

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: P1061439

Luminaire Tested: S125RDRP-S1090D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061439
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: S125RDRP-S1090D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

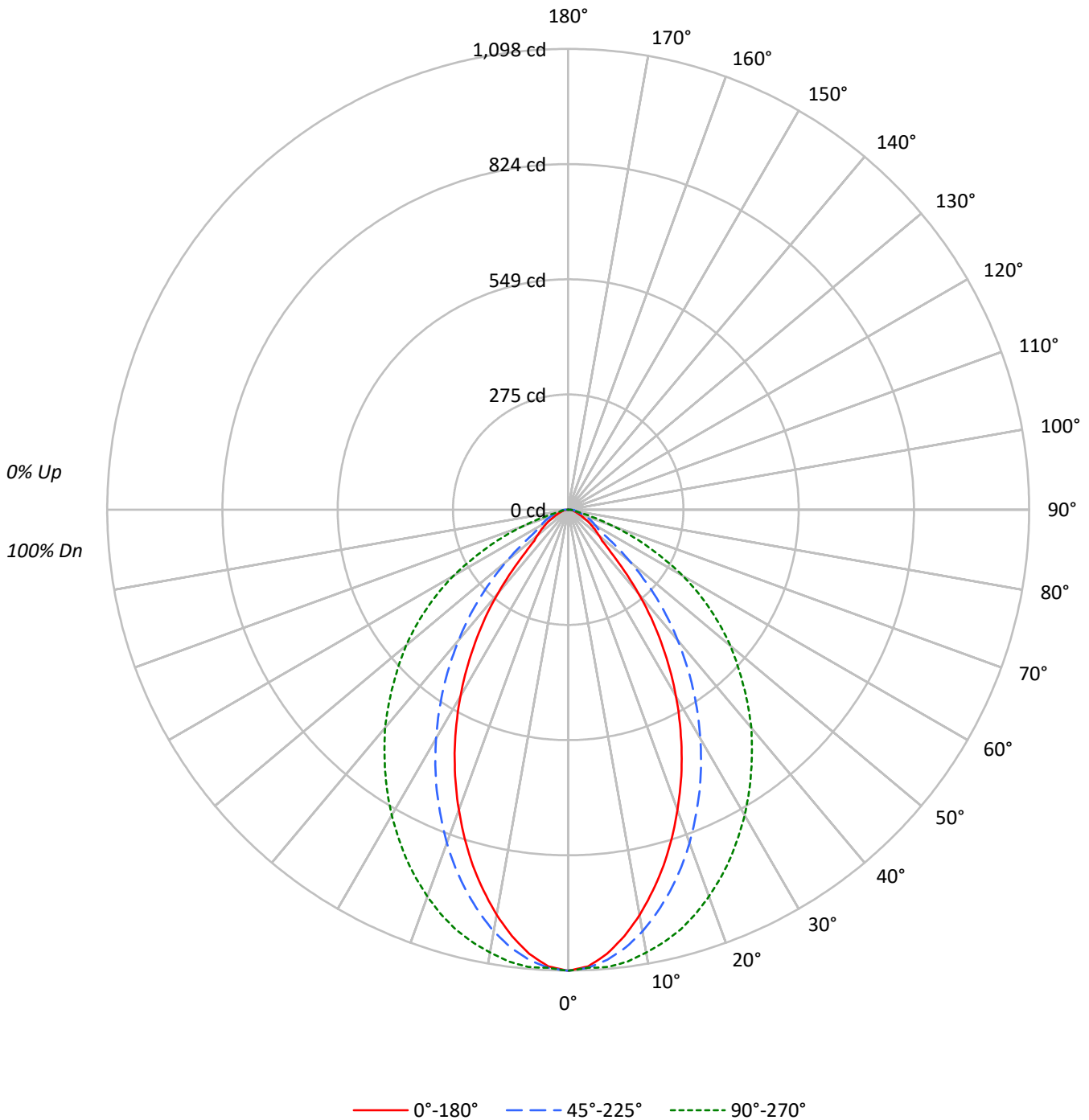
Lumens per Lamp: N/A
Luminaire Lumens: 1591.0 lumens
Efficiency: N/A
Efficacy: 45.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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

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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7563	7563	7563
5°	7341	7438	7559
10°	6855	7133	7492
15°	6257	6698	7380
20°	5577	6192	7184
25°	4860	5623	6953
30°	4083	5002	6682
35°	3248	4346	6387
40°	2340	3651	6096
45°	1387	2899	5740
50°	1025	2063	5402
55°	869	1275	4947
60°	708	1029	4356
65°	552	951	3442
70°	469	823	2303
75°	434	713	931
80°	464	741	646
85°	553	1106	735

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5740 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.2	6.4
10°-20°	265.9	16.7
20°-30°	347.5	21.8
30°-40°	338.5	21.3
40°-50°	253.9	16.0
50°-60°	159.2	10.0
60°-70°	82.9	5.2
70°-80°	30.0	1.9
80°-90°	11.9	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°	714.7	44.9
0°-40°	1053.2	66.2
0°-60°	1466.3	92.2
0°-90°	1591.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1591.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1062	1076	1076	1084	1094	99
15°	878	904	940	998	1035	245
25°	640	675	740	840	915	292
35°	386	427	517	655	760	240
45°	142	184	298	460	590	120
55°	72	76	106	278	412	65
65°	34	36	58	112	211	35
75°	16	22	27	28	35	18
85°	7	12	14	13	9	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1098.4	1098.4	1098.4	1098.4	1098.4
2.5°	1089.1	1099.6	1092.6	1092.6	1092.6
5°	1062.2	1076.2	1076.2	1084.4	1093.7
7.5°	1024.9	1041.2	1051.7	1071.6	1085.6
10°	980.5	1000.4	1020.2	1052.9	1071.6
12.5°	930.3	953.7	981.7	1027.2	1055.2
15°	877.8	903.5	939.7	998.0	1035.4
17.5°	820.6	851.0	894.1	964.2	1009.7
20°	761.1	791.4	845.1	924.5	980.5
22.5°	701.5	734.2	792.6	882.5	949.0
25°	639.7	674.7	740.1	840.4	915.2
27.5°	576.6	612.8	685.2	797.3	877.8
30°	513.6	551.0	629.2	750.6	840.4
32.5°	450.6	490.3	573.1	702.7	800.8
35°	386.4	427.2	517.1	654.8	759.9
37.5°	324.5	365.4	461.1	605.8	719.0
40°	260.3	304.7	406.2	556.8	678.2
42.5°	197.3	242.8	351.4	507.8	633.8
45°	142.4	184.4	297.7	459.9	589.5
47.5°	109.7	133.1	242.8	410.9	546.3
50°	95.7	102.7	192.6	365.4	504.3
52.5°	82.9	87.5	144.7	323.3	458.7
55°	72.4	75.9	106.2	277.8	412.1
57.5°	60.7	65.4	84.0	233.5	364.2
60°	51.4	53.7	74.7	192.6	316.3
62.5°	42.0	44.4	66.5	151.7	262.6
65°	33.9	36.2	58.4	112.1	211.3
67.5°	28.0	29.2	49.0	79.4	162.3
70°	23.3	24.5	40.9	54.9	114.4
72.5°	19.8	23.3	32.7	39.7	72.4
75°	16.3	22.2	26.8	28.0	35.0
77.5°	14.0	21.0	22.2	22.2	19.8
80°	11.7	17.5	18.7	17.5	16.3
82.5°	9.3	14.0	15.2	15.2	12.8
85°	7.0	11.7	14.0	12.8	9.3
87.5°	4.7	10.5	11.7	10.5	7.0
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	6.95	8.30	7.32	8.62	8.93	16.56	17.91	16.93	18.23	18.54
	3H	7.81	9.01	8.19	9.34	9.70	17.40	18.60	17.78	18.93	19.30
	4H	8.23	9.35	8.63	9.70	10.08	17.48	18.60	17.88	18.95	19.33
	6H	8.66	9.69	9.07	10.06	10.45	17.46	18.49	17.87	18.86	19.25
	8H	8.83	9.81	9.26	10.20	10.61	17.45	18.42	17.88	18.81	19.22
	12H	9.00	9.93	9.43	10.31	10.74	17.43	18.37	17.87	18.75	19.18
4H	2H	7.91	9.03	8.32	9.38	9.77	16.42	17.54	16.83	17.89	18.28
	3H	8.96	9.88	9.38	10.28	10.69	17.33	18.25	17.75	18.65	19.06
	4H	9.53	10.35	9.96	10.76	11.21	17.44	18.26	17.87	18.67	19.12
	6H	10.13	10.83	10.59	11.28	11.74	17.46	18.17	17.93	18.62	19.08
	8H	10.36	11.02	10.83	11.47	11.94	17.46	18.13	17.93	18.57	19.04
	12H	10.59	11.17	11.07	11.66	12.13	17.48	18.06	17.96	18.54	19.02
8H	4H	10.00	10.66	10.47	11.10	11.58	17.36	18.02	17.83	18.47	18.94
	6H	10.81	11.35	11.31	11.85	12.33	17.42	17.96	17.92	18.45	18.93
	8H	11.19	11.68	11.71	12.19	12.68	17.45	17.93	17.97	18.45	18.94
	12H	11.58	12.01	12.10	12.51	13.08	17.51	17.94	18.03	18.44	19.01
12H	4H	10.05	10.63	10.53	11.12	11.59	17.33	17.91	17.81	18.40	18.87
	6H	10.93	11.42	11.45	11.93	12.43	17.38	17.87	17.90	18.38	18.87
	8H	11.42	11.85	11.94	12.35	12.92	17.45	17.88	17.97	18.38	18.95