

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: P1061880

Luminaire Tested: S125RDR-H1090D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061880
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D927-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

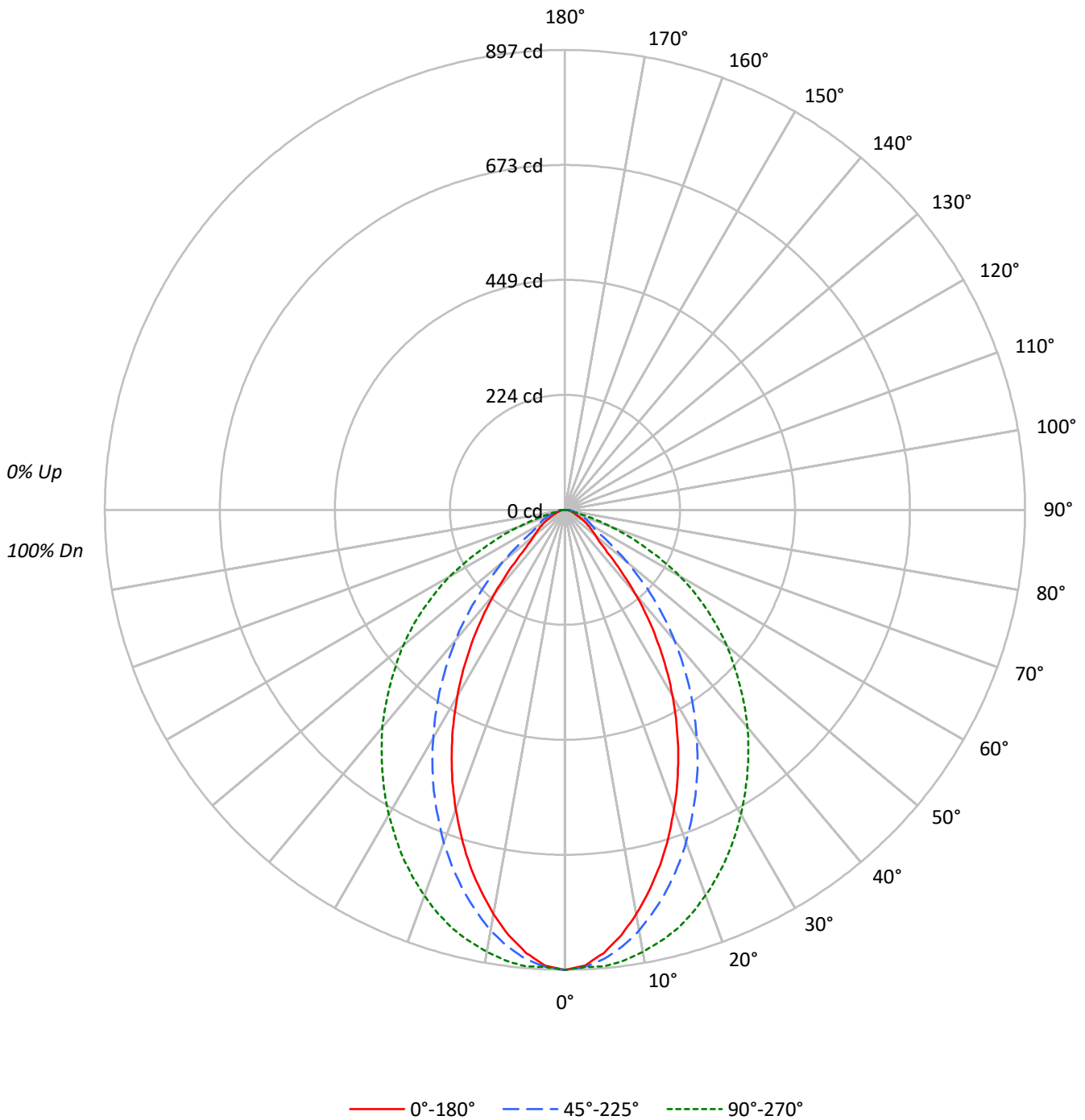
Lumens per Lamp: N/A
Luminaire Lumens: 1299.5 lumens
Efficiency: N/A
Efficacy: 41.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6177	6177	6177
5°	5996	6076	6175
10°	5599	5826	6119
15°	5111	5471	6028
20°	4555	5058	5868
25°	3969	4592	5679
30°	3335	4086	5458
35°	2653	3550	5217
40°	1911	2982	4978
45°	1132	2367	4688
50°	838	1685	4412
55°	709	1042	4041
60°	578	840	3558
65°	450	777	2812
70°	385	672	1880
75°	354	583	761
80°	377	607	527
85°	450	901	600

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4688 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.7	6.4
10°-20°	217.2	16.7
20°-30°	283.9	21.8
30°-40°	276.5	21.3
40°-50°	207.4	16.0
50°-60°	130.0	10.0
60°-70°	67.7	5.2
70°-80°	24.5	1.9
80°-90°	9.7	0.7
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°	583.7	44.9
0°-40°	860.2	66.2
0°-60°	1197.6	92.2
0°-90°	1299.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1299.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	868	879	879	886	893	81
15°	717	738	768	815	846	200
25°	522	551	604	686	748	239
35°	316	349	422	535	621	196
45°	116	151	243	376	482	98
55°	59	62	87	227	337	53
65°	28	30	48	92	173	28
75°	13	18	22	23	29	15
85°	6	10	11	10	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	897.2	897.2	897.2	897.2	897.2
2.5°	889.5	898.1	892.4	892.4	892.4
5°	867.6	879.1	879.1	885.7	893.4
7.5°	837.1	850.5	859.0	875.2	886.7
10°	800.9	817.1	833.3	860.0	875.2
12.5°	759.9	778.9	801.8	839.0	861.9
15°	717.0	737.9	767.5	815.2	845.7
17.5°	670.3	695.0	730.3	787.5	824.7
20°	621.6	646.4	690.3	755.1	800.9
22.5°	573.0	599.7	647.4	720.8	775.1
25°	522.5	551.1	604.5	686.5	747.5
27.5°	471.0	500.5	559.7	651.2	717.0
30°	419.5	450.0	513.9	613.0	686.5
32.5°	368.0	400.4	468.1	574.0	654.0
35°	315.6	349.0	422.4	534.9	620.7
37.5°	265.1	298.4	376.6	494.8	587.3
40°	212.6	248.8	331.8	454.8	553.9
42.5°	161.1	198.3	287.0	414.7	517.7
45°	116.3	150.6	243.1	375.6	481.5
47.5°	89.6	108.7	198.3	335.6	446.2
50°	78.2	83.9	157.3	298.4	411.9
52.5°	67.7	71.5	118.2	264.1	374.7
55°	59.1	62.0	86.8	226.9	336.6
57.5°	49.6	53.4	68.6	190.7	297.5
60°	42.0	43.9	61.0	157.3	258.4
62.5°	34.3	36.2	54.3	123.9	214.5
65°	27.6	29.6	47.7	91.5	172.6
67.5°	22.9	23.8	40.0	64.8	132.5
70°	19.1	20.0	33.4	44.8	93.4
72.5°	16.2	19.1	26.7	32.4	59.1
75°	13.3	18.1	21.9	22.9	28.6
77.5°	11.4	17.2	18.1	18.1	16.2
80°	9.5	14.3	15.3	14.3	13.3
82.5°	7.6	11.4	12.4	12.4	10.5
85°	5.7	9.5	11.4	10.5	7.6
87.5°	3.8	8.6	9.5	8.6	5.7
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	6.25	7.60	6.61	7.91	8.23	15.86	17.21	16.22	17.52	17.84
	3H	7.10	8.30	7.48	8.63	9.00	16.70	17.90	17.08	18.23	18.59
	4H	7.53	8.64	7.93	8.99	9.38	16.77	17.89	17.18	18.24	18.62
	6H	7.95	8.98	8.37	9.35	9.74	16.75	17.78	17.17	18.15	18.55
	8H	8.13	9.10	8.56	9.50	9.90	16.74	17.72	17.17	18.11	18.51
	12H	8.29	9.22	8.72	9.61	10.04	16.73	17.66	17.16	18.05	18.48
4H	2H	7.21	8.33	7.61	8.68	9.06	15.72	16.84	16.12	17.19	17.57
	3H	8.26	9.18	8.67	9.58	9.98	16.63	17.55	17.04	17.95	18.35
	4H	8.82	9.64	9.26	10.06	10.50	16.73	17.55	17.17	17.97	18.41
	6H	9.42	10.13	9.88	10.57	11.04	16.76	17.47	17.22	17.91	18.38
	8H	9.66	10.32	10.13	10.77	11.24	16.76	17.42	17.23	17.87	18.34
	12H	9.88	10.47	10.37	10.95	11.42	16.77	17.36	17.26	17.84	18.31
8H	4H	9.29	9.95	9.76	10.40	10.87	16.66	17.32	17.13	17.76	18.24
	6H	10.11	10.65	10.61	11.14	11.62	16.71	17.25	17.21	17.75	18.23
	8H	10.48	10.97	11.00	11.48	11.98	16.74	17.23	17.27	17.74	18.24
	12H	10.87	11.30	11.39	11.80	12.37	16.81	17.24	17.32	17.73	18.30
12H	4H	9.34	9.93	9.83	10.41	10.89	16.62	17.21	17.11	17.69	18.16
	6H	10.23	10.72	10.75	11.23	11.72	16.68	17.16	17.20	17.68	18.17
	8H	10.72	11.14	11.23	11.64	12.21	16.75	17.18	17.26	17.67	18.24