

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: P1061904

Luminaire Tested: S125RDR-H1090D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061904
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D940-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE 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

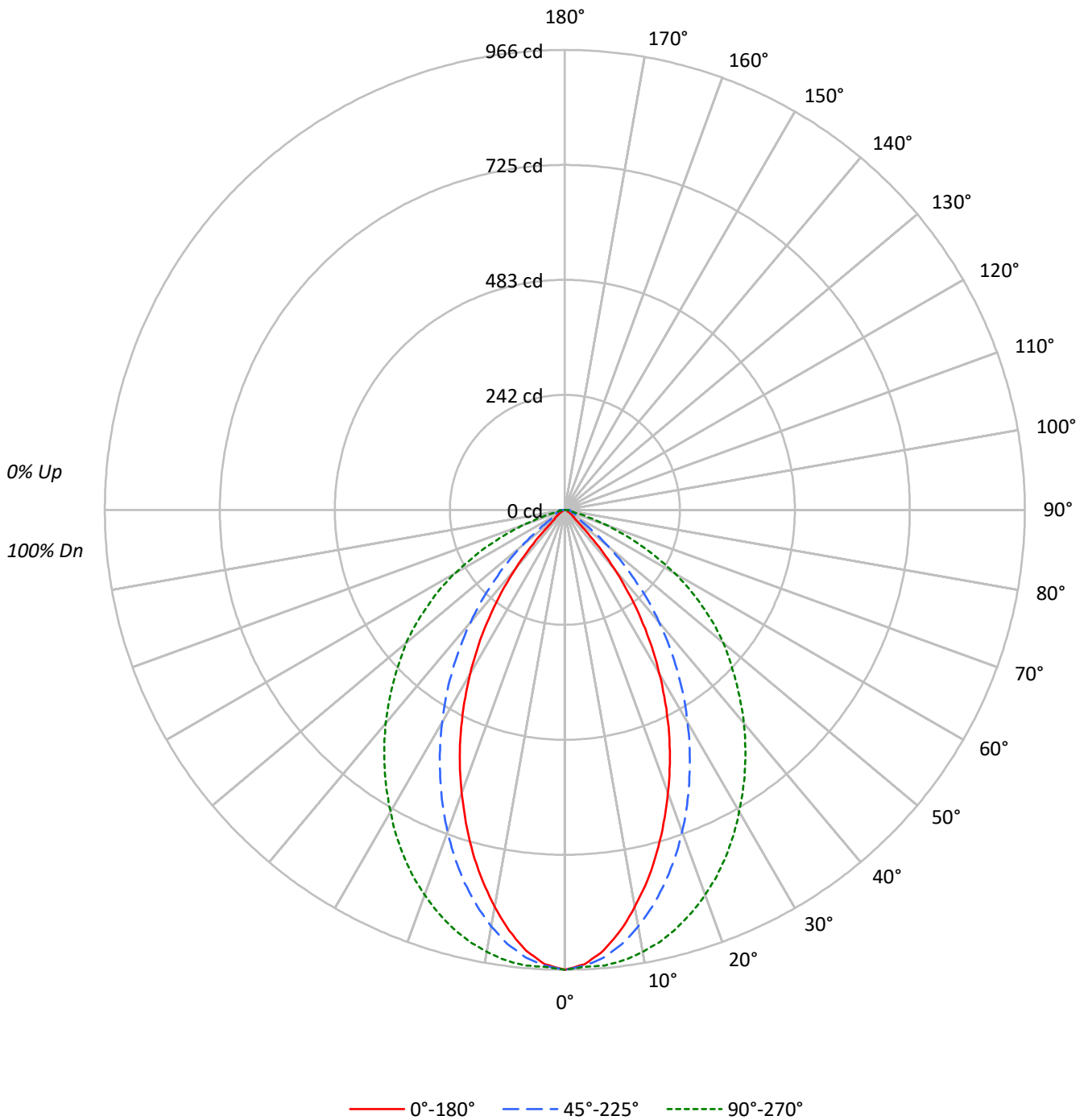
Lumens per Lamp: N/A
Luminaire Lumens: 1249.9 lumens
Efficiency: N/A
Efficacy: 40.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	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	67	74	70	67	65				65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6651	6651	6651
5°	6424	6521	6640
10°	5921	6213	6589
15°	5318	5784	6480
20°	4640	5277	6307
25°	3931	4705	6091
30°	3157	4096	5820
35°	2337	3455	5548
40°	1447	2759	5258
45°	565	2018	4944
50°	265	1265	4656
55°	193	541	4227
60°	134	384	3666
65°	88	402	2851
70°	87	366	1794
75°	114	372	572
80°	170	424	385
85°	253	845	592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4944 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	7.1
10°-20°	229.5	18.4
20°-30°	292.3	23.4
30°-40°	272.1	21.8
40°-50°	187.3	15.0
50°-60°	106.0	8.5
60°-70°	50.1	4.0
70°-80°	15.7	1.3
80°-90°	8.2	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°	610.5	48.8
0°-40°	882.6	70.6
0°-60°	1175.9	94.1
0°-90°	1249.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1249.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	930	942	944	952	961	86
15°	746	771	812	873	909	208
25°	517	551	619	723	802	236
35°	278	317	411	552	660	172
45°	58	92	207	375	508	54
55°	16	18	45	216	352	15
65°	5	6	25	77	175	6
75°	4	10	14	15	22	5
85°	3	9	11	10	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	966.0	966.0	966.0	966.0	966.0
2.5°	955.3	965.0	958.5	959.6	960.7
5°	929.5	942.4	943.5	952.1	960.7
7.5°	892.0	908.1	919.9	940.3	954.2
10°	846.9	866.2	888.7	922.0	942.4
12.5°	798.6	821.1	852.3	899.5	928.5
15°	746.0	770.7	811.5	872.6	909.1
17.5°	690.2	718.1	767.5	840.4	886.6
20°	633.3	663.3	720.2	804.0	860.8
22.5°	576.4	607.5	670.9	764.2	832.9
25°	517.4	550.6	619.3	723.4	801.8
27.5°	457.3	491.6	567.8	681.6	768.5
30°	397.1	433.6	515.2	638.7	732.0
32.5°	338.1	374.6	463.7	595.7	696.6
35°	278.0	316.6	411.1	551.7	660.1
37.5°	217.9	259.8	359.6	506.6	622.6
40°	161.0	200.7	307.0	462.6	585.0
42.5°	107.3	146.0	259.8	418.6	546.3
45°	58.0	92.3	207.2	374.6	507.7
47.5°	31.1	49.4	162.1	331.7	470.1
50°	24.7	27.9	118.1	292.0	434.7
52.5°	20.4	22.5	77.3	254.4	393.9
55°	16.1	18.2	45.1	215.7	352.1
57.5°	12.9	15.0	29.0	179.3	311.3
60°	9.7	11.8	27.9	143.8	266.2
62.5°	7.5	8.6	25.8	110.6	219.0
65°	5.4	6.4	24.7	77.3	175.0
67.5°	4.3	5.4	22.5	49.4	131.0
70°	4.3	4.3	18.2	32.2	89.1
72.5°	4.3	7.5	16.1	21.5	53.7
75°	4.3	9.7	14.0	15.0	21.5
77.5°	4.3	10.7	11.8	11.8	11.8
80°	4.3	9.7	10.7	10.7	9.7
82.5°	4.3	8.6	9.7	10.7	8.6
85°	3.2	8.6	10.7	9.7	7.5
87.5°	3.2	8.6	9.7	8.6	5.4
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	15.83	17.12	16.19	17.43	17.75
	3H	0.00	0.00	0.00	0.00	0.00	16.55	17.69	16.93	18.02	18.39
	4H	0.00	0.00	0.00	0.32	0.70	16.57	17.64	16.98	17.99	18.37
	6H	0.17	1.14	0.58	1.51	1.91	16.52	17.50	16.94	17.87	18.26
	8H	0.81	1.73	1.24	2.12	2.53	16.50	17.42	16.93	17.81	18.22
	12H	1.40	2.28	1.83	2.66	3.09	16.48	17.37	16.92	17.75	18.18
4H	2H	0.34	1.40	0.74	1.75	2.13	15.62	16.68	16.02	17.03	17.42
	3H	1.15	2.02	1.56	2.42	2.82	16.38	17.24	16.79	17.65	18.05
	4H	2.16	2.94	2.60	3.36	3.80	16.41	17.18	16.84	17.60	18.04
	6H	3.44	4.11	3.91	4.56	5.02	16.38	17.05	16.85	17.50	17.97
	8H	4.02	4.65	4.49	5.10	5.57	16.37	16.99	16.84	17.44	17.91
	12H	4.59	5.13	5.07	5.62	6.09	16.38	16.93	16.86	17.41	17.88
8H	4H	3.58	4.20	4.05	4.65	5.12	16.29	16.91	16.76	17.36	17.83
	6H	5.14	5.65	5.64	6.14	6.63	16.28	16.79	16.78	17.28	17.77
	8H	5.94	6.39	6.46	6.91	7.40	16.29	16.75	16.81	17.26	17.76
	12H	6.77	7.18	7.29	7.67	8.24	16.35	16.75	16.87	17.25	17.82
12H	4H	3.80	4.35	4.28	4.83	5.30	16.25	16.80	16.73	17.28	17.75
	6H	5.51	5.97	6.03	6.48	6.98	16.23	16.69	16.76	17.20	17.70
	8H	6.50	6.91	7.02	7.40	7.97	16.28	16.68	16.80	17.18	17.75