

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: P1061686

Luminaire Tested: S125RDRP-S610D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061686
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-S610D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

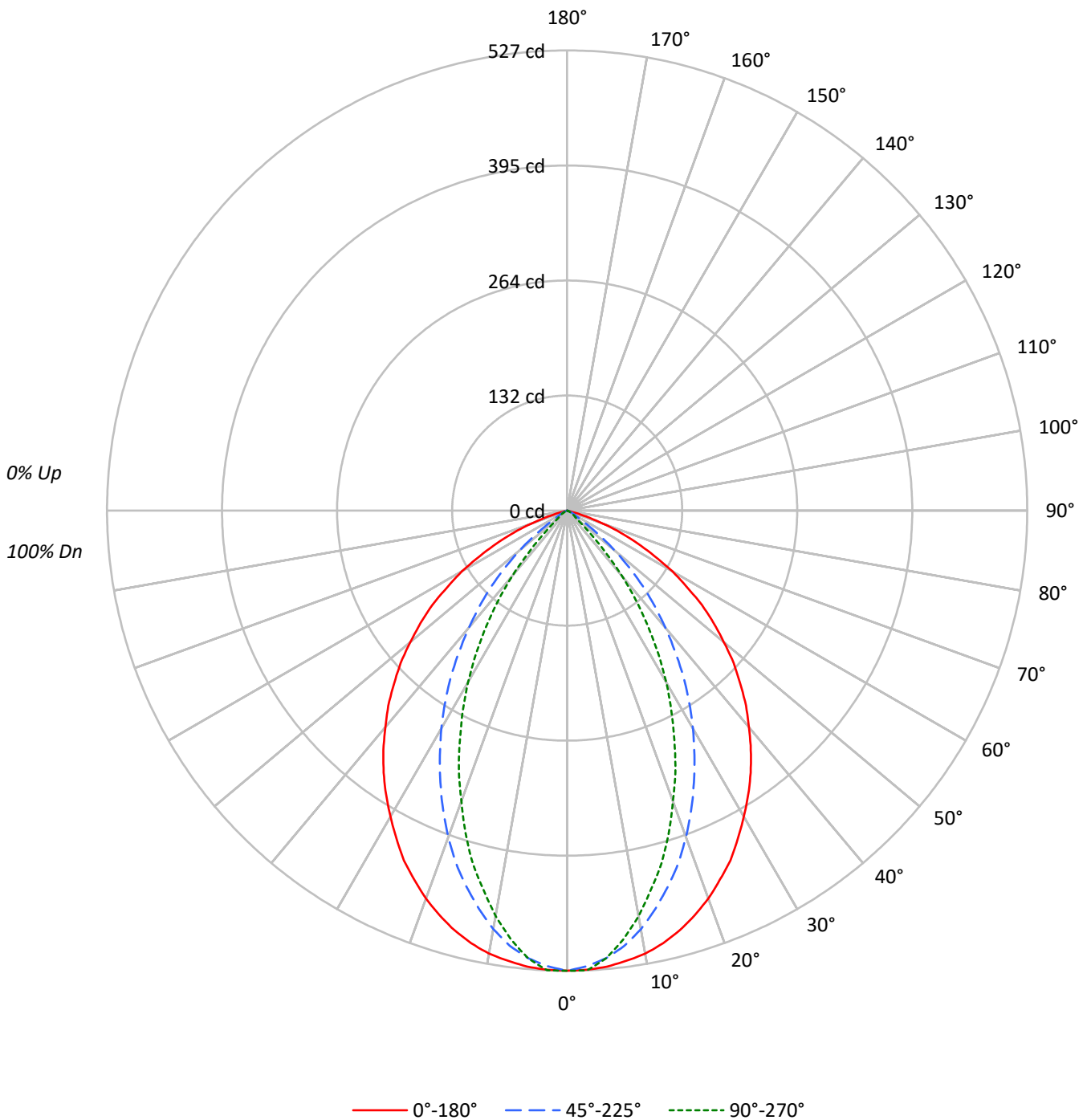
Lumens per Lamp: N/A
Luminaire Lumens: 680.9 lumens
Efficiency: N/A
Efficacy: 34.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061686

CATALOG NUMBER: S125RDRP-S610D835-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061686

CATALOG NUMBER: S125RDRP-S610D835-X4F0-XX-UDD-BVL-B

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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54					54			
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3629	3629	3629
5°	3624	3556	3556
10°	3602	3403	3296
15°	3548	3177	2979
20°	3464	2914	2593
25°	3359	2610	2208
30°	3218	2289	1802
35°	3080	1952	1350
40°	2912	1575	875
45°	2728	1192	379
50°	2510	759	141
55°	2262	334	100
60°	1915	143	67
65°	1450	91	34
70°	882	42	14
75°	186	19	19
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2728 cd/sqm



TEST NUMBER: P1061686

CATALOG NUMBER: S125RDRP-S610D835-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	7.1
10°-20°	126.6	18.6
20°-30°	162.6	23.9
30°-40°	153.1	22.5
40°-50°	107.0	15.7
50°-60°	57.2	8.4
60°-70°	22.8	3.4
70°-80°	3.0	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°	337.8	49.6
0°-40°	490.9	72.1
0°-60°	655.1	96.2
0°-90°	680.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	680.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	524	523	514	516	514	50
15°	498	482	446	425	418	140
25°	442	403	344	306	291	203
35°	366	308	232	179	161	229
45°	280	210	122	59	39	216
55°	188	115	28	10	8	167
65°	89	36	6	3	2	89
75°	7	2	1	1	1	14
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1061686

CATALOG NUMBER: S125RDRP-S610D835-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	527.0	527.0	527.0	527.0	527.0
2.5°	526.3	527.0	522.2	526.3	527.0
5°	524.3	522.9	514.5	515.9	514.5
7.5°	520.1	516.6	502.7	497.8	495.1
10°	515.2	507.6	486.7	476.3	471.4
12.5°	507.6	496.5	467.2	451.3	444.3
15°	497.8	481.8	445.7	424.8	417.9
17.5°	486.0	465.2	423.4	397.7	387.3
20°	472.8	445.0	397.7	367.1	353.9
22.5°	457.5	425.5	371.3	337.2	324.0
25°	442.2	403.3	343.5	305.9	290.6
27.5°	423.4	380.3	315.7	275.3	258.7
30°	404.7	357.4	287.9	244.1	226.7
32.5°	385.9	333.1	260.0	211.4	194.0
35°	366.4	308.0	232.2	179.4	160.6
37.5°	345.6	283.0	202.3	148.8	129.3
40°	324.0	258.7	175.2	118.9	97.3
42.5°	303.2	234.3	148.1	89.7	66.1
45°	280.2	210.0	122.4	59.1	38.9
47.5°	258.7	186.3	96.0	34.1	20.2
50°	234.3	162.0	70.9	18.1	13.2
52.5°	211.4	138.4	47.3	11.8	10.4
55°	188.4	115.4	27.8	9.7	8.3
57.5°	162.0	93.2	15.3	7.6	6.3
60°	139.1	73.0	10.4	5.6	4.9
62.5°	112.6	53.5	7.6	4.2	3.5
65°	89.0	35.5	5.6	2.8	2.1
67.5°	66.1	20.9	3.5	1.4	1.4
70°	43.8	11.1	2.1	0.7	0.7
72.5°	22.9	4.9	1.4	0.7	0.7
75°	7.0	2.1	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



TEST NUMBER: P1061686
 CATALOG NUMBER: S125RDRP-S610D835-X4F0-XX-UDD-BVL-B

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	13.42	14.69	13.79	15.00	15.31	0.00	0.00	0.00	0.00	0.00
	3H	14.01	15.12	14.39	15.45	15.82	0.00	0.00	0.00	0.00	0.00
	4H	13.97	15.00	14.38	15.36	15.74	0.00	0.00	0.00	0.00	0.00
	6H	13.89	14.83	14.30	15.20	15.60	0.00	0.00	0.00	0.00	0.00
	8H	13.84	14.73	14.27	15.12	15.53	0.00	0.00	0.00	0.00	0.00
	12H	13.79	14.65	14.23	15.03	15.46	0.00	0.00	0.00	0.00	0.00
4H	2H	13.20	14.23	13.60	14.58	14.96	0.00	0.00	0.00	0.00	0.00
	3H	13.79	14.62	14.20	15.03	15.43	0.00	0.00	0.00	0.00	0.00
	4H	13.74	14.48	14.17	14.90	15.35	0.00	0.00	0.00	0.00	0.00
	6H	13.65	14.29	14.12	14.74	15.20	0.00	0.00	0.00	0.00	0.00
	8H	13.59	14.18	14.06	14.63	15.11	0.00	0.00	0.00	0.00	0.00
	12H	13.54	14.06	14.03	14.55	15.02	0.00	0.00	0.00	0.00	0.00
8H	4H	13.59	14.19	14.06	14.63	15.11	0.00	0.00	0.00	0.00	0.00
	6H	13.48	13.97	13.99	14.46	14.95	0.00	0.00	0.00	0.00	0.00
	8H	13.42	13.85	13.94	14.37	14.86	0.00	0.00	0.00	0.00	0.00
	12H	13.37	13.75	13.89	14.25	14.82	0.00	0.00	0.00	0.00	0.00
12H	4H	13.54	14.06	14.03	14.55	15.02	0.00	0.00	0.00	0.00	0.00
	6H	13.42	13.85	13.94	14.37	14.86	0.00	0.00	0.00	0.00	0.00
	8H	13.37	13.75	13.89	14.25	14.82	0.00	0.00	0.00	0.00	0.00