

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: P1062118

Luminaire Tested: S125RDR-H610D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062118
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D927-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK 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

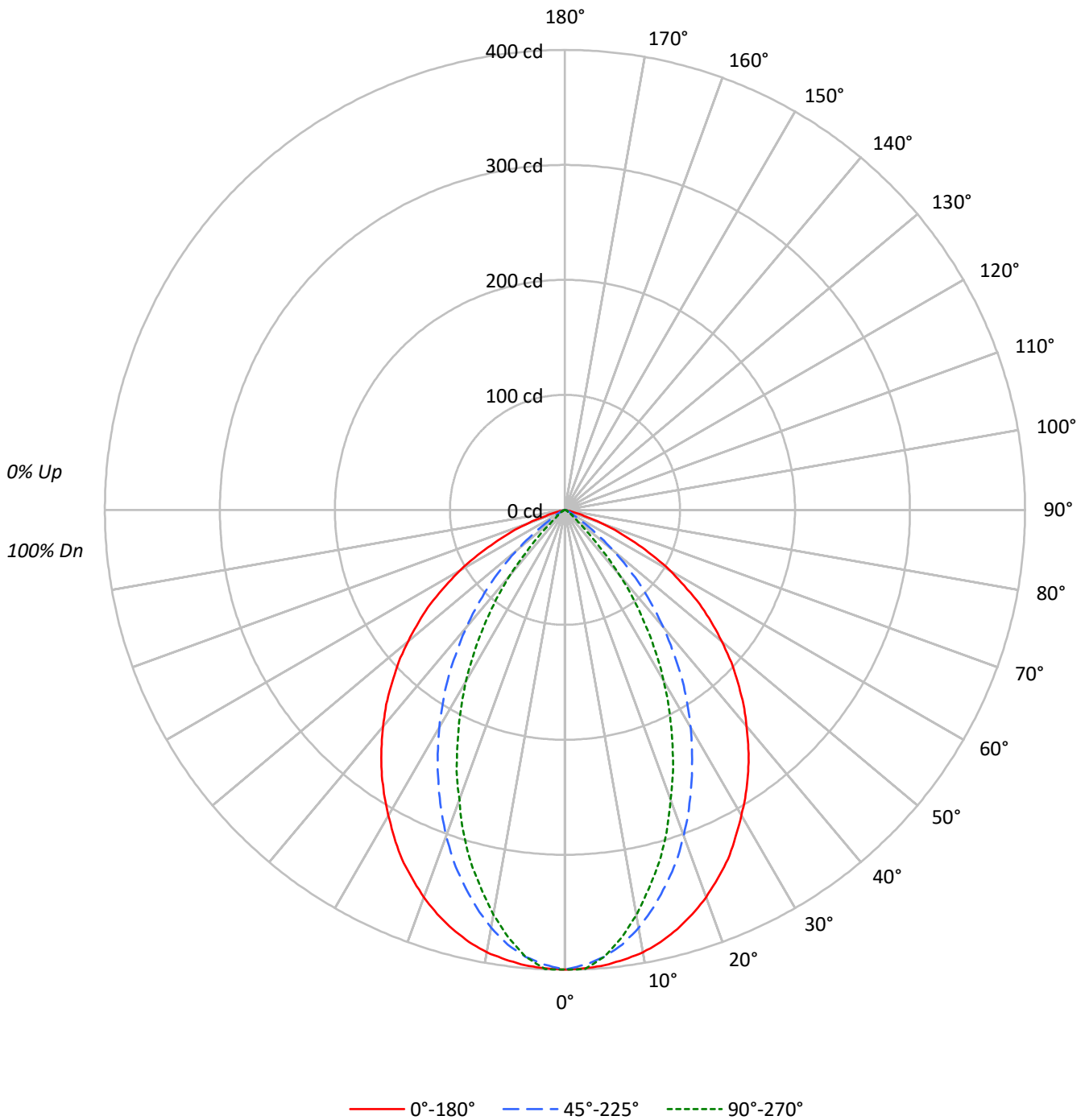
Lumens per Lamp: N/A
Luminaire Lumens: 516.4 lumens
Efficiency: N/A
Efficacy: 29.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2753	2753	2753
5°	2749	2698	2698
10°	2732	2581	2500
15°	2692	2410	2260
20°	2628	2211	1967
25°	2548	1979	1675
30°	2440	1736	1367
35°	2336	1481	1024
40°	2209	1195	663
45°	2069	904	287
50°	1903	576	107
55°	1715	253	76
60°	1453	109	51
65°	1100	68	26
70°	668	32	10
75°	141	13	13
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2069 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.9	7.1
10°-20°	96.1	18.6
20°-30°	123.3	23.9
30°-40°	116.1	22.5
40°-50°	81.2	15.7
50°-60°	43.4	8.4
60°-70°	17.3	3.3
70°-80°	2.2	0.4
80°-90°	0.0	0.0
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°	256.3	49.6
0°-40°	372.4	72.1
0°-60°	496.9	96.2
0°-90°	516.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	516.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	400	400	400	400	400	
5°	398	397	390	391	390	38
15°	378	366	338	322	317	106
25°	335	306	260	232	220	154
35°	278	234	176	136	122	173
45°	212	159	93	45	30	164
55°	143	88	21	7	6	127
65°	68	27	4	2	2	67
75°	5	2	0	0	0	10
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	399.8	399.8	399.8	399.8	399.8
2.5°	399.2	399.8	396.1	399.2	399.8
5°	397.7	396.6	390.3	391.3	390.3
7.5°	394.5	391.9	381.3	377.6	375.5
10°	390.8	385.0	369.2	361.3	357.6
12.5°	385.0	376.6	354.4	342.3	337.0
15°	377.6	365.5	338.1	322.2	317.0
17.5°	368.7	352.8	321.2	301.7	293.8
20°	358.6	337.5	301.7	278.5	268.4
22.5°	347.0	322.8	281.6	255.8	245.8
25°	335.4	305.9	260.5	232.1	220.5
27.5°	321.2	288.5	239.4	208.9	196.2
30°	306.9	271.1	218.3	185.1	171.9
32.5°	292.7	252.6	197.2	160.3	147.1
35°	277.9	233.6	176.2	136.1	121.8
37.5°	262.1	214.7	153.5	112.9	98.1
40°	245.8	196.2	132.9	90.2	73.8
42.5°	229.9	177.7	112.3	68.0	50.1
45°	212.5	159.3	92.8	44.8	29.5
47.5°	196.2	141.3	72.8	25.8	15.3
50°	177.7	122.9	53.8	13.7	10.0
52.5°	160.3	105.0	35.9	9.0	7.9
55°	142.9	87.5	21.1	7.4	6.3
57.5°	122.9	70.7	11.6	5.8	4.7
60°	105.5	55.4	7.9	4.2	3.7
62.5°	85.4	40.6	5.8	3.2	2.6
65°	67.5	26.9	4.2	2.1	1.6
67.5°	50.1	15.8	2.6	1.1	1.1
70°	33.2	8.4	1.6	0.5	0.5
72.5°	17.4	3.7	1.1	0.5	0.5
75°	5.3	1.6	0.5	0.5	0.5
77.5°	0.0	0.5	0.0	0.0	0.5
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	12.46	13.73	12.83	14.04	14.36	0.00	0.00	0.00	0.00	0.00
	3H	13.05	14.16	13.43	14.49	14.86	0.00	0.00	0.00	0.00	0.00
	4H	13.01	14.04	13.41	14.39	14.78	0.00	0.00	0.00	0.00	0.00
	6H	12.93	13.87	13.34	14.24	14.64	0.00	0.00	0.00	0.00	0.00
	8H	12.88	13.77	13.31	14.16	14.57	0.00	0.00	0.00	0.00	0.00
	12H	12.83	13.69	13.27	14.07	14.50	0.00	0.00	0.00	0.00	0.00
4H	2H	12.24	13.27	12.64	13.62	14.01	0.00	0.00	0.00	0.00	0.00
	3H	12.83	13.66	13.24	14.07	14.47	0.00	0.00	0.00	0.00	0.00
	4H	12.78	13.52	13.21	13.94	14.38	0.00	0.00	0.00	0.00	0.00
	6H	12.69	13.33	13.16	13.77	14.24	0.00	0.00	0.00	0.00	0.00
	8H	12.63	13.22	13.10	13.67	14.14	0.00	0.00	0.00	0.00	0.00
	12H	12.58	13.10	13.07	13.59	14.06	0.00	0.00	0.00	0.00	0.00
8H	4H	12.63	13.22	13.10	13.67	14.14	0.00	0.00	0.00	0.00	0.00
	6H	12.52	13.00	13.03	13.50	13.99	0.00	0.00	0.00	0.00	0.00
	8H	12.46	12.89	12.98	13.41	13.90	0.00	0.00	0.00	0.00	0.00
	12H	12.41	12.79	12.93	13.28	13.86	0.00	0.00	0.00	0.00	0.00
12H	4H	12.58	13.10	13.07	13.59	14.06	0.00	0.00	0.00	0.00	0.00
	6H	12.46	12.89	12.98	13.41	13.90	0.00	0.00	0.00	0.00	0.00
	8H	12.41	12.79	12.93	13.28	13.86	0.00	0.00	0.00	0.00	0.00