

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: P1061774

Luminaire Tested: S125RDRP-S850D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061774
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D835-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

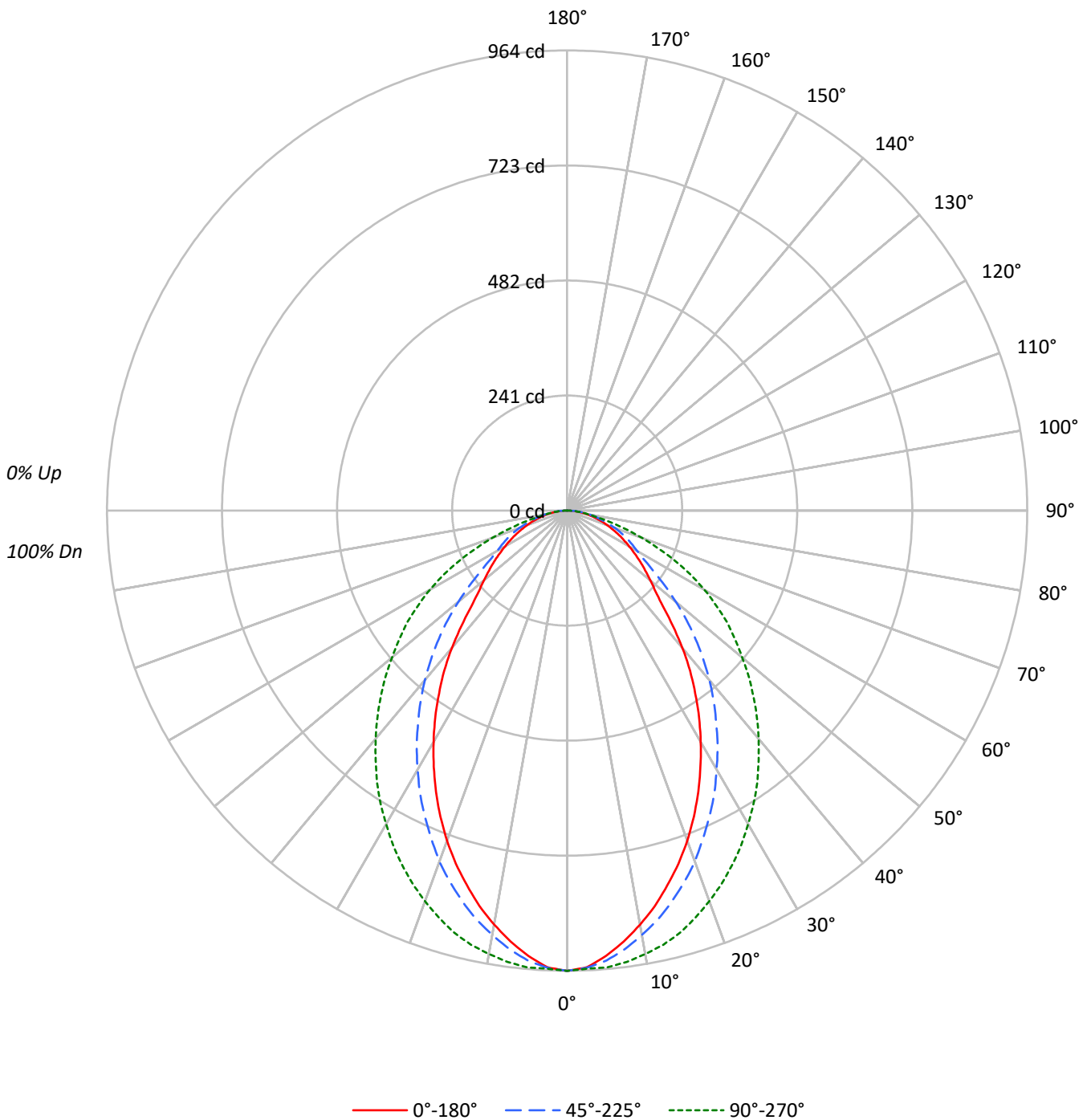
Lumens per Lamp: N/A
Luminaire Lumens: 1807.7 lumens
Efficiency: N/A
Efficacy: 70.1 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1061774

CATALOG NUMBER: S125RDRP-S850D835-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061774

CATALOG NUMBER: S125RDRP-S850D835-X4F0-XX-UDD-WVL-S

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	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	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	48	59	52	47	58	52	47	56	51	46	44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6639	6639	6639
5°	6472	6538	6638
10°	6156	6310	6594
15°	5789	6043	6524
20°	5393	5731	6381
25°	4940	5364	6220
30°	4450	4979	6027
35°	3935	4575	5838
40°	3377	4165	5610
45°	2758	3705	5375
50°	2445	3178	5129
55°	2244	2636	4914
60°	2070	2334	4577
65°	1931	2245	4081
70°	1804	2134	3336
75°	1665	1998	2461
80°	1566	1872	1796
85°	1446	1825	1525

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5375 cd/sqm



TEST NUMBER: P1061774

CATALOG NUMBER: S125RDRP-S850D835-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.2	4.9
10°-20°	240.4	13.3
20°-30°	330.4	18.3
30°-40°	350.1	19.4
40°-50°	305.6	16.9
50°-60°	232.2	12.8
60°-70°	155.6	8.6
70°-80°	80.2	4.4
80°-90°	24.1	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°	660.0	36.5
0°-40°	1010.1	55.9
0°-60°	1547.9	85.6
0°-90°	1807.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1807.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	964	964	964	964	964	
5°	936	946	946	953	960	88
15°	812	828	848	885	915	228
25°	650	670	706	765	819	298
35°	468	495	544	621	695	292
45°	283	311	380	471	552	224
55°	187	193	220	323	409	168
65°	118	121	138	184	250	118
75°	63	66	75	80	92	67
85°	18	23	23	21	19	21
90°	0	0	0	0	0	



TEST NUMBER: P1061774

CATALOG NUMBER: S125RDRP-S850D835-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	964.3	964.3	964.3	964.3	964.3
2.5°	957.6	964.3	958.5	958.5	960.4
5°	936.4	946.0	946.0	952.7	960.4
7.5°	910.4	920.9	926.7	942.1	953.7
10°	880.5	892.0	902.6	925.8	943.1
12.5°	848.7	861.2	877.6	907.5	931.5
15°	812.1	827.5	847.7	885.3	915.2
17.5°	775.5	790.9	815.9	860.3	894.0
20°	736.0	752.4	782.2	830.4	870.9
22.5°	693.6	711.9	743.7	798.6	845.8
25°	650.3	670.5	706.1	764.9	818.8
27.5°	605.0	629.1	667.6	730.2	789.9
30°	559.7	583.8	626.2	694.6	758.1
32.5°	514.4	540.4	586.7	658.9	727.3
35°	468.2	495.2	544.3	621.4	694.6
37.5°	422.9	449.9	504.8	584.7	658.9
40°	375.7	403.6	463.4	547.2	624.2
42.5°	327.5	357.4	421.9	508.6	588.6
45°	283.2	311.2	380.5	471.1	552.0
47.5°	250.5	268.8	339.1	432.5	516.3
50°	228.3	237.9	296.7	395.0	478.8
52.5°	206.2	213.9	257.2	356.4	443.1
55°	186.9	192.7	219.6	322.7	409.4
57.5°	167.6	173.4	190.7	289.0	369.9
60°	150.3	155.1	169.5	253.4	332.4
62.5°	133.9	137.8	153.2	219.6	291.9
65°	118.5	121.4	137.8	184.0	250.5
67.5°	103.1	106.0	122.3	150.3	206.2
70°	89.6	90.6	106.0	122.3	165.7
72.5°	76.1	77.1	89.6	99.2	127.2
75°	62.6	66.5	75.1	80.0	92.5
77.5°	51.1	55.9	60.7	62.6	62.6
80°	39.5	45.3	47.2	47.2	45.3
82.5°	28.9	33.7	34.7	32.8	30.8
85°	18.3	23.1	23.1	21.2	19.3
87.5°	8.7	12.5	12.5	11.6	8.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061774
 CATALOG NUMBER: S125RDRP-S850D835-X4F0-XX-UDD-WVL-S

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	13.18	14.68	13.55	14.99	15.31	17.11	18.61	17.48	18.92	19.24
	3H	14.76	16.10	15.13	16.43	16.79	18.53	19.88	18.91	20.20	20.57
	4H	15.37	16.63	15.77	16.98	17.36	18.95	20.21	19.35	20.56	20.94
	6H	15.86	17.03	16.28	17.39	17.79	19.17	20.33	19.58	20.69	21.09
	8H	16.04	17.15	16.47	17.54	17.94	19.22	20.33	19.65	20.72	21.12
	12H	16.16	17.22	16.59	17.60	18.03	19.26	20.32	19.69	20.70	21.13
4H	2H	13.92	15.18	14.32	15.53	15.91	17.24	18.50	17.64	18.85	19.22
	3H	15.70	16.75	16.11	17.15	17.55	18.85	19.89	19.26	20.29	20.69
	4H	16.44	17.38	16.87	17.79	18.23	19.37	20.32	19.81	20.73	21.17
	6H	17.07	17.89	17.53	18.33	18.79	19.72	20.54	20.17	20.98	21.44
	8H	17.30	18.07	17.76	18.51	18.98	19.82	20.58	20.28	21.03	21.49
	12H	17.47	18.16	17.96	18.64	19.11	19.89	20.57	20.37	21.05	21.52
8H	4H	16.84	17.60	17.30	18.05	18.51	19.48	20.25	19.95	20.69	21.16
	6H	17.62	18.26	18.12	18.75	19.22	19.92	20.55	20.42	21.04	21.52
	8H	17.95	18.51	18.46	19.02	19.51	20.08	20.65	20.59	21.16	21.64
	12H	18.22	18.72	18.73	19.22	19.78	20.21	20.72	20.72	21.21	21.77
12H	4H	16.88	17.56	17.36	18.04	18.51	19.48	20.16	19.96	20.64	21.11
	6H	17.71	18.27	18.22	18.78	19.27	19.94	20.50	20.45	21.01	21.50
	8H	18.10	18.60	18.61	19.10	19.66	20.15	20.65	20.66	21.14	21.70