

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: P1061903

Luminaire Tested: S125RDRP-H1090D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061903
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-H1090D940-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

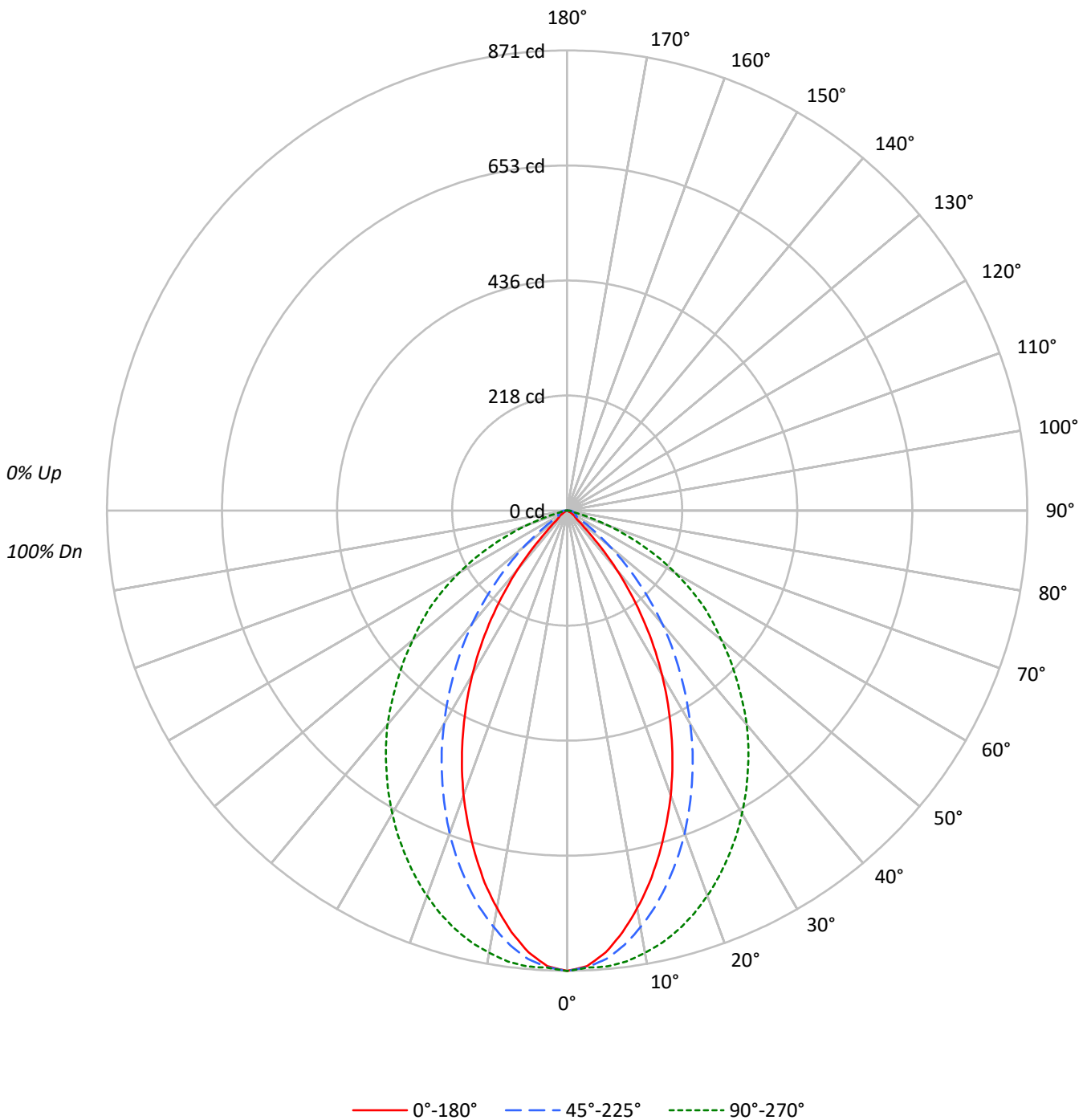
Lumens per Lamp: N/A
Luminaire Lumens: 1120.9 lumens
Efficiency: N/A
Efficacy: 35.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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: P1061903

CATALOG NUMBER: S125RDRP-H1090D940-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot



TEST NUMBER: P1061903

CATALOG NUMBER: S125RDRP-H1090D940-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°	6000	6000	6000
5°	5800	5889	5986
10°	5342	5597	5943
15°	4797	5210	5844
20°	4199	4766	5685
25°	3546	4256	5487
30°	2858	3703	5265
35°	2102	3121	5015
40°	1312	2518	4756
45°	491	1839	4421
50°	230	1149	4081
55°	168	477	3774
60°	118	251	3266
65°	70	297	2587
70°	64	346	1643
75°	85	343	513
80°	127	424	385
85°	253	679	506

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4421 cd/sqm



TEST NUMBER: P1061903

CATALOG NUMBER: S125RDRP-H1090D940-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	7.1
10°-20°	206.9	18.5
20°-30°	263.5	23.5
30°-40°	245.3	21.9
40°-50°	168.1	15.0
50°-60°	92.5	8.3
60°-70°	43.8	3.9
70°-80°	13.8	1.2
80°-90°	7.1	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°	550.3	49.1
0°-40°	795.6	71.0
0°-60°	1056.2	94.2
0°-90°	1120.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1120.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	839	850	852	859	866	78
15°	673	694	731	786	820	188
25°	467	496	560	650	722	213
35°	250	286	371	494	597	155
45°	50	85	189	335	454	48
55°	14	16	40	187	314	13
65°	4	5	18	69	159	5
75°	3	5	13	14	19	3
85°	3	8	9	8	6	3
90°	0	0	0	0	0	



TEST NUMBER: P1061903

CATALOG NUMBER: S125RDRP-H1090D940-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	871.4	871.4	871.4	871.4	871.4
2.5°	862.9	871.4	865.0	865.0	866.1
5°	839.2	850.0	852.1	858.6	866.1
7.5°	804.9	818.9	829.6	847.8	860.7
10°	764.1	781.3	800.6	830.7	850.0
12.5°	721.2	739.4	768.4	810.3	837.1
15°	672.9	694.4	730.9	785.6	819.9
17.5°	623.5	647.1	692.2	756.6	799.5
20°	573.1	597.8	650.4	722.3	775.9
22.5°	520.5	547.3	605.3	686.9	750.2
25°	466.8	495.8	560.2	650.4	722.3
27.5°	413.2	443.2	514.1	612.8	693.3
30°	359.5	390.6	465.8	574.2	662.2
32.5°	304.8	339.1	418.6	535.5	630.0
35°	250.1	285.5	371.3	493.7	596.7
37.5°	196.4	232.9	325.2	454.0	563.4
40°	146.0	182.4	280.1	414.3	529.1
42.5°	94.4	133.1	232.9	373.5	491.5
45°	50.4	84.8	188.9	334.8	454.0
47.5°	26.8	45.1	147.0	296.2	418.6
50°	21.5	24.7	107.3	257.6	381.0
52.5°	17.2	19.3	68.7	217.9	347.7
55°	14.0	16.1	39.7	186.7	314.4
57.5°	10.7	12.9	22.5	155.6	275.8
60°	8.6	9.7	18.2	124.5	237.2
62.5°	5.4	7.5	18.2	96.6	198.5
65°	4.3	5.4	18.2	68.7	158.8
67.5°	4.3	4.3	18.2	45.1	119.1
70°	3.2	3.2	17.2	29.0	81.6
72.5°	3.2	3.2	15.0	19.3	47.2
75°	3.2	5.4	12.9	14.0	19.3
77.5°	3.2	8.6	11.8	11.8	10.7
80°	3.2	8.6	10.7	9.7	9.7
82.5°	3.2	8.6	8.6	8.6	7.5
85°	3.2	7.5	8.6	7.5	6.4
87.5°	3.2	7.5	7.5	7.5	4.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061903
 CATALOG NUMBER: S125RDRP-H1090D940-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	15.27	16.56	15.64	16.87	17.18
	3H	0.00	0.00	0.00	0.00	0.00	16.06	17.19	16.44	17.52	17.89
	4H	0.00	0.00	0.00	0.00	0.00	16.08	17.14	16.49	17.49	17.88
	6H	0.00	0.00	0.00	0.30	0.69	16.04	17.01	16.45	17.38	17.78
	8H	0.00	0.55	0.06	0.94	1.35	16.02	16.94	16.45	17.33	17.73
	12H	0.37	1.25	0.81	1.63	2.06	16.00	16.88	16.43	17.26	17.69
4H	2H	0.00	0.10	0.00	0.46	0.84	15.05	16.11	15.46	16.46	16.85
	3H	0.00	0.78	0.33	1.19	1.59	15.88	16.74	16.29	17.15	17.55
	4H	0.52	1.29	0.96	1.71	2.15	15.92	16.69	16.35	17.11	17.55
	6H	2.02	2.68	2.48	3.13	3.59	15.90	16.57	16.37	17.01	17.48
	8H	2.76	3.38	3.23	3.82	4.29	15.89	16.51	16.36	16.95	17.43
	12H	3.49	4.04	3.98	4.52	5.00	15.89	16.43	16.38	16.92	17.39
8H	4H	2.56	3.18	3.03	3.63	4.10	15.80	16.42	16.27	16.87	17.34
	6H	4.31	4.81	4.81	5.31	5.79	15.80	16.31	16.31	16.81	17.29
	8H	5.26	5.71	5.78	6.23	6.72	15.81	16.26	16.33	16.78	17.27
	12H	6.19	6.59	6.71	7.09	7.66	15.86	16.26	16.37	16.75	17.32
12H	4H	2.86	3.41	3.35	3.89	4.37	15.76	16.31	16.25	16.79	17.26
	6H	4.77	5.22	5.29	5.74	6.23	15.76	16.21	16.28	16.73	17.22
	8H	5.90	6.30	6.41	6.79	7.37	15.80	16.20	16.31	16.69	17.27