18.7	41.0	108.6
70°	3.6	3.6	15.1	26.7	73.9
72.5°	3.6	6.2	13.4	17.8	44.5
75°	3.6	8.0	11.6	12.5	17.8
77.5°	3.6	8.9	9.8	9.8	9.8
80°	3.6	8.0	8.9	8.9	8.0
82.5°	3.6	7.1	8.0	8.9	7.1
85°	2.7	7.1	8.9	8.0	6.2
87.5°	2.7	7.1	8.0	7.1	4.5
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	0.00	0.00	0.00	0.00	0.00	15.18	16.47	15.54	16.78	17.10
	3H	0.00	0.00	0.00	0.00	0.00	15.90	17.04	16.28	17.37	17.74
	4H	0.00	0.00	0.00	0.00	0.08	15.92	16.98	16.32	17.34	17.72
	6H	0.00	0.52	0.00	0.89	1.28	15.87	16.85	16.29	17.22	17.61
	8H	0.19	1.11	0.62	1.50	1.91	15.85	16.77	16.28	17.16	17.57
	12H	0.78	1.66	1.21	2.05	2.48	15.83	16.71	16.27	17.10	17.53
4H	2H	0.00	0.76	0.10	1.11	1.50	14.97	16.03	15.37	16.38	16.77
	3H	0.51	1.38	0.93	1.79	2.19	15.73	16.59	16.14	17.00	17.40
	4H	1.52	2.29	1.96	2.71	3.16	15.76	16.53	16.19	16.95	17.39
	6H	2.80	3.47	3.26	3.91	4.38	15.73	16.40	16.20	16.85	17.32
	8H	3.38	4.01	3.85	4.45	4.92	15.72	16.34	16.19	16.79	17.26
	12H	3.95	4.50	4.43	4.98	5.46	15.73	16.27	16.21	16.76	17.23
8H	4H	2.93	3.56	3.40	4.00	4.47	15.64	16.26	16.11	16.71	17.18
	6H	4.49	5.00	5.00	5.50	5.98	15.63	16.14	16.13	16.63	17.11
	8H	5.28	5.74	5.81	6.26	6.75	15.64	16.10	16.16	16.61	17.10
	12H	6.12	6.53	6.64	7.02	7.59	15.70	16.10	16.22	16.60	17.17
12H	4H	3.15	3.70	3.64	4.19	4.66	15.60	16.15	16.08	16.63	17.10
	6H	4.86	5.32	5.38	5.83	6.33	15.58	16.04	16.10	16.55	17.05
	8H	5.85	6.25	6.36	6.75	7.32	15.63	16.03	16.14	16.53	17.10