

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: P1175419

Luminaire Tested: S125RDRP-H610D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175419
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-H610D830-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

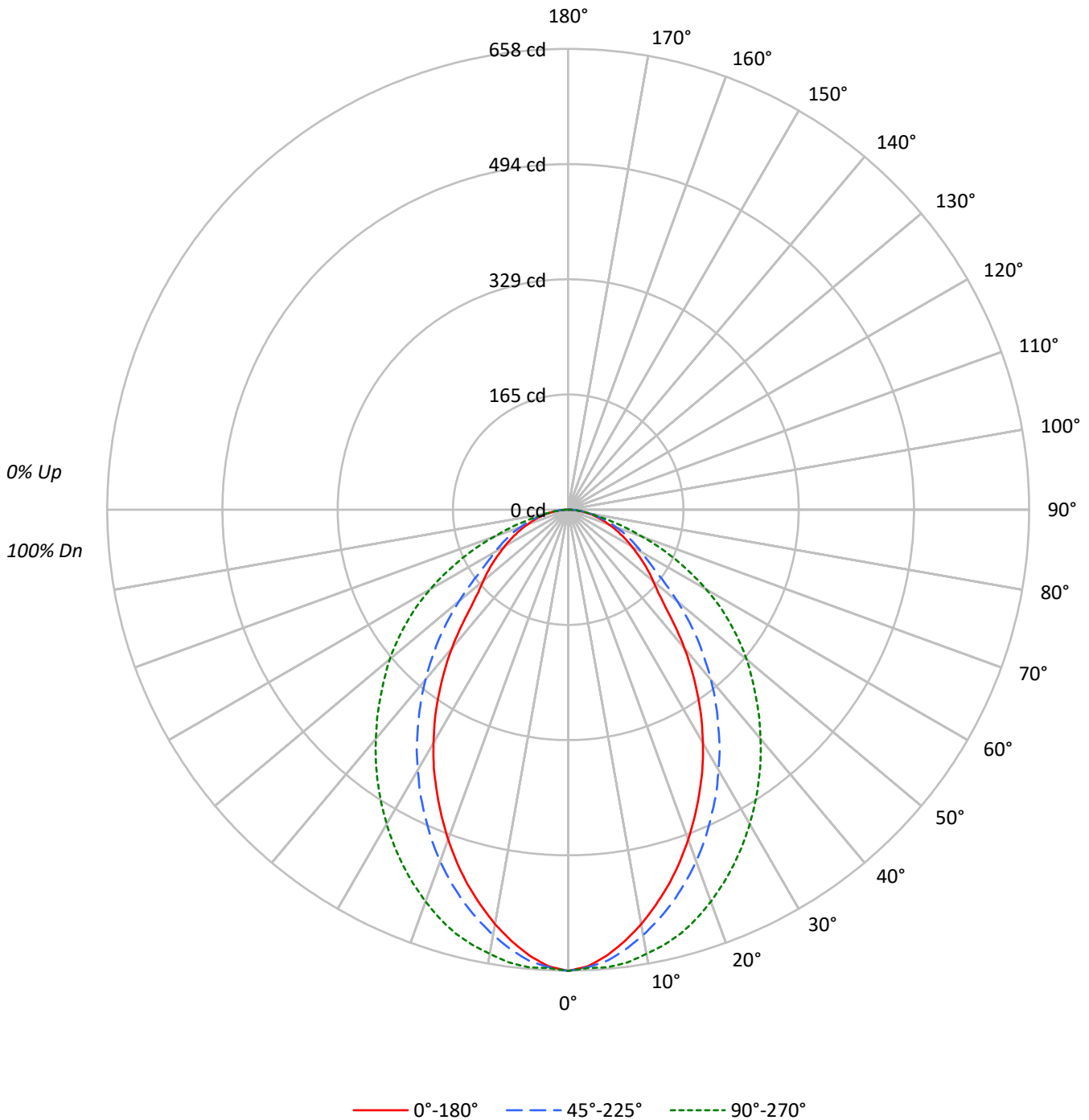
Lumens per Lamp: N/A
Luminaire Lumens: 1240.5 lumens
Efficiency: N/A
Efficacy: 71.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	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					100			
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86					86			
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74					74			
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64					64			
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56					56			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50					50			
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44					44			
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40					40			
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36					36			
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33					33			
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4534	4534	4534
5°	4416	4466	4532
10°	4201	4311	4502
15°	3949	4128	4459
20°	3670	3916	4362
25°	3372	3669	4247
30°	3058	3409	4120
35°	2707	3134	3984
40°	2322	2849	3839
45°	1905	2537	3690
50°	1695	2180	3563
55°	1563	1825	3382
60°	1439	1662	3133
65°	1339	1566	2768
70°	1248	1464	2263
75°	1176	1354	1695
80°	1106	1241	1217
85°	1019	1240	1019

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3690 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.0	4.9
10°-20°	164.3	13.2
20°-30°	226.1	18.2
30°-40°	239.8	19.3
40°-50°	209.9	16.9
50°-60°	161.0	13.0
60°-70°	107.3	8.6
70°-80°	55.0	4.4
80°-90°	16.3	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°	451.3	36.4
0°-40°	691.1	55.7
0°-60°	1062.0	85.6
0°-90°	1240.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1240.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	639	647	646	651	656	60
15°	554	567	579	606	626	155
25°	444	459	483	524	559	204
35°	322	337	373	428	474	201
45°	196	212	260	325	379	154
55°	130	133	152	226	282	117
65°	82	83	96	126	170	82
75°	44	47	51	54	64	47
85°	13	14	16	15	13	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	658.5	658.5	658.5	658.5	658.5
2.5°	652.4	659.1	654.0	654.6	655.1
5°	638.9	647.3	646.2	650.7	655.7
7.5°	621.0	630.0	632.8	644.0	651.8
10°	600.9	611.0	616.6	633.3	644.0
12.5°	578.0	589.7	598.7	620.5	636.1
15°	554.0	566.8	579.1	606.5	625.5
17.5°	528.3	541.1	557.3	588.6	611.5
20°	500.9	514.8	534.4	567.9	595.3
22.5°	472.9	487.4	509.8	546.7	578.0
25°	443.8	458.9	483.0	523.8	559.0
27.5°	415.3	429.3	457.3	500.9	539.4
30°	384.6	399.1	428.8	476.8	518.2
32.5°	353.8	368.4	402.5	452.8	496.4
35°	322.0	337.1	372.9	427.6	474.0
37.5°	290.1	305.8	345.5	401.9	451.1
40°	258.3	275.0	317.0	376.2	427.1
42.5°	225.8	243.7	287.9	351.1	403.6
45°	195.6	211.9	260.5	325.3	379.0
47.5°	173.8	183.4	231.4	299.1	355.5
50°	158.2	162.7	203.5	273.9	332.6
52.5°	144.2	147.0	176.1	250.4	307.4
55°	130.2	133.0	152.0	225.8	281.7
57.5°	116.8	118.5	134.2	201.2	256.0
60°	104.5	105.7	120.7	176.6	227.5
62.5°	93.4	93.9	107.9	151.5	199.0
65°	82.2	82.7	96.1	126.3	169.9
67.5°	72.1	72.1	85.0	103.4	142.0
70°	62.0	62.0	72.7	83.8	112.4
72.5°	53.1	54.2	61.5	67.6	87.8
75°	44.2	47.0	50.9	53.7	63.7
77.5°	35.8	39.1	40.8	41.9	42.5
80°	27.9	30.2	31.3	31.9	30.7
82.5°	20.7	22.4	22.9	22.9	21.2
85°	12.9	14.5	15.7	15.1	12.9
87.5°	6.1	8.4	8.9	7.8	6.1
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	11.87	13.37	12.23	13.68	13.99	15.89	17.39	16.26	17.70	18.02
	3H	13.45	14.80	13.83	15.12	15.49	17.28	18.62	17.66	18.95	19.31
	4H	14.10	15.36	14.50	15.71	16.09	17.68	18.95	18.08	19.29	19.67
	6H	14.61	15.77	15.02	16.14	16.53	17.89	19.05	18.30	19.42	19.81
	8H	14.79	15.90	15.21	16.29	16.69	17.95	19.06	18.37	19.45	19.85
	12H	14.91	15.97	15.34	16.36	16.79	17.98	19.04	18.41	19.42	19.85
4H	2H	12.64	13.90	13.04	14.24	14.62	16.02	17.28	16.42	17.63	18.01
	3H	14.42	15.46	14.83	15.86	16.27	17.59	18.64	18.00	19.04	19.44
	4H	15.19	16.13	15.62	16.54	16.98	18.10	19.04	18.53	19.46	19.90
	6H	15.83	16.65	16.28	17.09	17.55	18.43	19.25	18.89	19.69	20.15
	8H	16.06	16.82	16.52	17.27	17.73	18.53	19.29	18.99	19.74	20.20
	12H	16.23	16.91	16.71	17.39	17.86	18.60	19.28	19.08	19.76	20.23
8H	4H	15.57	16.34	16.03	16.78	17.25	18.20	18.97	18.67	19.41	19.88
	6H	16.35	16.98	16.84	17.47	17.95	18.62	19.25	19.12	19.74	20.22
	8H	16.66	17.23	17.18	17.74	18.23	18.78	19.35	19.29	19.86	20.35
	12H	16.93	17.43	17.44	17.92	18.49	18.92	19.42	19.43	19.91	20.48
12H	4H	15.61	16.29	16.09	16.77	17.24	18.20	18.88	18.68	19.36	19.83
	6H	16.42	16.99	16.94	17.50	17.99	18.63	19.20	19.15	19.71	20.20
	8H	16.81	17.31	17.32	17.80	18.37	18.84	19.34	19.35	19.84	20.40