

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: P1061777

Luminaire Tested: S125RDRP-S850D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061777
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D840-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

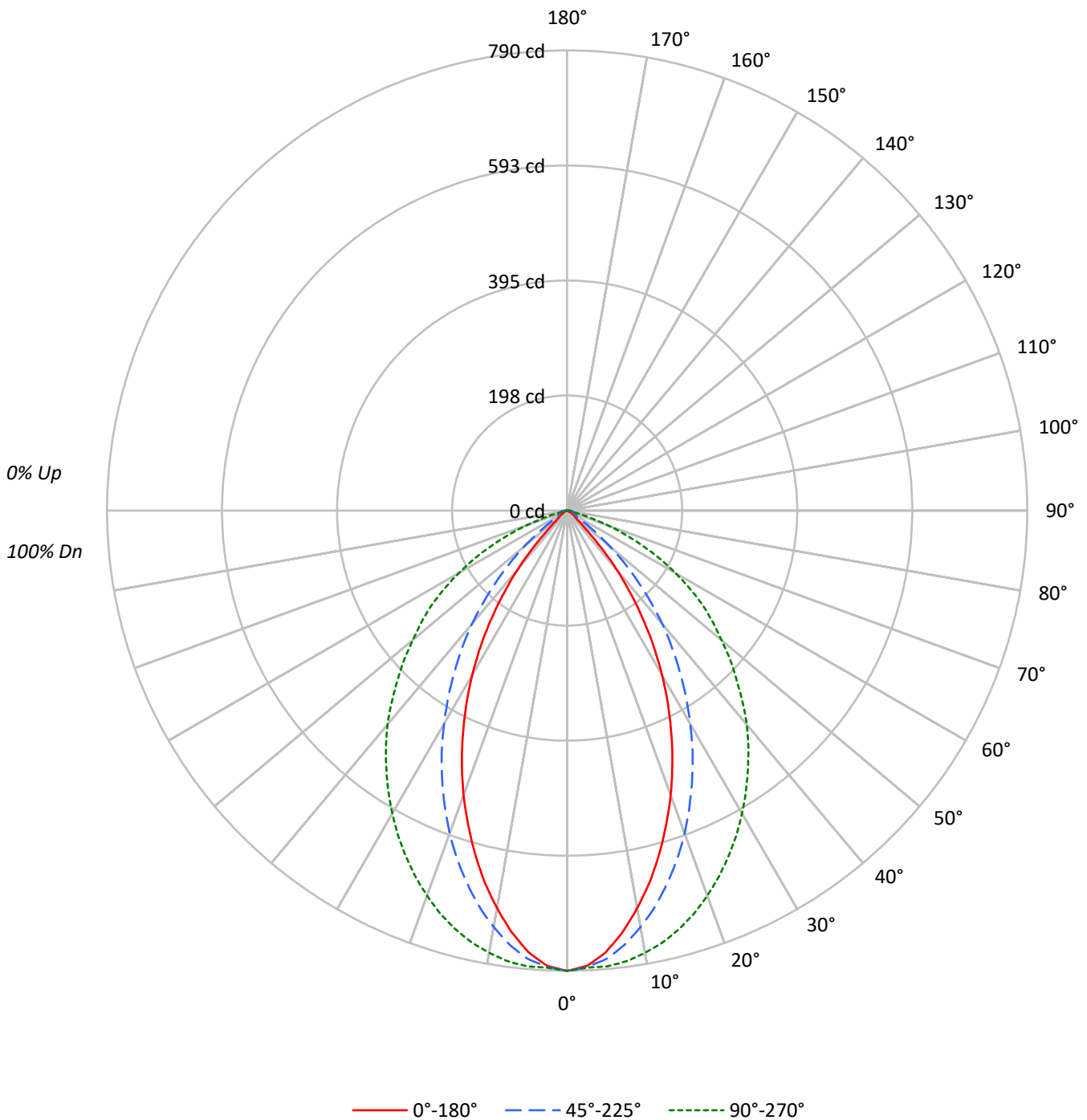
Lumens per Lamp: N/A
Luminaire Lumens: 1016.4 lumens
Efficiency: N/A
Efficacy: 39.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1061777

CATALOG NUMBER: S125RDRP-S850D840-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061777

CATALOG NUMBER: S125RDRP-S850D840-X4F0-XX-UDD-BVL-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	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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65					65			
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59					59			
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54					54			
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49					49			
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42					42			
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5441	5441	5441
5°	5260	5341	5428
10°	4844	5076	5389
15°	4350	4725	5300
20°	3808	4322	5155
25°	3217	3859	4976
30°	2592	3358	4774
35°	1906	2830	4548
40°	1190	2283	4312
45°	445	1668	4009
50°	209	1042	3701
55°	152	432	3424
60°	107	227	2962
65°	64	269	2346
70°	58	314	1490
75°	77	311	466
80°	115	385	349
85°	229	616	458

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4009 cd/sqm



TEST NUMBER: P1061777

CATALOG NUMBER: S125RDRP-S850D840-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.5	7.1
10°-20°	187.6	18.5
20°-30°	239.0	23.5
30°-40°	222.4	21.9
40°-50°	152.4	15.0
50°-60°	83.9	8.3
60°-70°	39.7	3.9
70°-80°	12.5	1.2
80°-90°	6.4	0.6
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°	499.1	49.1
0°-40°	721.5	71.0
0°-60°	957.8	94.2
0°-90°	1016.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1016.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	790	790	790	790	790	
5°	761	771	773	779	785	70
15°	610	630	663	712	744	170
25°	423	450	508	590	655	193
35°	227	259	337	448	541	141
45°	46	77	171	304	412	44
55°	13	15	36	169	285	11
65°	4	5	16	62	144	4
75°	3	5	12	13	18	3
85°	3	7	8	7	6	3
90°	0	0	0	0	0	



TEST NUMBER: P1061777

CATALOG NUMBER: S125RDRP-S850D840-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	790.3	790.3	790.3	790.3	790.3
2.5°	782.5	790.3	784.4	784.4	785.4
5°	761.1	770.8	772.7	778.6	785.4
7.5°	729.9	742.6	752.3	768.8	780.5
10°	692.9	708.5	726.0	753.3	770.8
12.5°	654.0	670.6	696.8	734.8	759.1
15°	610.2	629.7	662.8	712.4	743.5
17.5°	565.4	586.9	627.7	686.1	725.1
20°	519.7	542.1	589.8	655.0	703.6
22.5°	472.0	496.3	548.9	622.9	680.3
25°	423.4	449.6	508.0	589.8	655.0
27.5°	374.7	401.9	466.2	555.7	628.7
30°	326.0	354.3	422.4	520.7	600.5
32.5°	276.4	307.5	379.6	485.6	571.3
35°	226.8	258.9	336.7	447.7	541.1
37.5°	178.1	211.2	294.9	411.7	510.9
40°	132.4	165.4	254.0	375.7	479.8
42.5°	85.6	120.7	211.2	338.7	445.7
45°	45.7	76.9	171.3	303.6	411.7
47.5°	24.3	40.9	133.3	268.6	379.6
50°	19.5	22.4	97.3	233.6	345.5
52.5°	15.6	17.5	62.3	197.6	315.3
55°	12.7	14.6	36.0	169.3	285.2
57.5°	9.7	11.7	20.4	141.1	250.1
60°	7.8	8.8	16.5	112.9	215.1
62.5°	4.9	6.8	16.5	87.6	180.0
65°	3.9	4.9	16.5	62.3	144.0
67.5°	3.9	3.9	16.5	40.9	108.0
70°	2.9	2.9	15.6	26.3	74.0
72.5°	2.9	2.9	13.6	17.5	42.8
75°	2.9	4.9	11.7	12.7	17.5
77.5°	2.9	7.8	10.7	10.7	9.7
80°	2.9	7.8	9.7	8.8	8.8
82.5°	2.9	7.8	7.8	7.8	6.8
85°	2.9	6.8	7.8	6.8	5.8
87.5°	2.9	6.8	6.8	6.8	3.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061777
 CATALOG NUMBER: S125RDRP-S850D840-X4F0-XX-UDD-BVL-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	0.00	0.00	0.00	0.00	0.00	14.93	16.22	15.30	16.53	16.84
	3H	0.00	0.00	0.00	0.00	0.00	15.72	16.85	16.10	17.18	17.55
	4H	0.00	0.00	0.00	0.00	0.00	15.74	16.80	16.15	17.15	17.54
	6H	0.00	0.00	0.00	0.00	0.35	15.70	16.67	16.12	17.04	17.44
	8H	0.00	0.21	0.00	0.60	1.01	15.68	16.60	16.11	16.99	17.39
	12H	0.03	0.91	0.46	1.29	1.72	15.66	16.54	16.09	16.92	17.35
4H	2H	0.00	0.00	0.00	0.12	0.50	14.71	15.77	15.12	16.12	16.51
	3H	0.00	0.44	0.00	0.84	1.25	15.54	16.40	15.95	16.81	17.21
	4H	0.18	0.95	0.62	1.37	1.81	15.58	16.35	16.01	16.77	17.21
	6H	1.68	2.34	2.14	2.79	3.25	15.56	16.23	16.03	16.67	17.14
	8H	2.42	3.04	2.89	3.48	3.95	15.55	16.17	16.02	16.61	17.09
	12H	3.15	3.70	3.64	4.18	4.66	15.55	16.10	16.04	16.58	17.05
8H	4H	2.22	2.84	2.69	3.29	3.76	15.46	16.08	15.93	16.53	17.00
	6H	3.97	4.47	4.47	4.97	5.45	15.46	15.97	15.97	16.47	16.95
	8H	4.92	5.37	5.44	5.89	6.38	15.47	15.92	15.99	16.44	16.93
	12H	5.85	6.25	6.37	6.75	7.32	15.52	15.92	16.03	16.41	16.98
12H	4H	2.52	3.07	3.01	3.55	4.03	15.42	15.97	15.91	16.45	16.92
	6H	4.43	4.88	4.95	5.40	5.89	15.42	15.87	15.94	16.39	16.88
	8H	5.56	5.96	6.07	6.46	7.03	15.46	15.86	15.97	16.35	16.93