

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: P1175436

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

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175436
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-H850D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

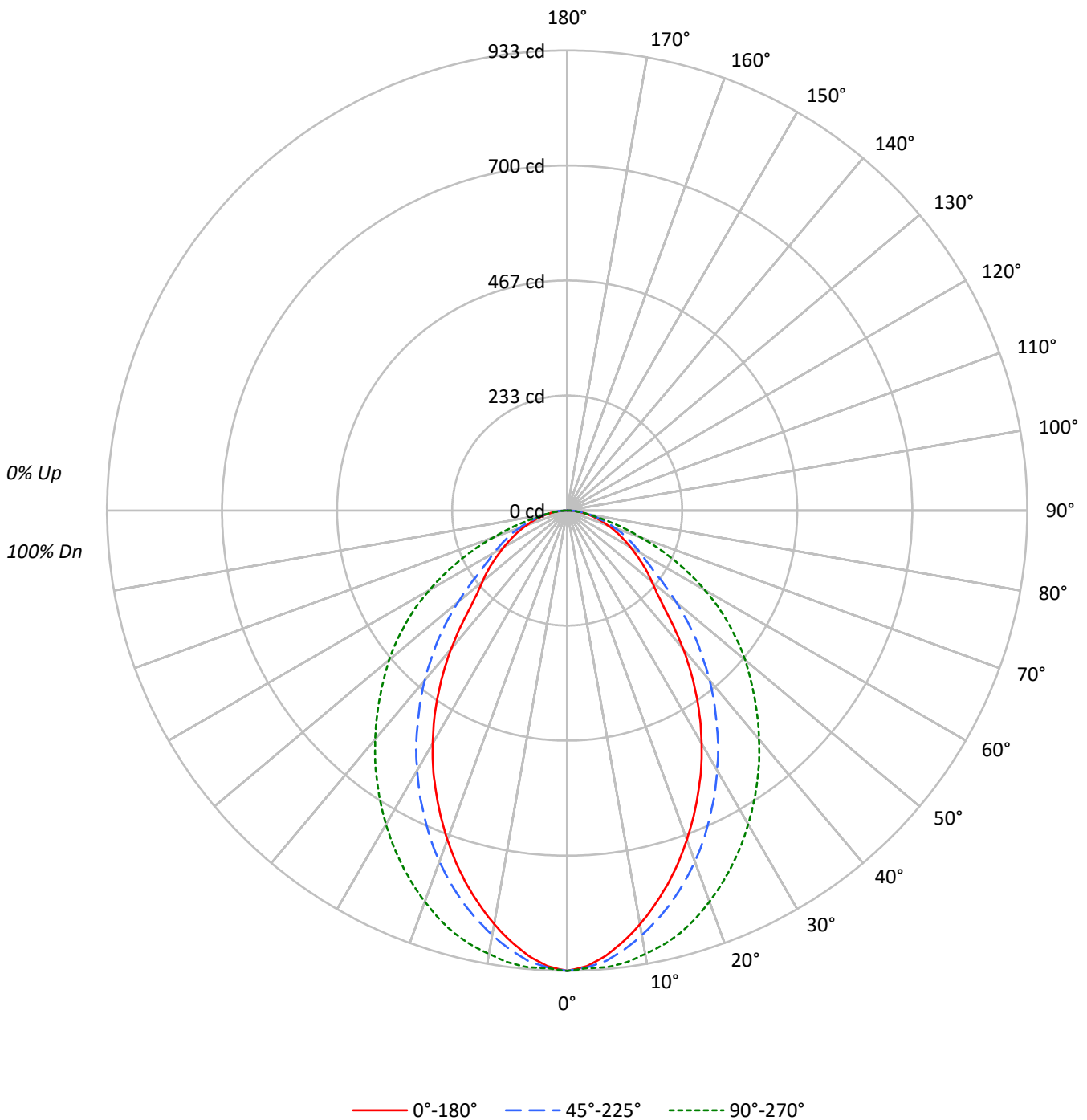
Lumens per Lamp: N/A
Luminaire Lumens: 1758.6 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	6427	6427	6427
5°	6260	6331	6424
10°	5955	6111	6382
15°	5598	5851	6321
20°	5202	5550	6183
25°	4780	5201	6020
30°	4335	4832	5840
35°	3836	4442	5648
40°	3291	4038	5441
45°	2700	3596	5231
50°	2402	3089	5050
55°	2216	2587	4794
60°	2041	2358	4441
65°	1898	2221	3925
70°	1772	2074	3207
75°	1665	1918	2402
80°	1570	1760	1729
85°	1438	1754	1438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5231 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.4	4.9
10°-20°	232.9	13.2
20°-30°	320.4	18.2
30°-40°	339.9	19.3
40°-50°	297.5	16.9
50°-60°	228.3	13.0
60°-70°	152.0	8.6
70°-80°	78.0	4.4
80°-90°	23.1	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°	639.8	36.4
0°-40°	979.7	55.7
0°-60°	1505.4	85.6
0°-90°	1758.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1758.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	906	918	916	922	930	85
15°	785	804	821	860	887	220
25°	629	651	685	742	792	289
35°	456	478	528	606	672	284
45°	277	300	369	461	537	219
55°	185	189	216	320	399	165
65°	116	117	136	179	241	116
75°	63	67	72	76	90	67
85°	18	21	22	21	18	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	933.4	933.4	933.4	933.4	933.4
2.5°	924.7	934.2	927.1	927.9	928.7
5°	905.7	917.6	916.0	922.3	929.5
7.5°	880.3	893.0	897.0	912.8	923.9
10°	851.8	866.1	874.0	897.8	912.8
12.5°	819.3	836.0	848.6	879.6	901.7
15°	785.3	803.5	820.9	859.7	886.7
17.5°	748.8	767.0	790.0	834.4	866.9
20°	710.0	729.8	757.5	805.1	843.9
22.5°	670.4	691.0	722.7	775.0	819.3
25°	629.2	650.6	684.6	742.5	792.4
27.5°	588.7	608.6	648.2	710.0	764.7
30°	545.2	565.8	607.8	675.9	734.5
32.5°	501.6	522.2	570.5	641.8	703.6
35°	456.4	477.8	528.5	606.2	671.9
37.5°	411.3	433.4	489.7	569.7	639.5
40°	366.1	389.9	449.3	533.3	605.4
42.5°	320.1	345.5	408.1	497.6	572.1
45°	277.3	300.3	369.3	461.2	537.2
47.5°	246.4	259.9	328.0	423.9	504.0
50°	224.2	230.6	288.4	388.3	471.5
52.5°	204.4	208.4	249.6	355.0	435.8
55°	184.6	188.6	215.5	320.1	399.4
57.5°	165.6	168.0	190.2	285.3	362.9
60°	148.2	149.8	171.2	250.4	322.5
62.5°	132.3	133.1	152.9	214.7	282.1
65°	116.5	117.3	136.3	179.1	240.9
67.5°	102.2	102.2	120.4	146.6	201.3
70°	88.0	88.0	103.0	118.9	159.3
72.5°	75.3	76.9	87.2	95.9	124.4
75°	62.6	66.6	72.1	76.1	90.3
77.5°	50.7	55.5	57.8	59.4	60.2
80°	39.6	42.8	44.4	45.2	43.6
82.5°	29.3	31.7	32.5	32.5	30.1
85°	18.2	20.6	22.2	21.4	18.2
87.5°	8.7	11.9	12.7	11.1	8.7
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	13.08	14.58	13.44	14.89	15.21	17.11	18.60	17.47	18.92	19.23
	3H	14.67	16.01	15.04	16.34	16.70	18.49	19.84	18.87	20.16	20.53
	4H	15.31	16.57	15.71	16.92	17.30	18.90	20.16	19.30	20.51	20.89
	6H	15.82	16.98	16.23	17.35	17.74	19.10	20.27	19.52	20.64	21.03
	8H	16.00	17.11	16.43	17.50	17.90	19.16	20.27	19.59	20.66	21.06
	12H	16.13	17.19	16.56	17.57	18.00	19.19	20.26	19.62	20.64	21.07
4H	2H	13.85	15.11	14.25	15.46	15.84	17.23	18.50	17.63	18.84	19.22
	3H	15.63	16.68	16.04	17.08	17.48	18.80	19.85	19.22	20.25	20.65
	4H	16.40	17.34	16.83	17.76	18.20	19.31	20.26	19.75	20.67	21.11
	6H	17.04	17.86	17.50	18.30	18.76	19.64	20.46	20.10	20.90	21.36
	8H	17.27	18.03	17.73	18.48	18.95	19.74	20.51	20.20	20.95	21.42
	12H	17.44	18.12	17.92	18.60	19.07	19.81	20.50	20.29	20.97	21.45
8H	4H	16.78	17.55	17.25	17.99	18.46	19.41	20.18	19.88	20.62	21.09
	6H	17.56	18.19	18.06	18.68	19.16	19.83	20.47	20.33	20.96	21.44
	8H	17.88	18.44	18.39	18.95	19.44	19.99	20.56	20.51	21.07	21.56
	12H	18.14	18.64	18.65	19.13	19.70	20.13	20.63	20.64	21.12	21.69
12H	4H	16.82	17.51	17.31	17.99	18.46	19.41	20.10	19.90	20.58	21.05
	6H	17.64	18.20	18.15	18.71	19.20	19.85	20.41	20.36	20.92	21.41
	8H	18.02	18.52	18.53	19.01	19.58	20.06	20.56	20.57	21.05	21.62