

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: P1061842

Luminaire Tested: S125RDR-H1090D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

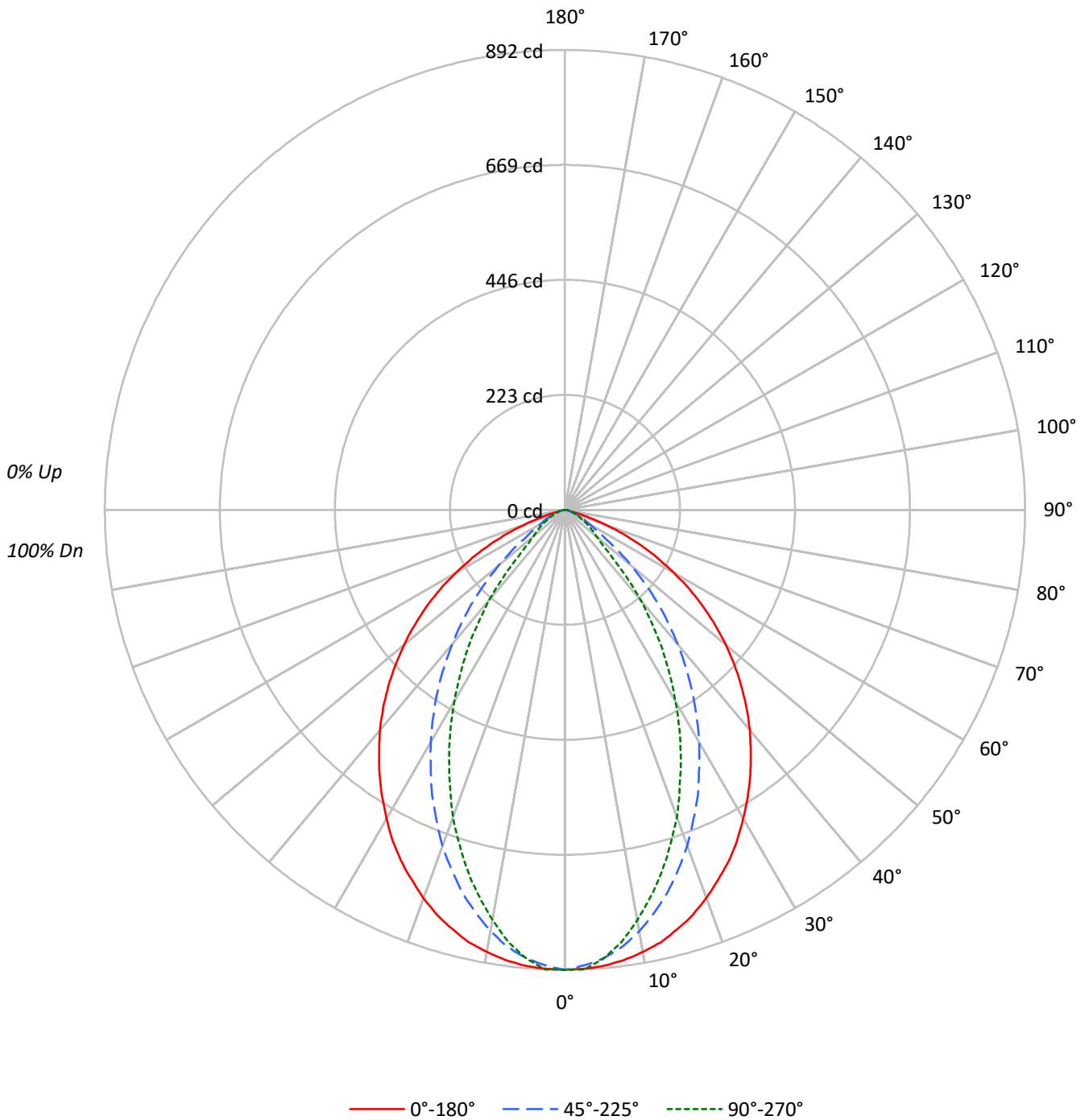
Lumens per Lamp: N/A
Luminaire Lumens: 1290.0 lumens
Efficiency: N/A
Efficacy: 41.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6142	6142	6142
5°	6134	6032	6032
10°	6086	5801	5650
15°	6003	5478	5179
20°	5871	5083	4651
25°	5709	4633	4039
30°	5497	4136	3406
35°	5268	3620	2763
40°	5012	3056	2047
45°	4713	2450	1236
50°	4359	1796	849
55°	3933	1102	707
60°	3341	749	562
65°	2641	572	443
70°	1665	411	364
75°	543	301	301
80°	178	226	270
85°	87	182	182

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4713 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	6.4
10°-20°	217.9	16.9
20°-30°	286.6	22.2
30°-40°	281.6	21.8
40°-50°	213.0	16.5
50°-60°	129.2	10.0
60°-70°	61.0	4.7
70°-80°	15.9	1.2
80°-90°	2.4	0.2
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°	587.0	45.5
0°-40°	868.5	67.3
0°-60°	1210.7	93.9
0°-90°	1290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1290.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	888	885	873	874	873	84
15°	842	820	768	739	726	237
25°	752	695	610	553	532	345
35°	627	543	431	355	329	391
45°	484	381	252	160	127	373
55°	328	224	92	62	59	292
65°	162	83	35	30	27	160
75°	20	14	11	11	11	32
85°	1	1	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	892.0	892.0	892.0	892.0	892.0
2.5°	890.9	890.9	884.1	892.0	892.0
5°	887.5	885.2	872.7	873.9	872.7
7.5°	880.7	876.1	854.6	848.9	844.4
10°	870.5	861.4	829.7	816.1	808.1
12.5°	859.1	843.3	800.2	780.9	768.5
15°	842.1	819.5	768.5	739.0	726.5
17.5°	824.0	791.1	731.1	695.9	680.1
20°	801.3	762.8	693.7	650.6	634.7
22.5°	776.4	731.1	650.6	603.0	581.4
25°	751.5	694.8	609.8	553.1	531.6
27.5°	723.1	658.5	563.3	504.4	480.6
30°	691.4	622.3	520.2	459.0	428.4
32.5°	659.7	584.8	474.9	408.0	377.4
35°	626.8	542.9	430.7	354.8	328.7
37.5°	591.6	503.2	385.4	306.0	275.4
40°	557.6	463.6	340.0	256.2	227.8
42.5°	521.4	423.9	294.7	207.4	175.7
45°	484.0	380.8	251.6	159.8	126.9
47.5°	445.4	342.3	208.6	117.9	95.2
50°	406.9	301.5	167.7	87.3	79.3
52.5°	367.2	261.8	126.9	72.5	69.1
55°	327.6	224.4	91.8	62.3	58.9
57.5°	286.8	183.6	69.1	53.3	49.9
60°	242.6	147.3	54.4	44.2	40.8
62.5°	201.7	115.6	44.2	36.3	34.0
65°	162.1	82.7	35.1	29.5	27.2
67.5°	121.3	55.5	27.2	22.7	22.7
70°	82.7	36.3	20.4	18.1	18.1
72.5°	49.9	21.5	14.7	14.7	14.7
75°	20.4	13.6	11.3	11.3	11.3
77.5°	6.8	7.9	7.9	9.1	9.1
80°	4.5	4.5	5.7	6.8	6.8
82.5°	2.3	3.4	3.4	4.5	4.5
85°	1.1	1.1	2.3	2.3	2.3
87.5°	0.0	0.0	0.0	1.1	1.1
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	15.64	16.97	16.00	17.28	17.59	6.29	7.63	6.66	7.94	8.25
	3H	16.34	17.52	16.72	17.85	18.21	7.07	8.25	7.45	8.58	8.95
	4H	16.36	17.45	16.76	17.80	18.19	7.32	8.42	7.72	8.77	9.15
	6H	16.29	17.29	16.70	17.66	18.06	7.50	8.51	7.92	8.88	9.27
	8H	16.25	17.20	16.68	17.59	17.99	7.55	8.50	7.98	8.89	9.29
	12H	16.21	17.12	16.64	17.50	17.93	7.55	8.46	7.99	8.85	9.28
4H	2H	15.47	16.56	15.87	16.91	17.30	6.78	7.88	7.18	8.23	8.61
	3H	16.21	17.10	16.63	17.51	17.91	7.69	8.58	8.10	8.98	9.39
	4H	16.23	17.03	16.67	17.44	17.89	8.00	8.79	8.43	9.21	9.65
	6H	16.17	16.85	16.63	17.30	17.77	8.26	8.94	8.72	9.39	9.86
	8H	16.12	16.76	16.59	17.20	17.67	8.32	8.96	8.79	9.41	9.88
	12H	16.07	16.64	16.56	17.12	17.59	8.35	8.91	8.84	9.39	9.87
8H	4H	16.11	16.75	16.58	17.20	17.67	8.11	8.75	8.58	9.19	9.67
	6H	16.04	16.56	16.54	17.05	17.54	8.43	8.95	8.93	9.45	9.93
	8H	15.98	16.45	16.51	16.97	17.46	8.53	9.00	9.06	9.51	10.01
	12H	15.94	16.35	16.46	16.85	17.42	8.60	9.01	9.11	9.50	10.07
12H	4H	16.07	16.63	16.56	17.12	17.59	8.08	8.64	8.57	9.13	9.60
	6H	15.98	16.45	16.50	16.96	17.45	8.40	8.87	8.92	9.38	9.87
	8H	15.95	16.36	16.46	16.85	17.42	8.54	8.95	9.05	9.44	10.02