

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: P1061677

Luminaire Tested: S125RDRP-S610D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061677
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S610D830-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

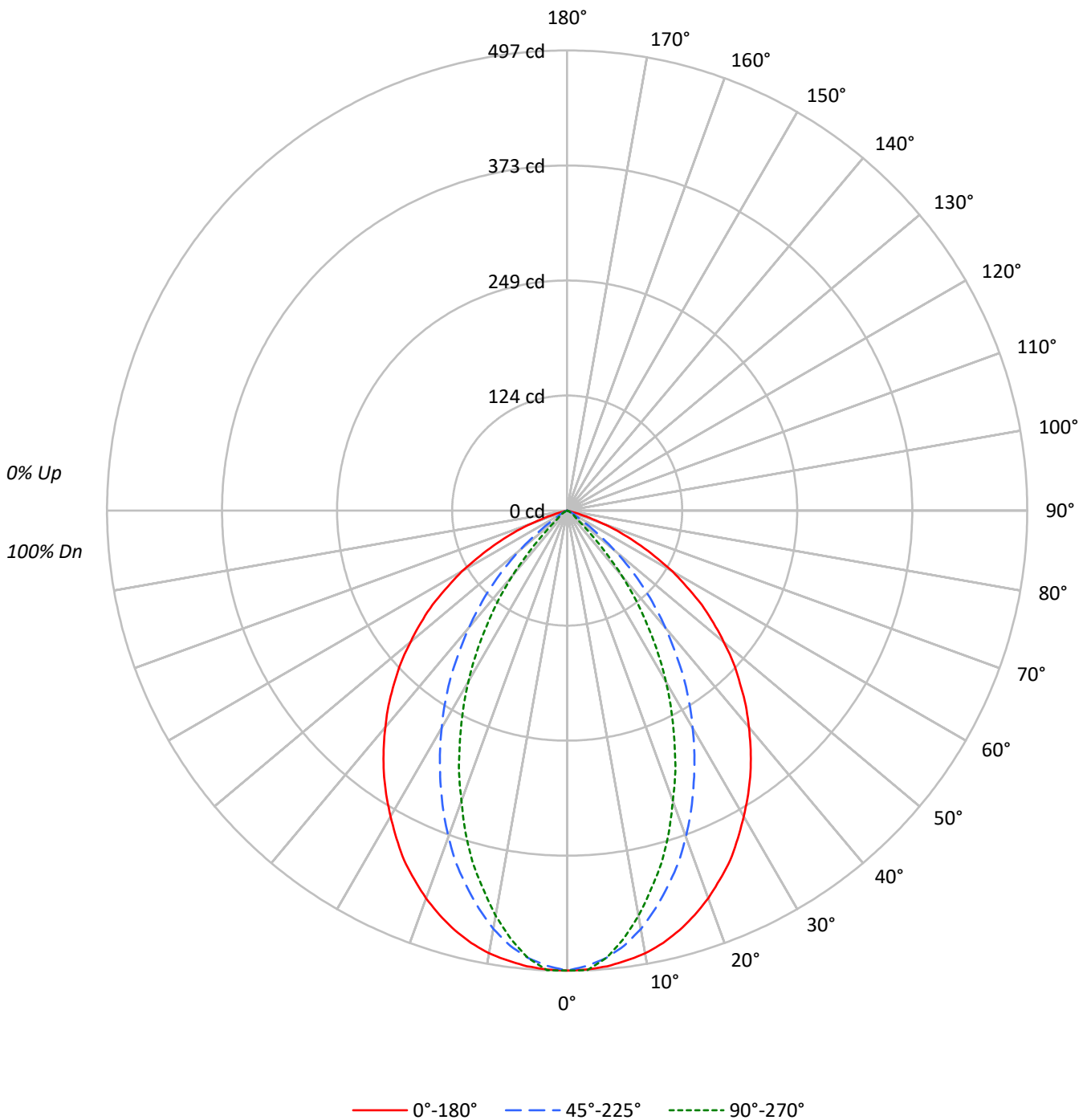
Lumens per Lamp: N/A
Luminaire Lumens: 641.8 lumens
Efficiency: N/A
Efficacy: 32.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3421	3421	3421
5°	3415	3352	3352
10°	3395	3208	3106
15°	3345	2995	2808
20°	3265	2747	2444
25°	3166	2459	2081
30°	3032	2157	1698
35°	2903	1840	1273
40°	2745	1485	825
45°	2572	1123	357
50°	2366	716	134
55°	2132	315	95
60°	1805	135	63
65°	1367	85	33
70°	831	40	14
75°	176	19	19
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2572 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.8	7.1
10°-20°	119.4	18.6
20°-30°	153.3	23.9
30°-40°	144.3	22.5
40°-50°	100.9	15.7
50°-60°	53.9	8.4
60°-70°	21.5	3.3
70°-80°	2.8	0.4
80°-90°	0.0	0.0
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°	318.4	49.6
0°-40°	462.7	72.1
0°-60°	617.5	96.2
0°-90°	641.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	641.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	497	497	497	497	497	
5°	494	493	485	486	485	47
15°	469	454	420	400	394	132
25°	417	380	324	288	274	191
35°	345	290	219	169	151	216
45°	264	198	115	56	37	204
55°	178	109	26	9	8	157
65°	84	33	5	3	2	83
75°	7	2	1	1	1	13
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	496.8	496.8	496.8	496.8	496.8
2.5°	496.1	496.8	492.2	496.1	496.8
5°	494.1	492.8	485.0	486.3	485.0
7.5°	490.2	486.9	473.8	469.2	466.6
10°	485.6	478.4	458.8	448.9	444.3
12.5°	478.4	467.9	440.4	425.3	418.8
15°	469.2	454.2	420.1	400.4	393.9
17.5°	458.1	438.4	399.1	374.9	365.0
20°	445.6	419.4	374.9	346.0	333.6
22.5°	431.2	401.1	350.0	317.8	305.4
25°	416.8	380.1	323.7	288.4	273.9
27.5°	399.1	358.5	297.5	259.5	243.8
30°	381.4	336.9	271.3	230.0	213.6
32.5°	363.7	313.9	245.1	199.2	182.8
35°	345.4	290.3	218.9	169.1	151.4
37.5°	325.7	266.7	190.7	140.2	121.9
40°	305.4	243.8	165.2	112.1	91.8
42.5°	285.7	220.9	139.6	84.5	62.3
45°	264.1	197.9	115.3	55.7	36.7
47.5°	243.8	175.6	90.4	32.1	19.0
50°	220.9	152.7	66.8	17.0	12.5
52.5°	199.2	130.4	44.6	11.1	9.8
55°	177.6	108.8	26.2	9.2	7.9
57.5°	152.7	87.8	14.4	7.2	5.9
60°	131.1	68.8	9.8	5.2	4.6
62.5°	106.2	50.5	7.2	3.9	3.3
65°	83.9	33.4	5.2	2.6	2.0
67.5°	62.3	19.7	3.3	1.3	1.3
70°	41.3	10.5	2.0	0.7	0.7
72.5°	21.6	4.6	1.3	0.7	0.7
75°	6.6	2.0	0.7	0.7	0.7
77.5°	0.0	0.7	0.0	0.0	0.7
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	13.22	14.48	13.58	14.79	15.11	0.00	0.00	0.00	0.00	0.00
	3H	13.80	14.91	14.18	15.24	15.61	0.00	0.00	0.00	0.00	0.00
	4H	13.76	14.80	14.17	15.15	15.53	0.00	0.00	0.00	0.00	0.00
	6H	13.68	14.62	14.10	15.00	15.39	0.00	0.00	0.00	0.00	0.00
	8H	13.63	14.53	14.06	14.92	15.32	0.00	0.00	0.00	0.00	0.00
	12H	13.59	14.44	14.02	14.82	15.25	0.00	0.00	0.00	0.00	0.00
4H	2H	12.99	14.02	13.39	14.37	14.76	0.00	0.00	0.00	0.00	0.00
	3H	13.58	14.42	14.00	14.82	15.23	0.00	0.00	0.00	0.00	0.00
	4H	13.53	14.27	13.97	14.69	15.14	0.00	0.00	0.00	0.00	0.00
	6H	13.44	14.08	13.91	14.53	15.00	0.00	0.00	0.00	0.00	0.00
	8H	13.38	13.98	13.86	14.43	14.90	0.00	0.00	0.00	0.00	0.00
	12H	13.33	13.85	13.82	14.34	14.81	0.00	0.00	0.00	0.00	0.00
8H	4H	13.38	13.98	13.86	14.43	14.90	0.00	0.00	0.00	0.00	0.00
	6H	13.28	13.76	13.78	14.26	14.74	0.00	0.00	0.00	0.00	0.00
	8H	13.21	13.64	13.74	14.16	14.65	0.00	0.00	0.00	0.00	0.00
	12H	13.16	13.54	13.68	14.04	14.61	0.00	0.00	0.00	0.00	0.00
12H	4H	13.33	13.85	13.82	14.34	14.81	0.00	0.00	0.00	0.00	0.00
	6H	13.21	13.64	13.74	14.16	14.65	0.00	0.00	0.00	0.00	0.00
	8H	13.16	13.54	13.68	14.04	14.61	0.00	0.00	0.00	0.00	0.00