

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061876

Luminaire Tested: S125RDR-H1090D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061876
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: S125RDR-H1090D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

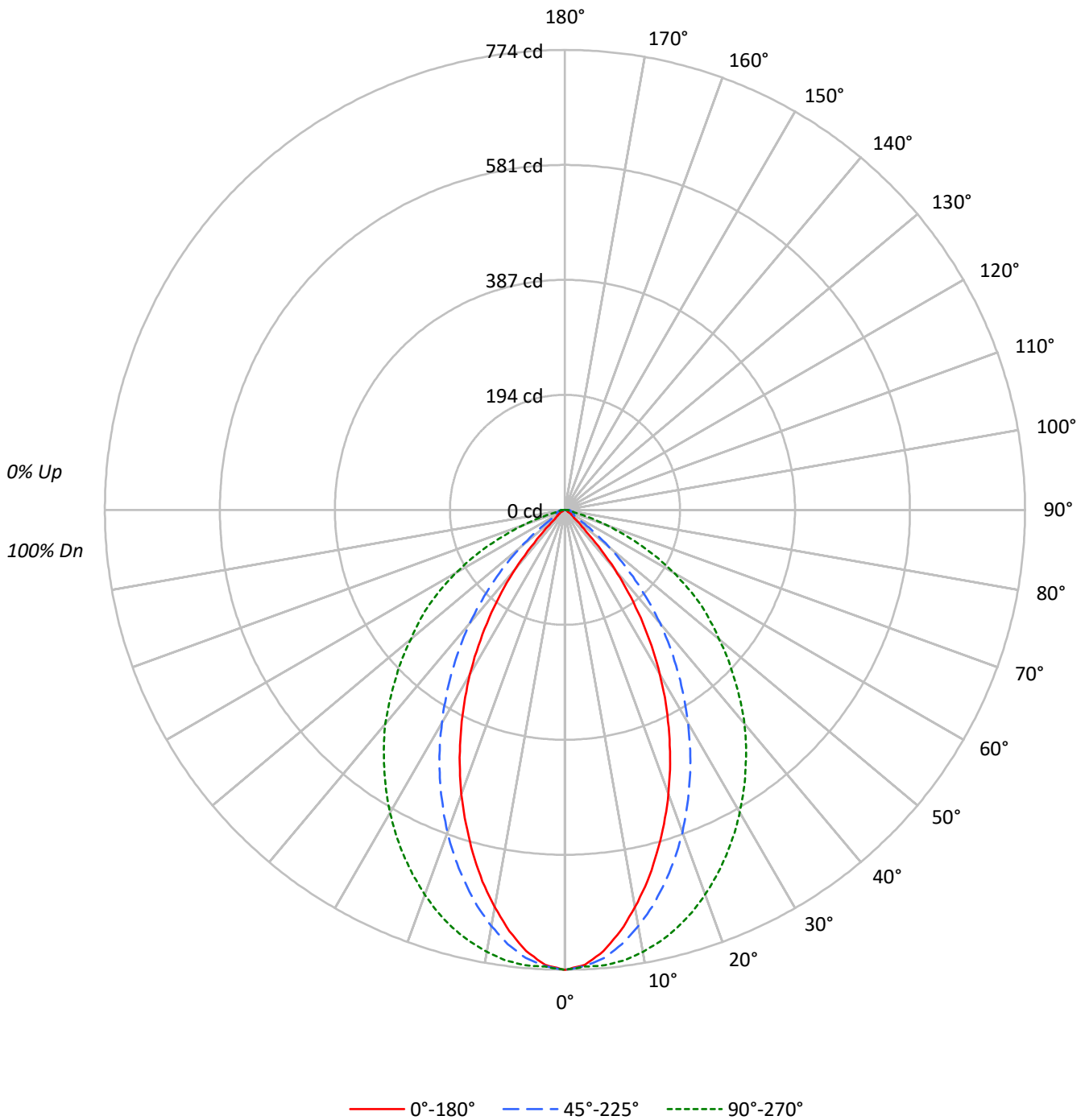
Lumens per Lamp: N/A
Luminaire Lumens: 995.8 lumens
Efficiency: N/A
Efficacy: 31.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): 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	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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5331	5331	5331
5°	5153	5232	5318
10°	4746	4973	5279
15°	4261	4628	5192
20°	3730	4234	5051
25°	3150	3781	4875
30°	2539	3290	4677
35°	1867	2773	4456
40°	1166	2236	4224
45°	436	1634	3927
50°	205	1021	3626
55°	149	424	3354
60°	105	223	2901
65°	62	264	2299
70°	58	308	1460
75°	77	303	458
80°	115	377	341
85°	229	600	450

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3927 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	7.1
10°-20°	183.8	18.5
20°-30°	234.1	23.5
30°-40°	217.9	21.9
40°-50°	149.3	15.0
50°-60°	82.2	8.3
60°-70°	38.9	3.9
70°-80°	12.2	1.2
80°-90°	6.3	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°	488.9	49.1
0°-40°	706.8	71.0
0°-60°	938.3	94.2
0°-90°	995.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	995.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	746	755	757	763	769	69
15°	598	617	649	698	728	167
25°	415	440	498	578	642	189
35°	222	254	330	439	530	138
45°	45	75	168	298	403	43
55°	12	14	35	166	279	11
65°	4	5	16	61	141	4
75°	3	5	11	12	17	3
85°	3	7	8	7	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	774.2	774.2	774.2	774.2	774.2
2.5°	766.5	774.2	768.5	768.5	769.4
5°	745.6	755.1	757.0	762.7	769.4
7.5°	715.1	727.5	737.0	753.2	764.6
10°	678.8	694.1	711.3	737.9	755.1
12.5°	640.7	656.9	682.6	719.8	743.7
15°	597.8	616.9	649.3	697.9	728.4
17.5°	553.9	574.9	615.0	672.2	710.3
20°	509.1	531.1	577.8	641.7	689.3
22.5°	462.4	486.2	537.7	610.2	666.4
25°	414.7	440.5	497.7	577.8	641.7
27.5°	367.1	393.8	456.7	544.4	615.9
30°	319.4	347.0	413.8	510.1	588.3
32.5°	270.8	301.3	371.8	475.8	559.7
35°	222.1	253.6	329.9	438.6	530.1
37.5°	174.5	206.9	288.9	403.3	500.5
40°	129.7	162.1	248.8	368.0	470.0
42.5°	83.9	118.2	206.9	331.8	436.7
45°	44.8	75.3	167.8	297.5	403.3
47.5°	23.8	40.0	130.6	263.1	371.8
50°	19.1	21.9	95.3	228.8	338.5
52.5°	15.3	17.2	61.0	193.5	308.9
55°	12.4	14.3	35.3	165.9	279.4
57.5°	9.5	11.4	20.0	138.2	245.0
60°	7.6	8.6	16.2	110.6	210.7
62.5°	4.8	6.7	16.2	85.8	176.4
65°	3.8	4.8	16.2	61.0	141.1
67.5°	3.8	3.8	16.2	40.0	105.8
70°	2.9	2.9	15.3	25.7	72.5
72.5°	2.9	2.9	13.3	17.2	42.0
75°	2.9	4.8	11.4	12.4	17.2
77.5°	2.9	7.6	10.5	10.5	9.5
80°	2.9	7.6	9.5	8.6	8.6
82.5°	2.9	7.6	7.6	7.6	6.7
85°	2.9	6.7	7.6	6.7	5.7
87.5°	2.9	6.7	6.7	6.7	3.8
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	0.00	0.00	0.00	0.00	0.00	14.86	16.14	15.22	16.46	16.77
	3H	0.00	0.00	0.00	0.00	0.00	15.64	16.78	16.02	17.11	17.48
	4H	0.00	0.00	0.00	0.00	0.00	15.67	16.73	16.07	17.08	17.46
	6H	0.00	0.00	0.00	0.00	0.30	15.63	16.60	16.04	16.97	17.36
	8H	0.00	0.16	0.00	0.55	0.96	15.60	16.52	16.03	16.91	17.32
	12H	0.00	0.88	0.44	1.26	1.69	15.59	16.46	16.02	16.85	17.28
4H	2H	0.00	0.00	0.00	0.04	0.42	14.64	15.70	15.04	16.05	16.43
	3H	0.00	0.37	0.00	0.78	1.18	15.47	16.33	15.88	16.74	17.14
	4H	0.12	0.89	0.55	1.31	1.75	15.50	16.27	15.94	16.69	17.14
	6H	1.61	2.28	2.08	2.72	3.19	15.49	16.15	15.95	16.60	17.07
	8H	2.36	2.98	2.83	3.42	3.89	15.47	16.09	15.94	16.54	17.01
	12H	3.11	3.65	3.59	4.14	4.61	15.48	16.02	15.96	16.51	16.98
8H	4H	2.15	2.77	2.62	3.22	3.69	15.39	16.01	15.86	16.46	16.93
	6H	3.89	4.40	4.39	4.89	5.38	15.39	15.90	15.89	16.39	16.88
	8H	4.84	5.30	5.37	5.81	6.31	15.40	15.85	15.92	16.37	16.86
	12H	5.79	6.19	6.30	6.68	7.26	15.44	15.84	15.96	16.34	16.91
12H	4H	2.45	3.00	2.94	3.48	3.96	15.35	15.89	15.83	16.38	16.85
	6H	4.35	4.80	4.87	5.32	5.81	15.35	15.80	15.87	16.32	16.81
	8H	5.48	5.88	5.99	6.38	6.95	15.38	15.79	15.90	16.28	16.85