

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: P1058509

Luminaire Tested: S122RDR-H675D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

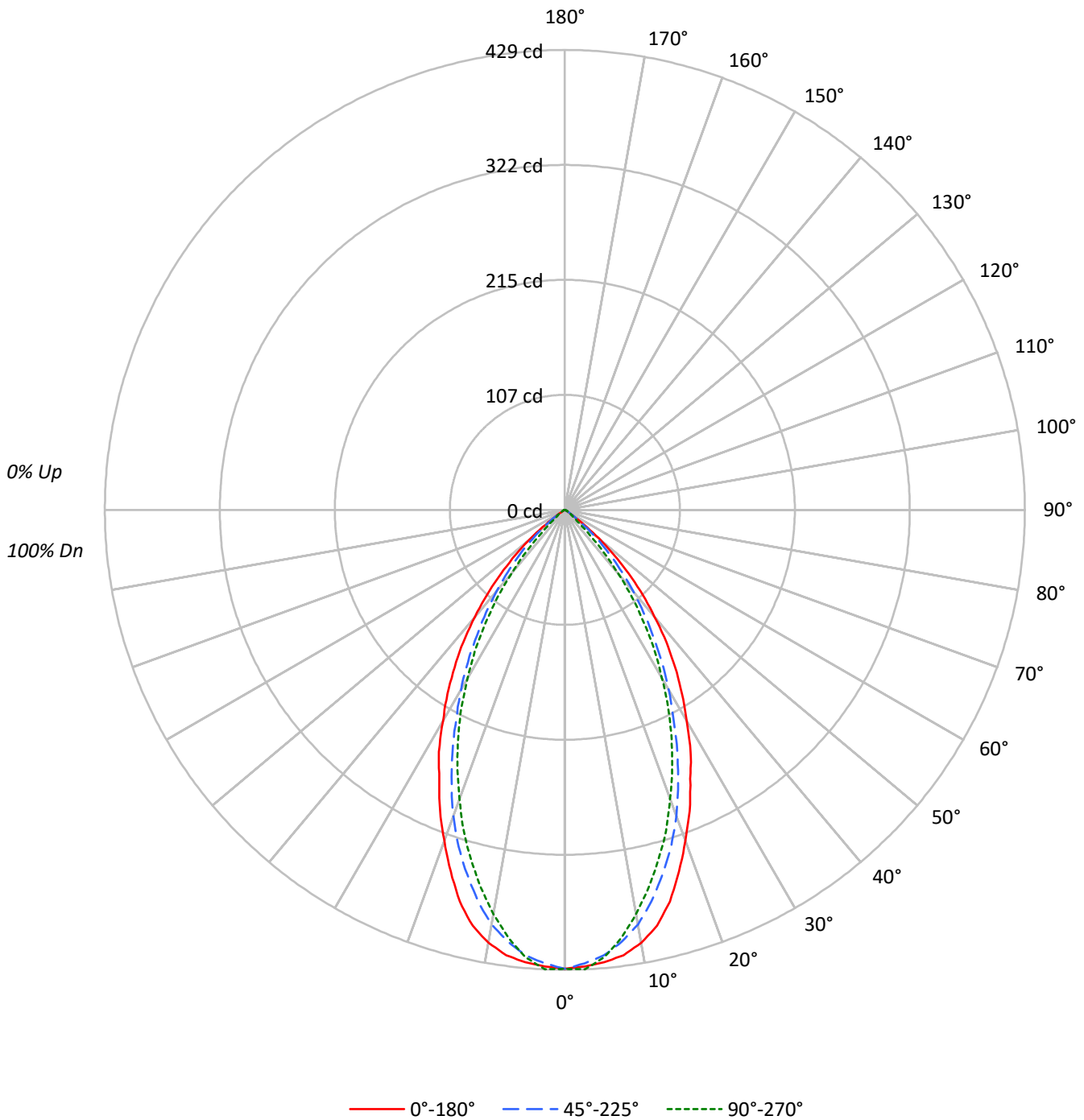
Lumens per Lamp: N/A
Luminaire Lumens: 402.5 lumens
Efficiency: N/A
Efficacy: 17.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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

TEST NUMBER: P1058509

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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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93			93	
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86			86	
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79			79	
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73			73	
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67			67	
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62			62	
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58			58	
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54			54	
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51			51	
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47			47	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7900	7900	7900
5°	7844	7728	7761
10°	7682	7360	7173
15°	7227	6724	6449
20°	6451	5972	5634
25°	5638	5049	4791
30°	4839	4127	3857
35°	4037	3221	2895
40°	3139	2375	1852
45°	2197	1581	804
50°	1194	833	287
55°	174	290	203
60°	33	66	133
65°	0	39	79
70°	0	0	49
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2197 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	9.8
10°-20°	99.1	24.6
20°-30°	115.5	28.7
30°-40°	92.6	23.0
40°-50°	46.0	11.4
50°-60°	9.1	2.3
60°-70°	0.8	0.2
70°-80°	0.1	0.0
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°	254.0	63.1
0°-40°	346.6	86.1
0°-60°	401.6	99.8
0°-90°	402.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	402.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	428	428	428	428	428	
5°	424	424	417	418	419	40
15°	378	371	352	343	338	105
25°	277	263	248	242	235	127
35°	179	161	143	137	128	111
45°	84	74	61	41	31	65
55°	5	11	9	5	6	11
65°	0	0	1	1	2	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	428.1	428.1	428.1	428.1	428.1
2.5°	426.2	428.1	423.5	428.1	429.0
5°	423.5	423.5	417.2	418.1	419.0
7.5°	419.0	417.2	406.3	404.5	402.7
10°	410.0	406.3	392.8	385.5	382.8
12.5°	397.3	391.9	373.8	365.6	361.1
15°	378.3	371.0	352.0	343.0	337.6
17.5°	353.8	347.5	329.4	319.5	314.0
20°	328.5	319.5	304.1	294.1	286.9
22.5°	304.1	292.3	276.0	268.8	261.5
25°	276.9	263.3	248.0	242.5	235.3
27.5°	254.3	237.1	219.0	215.4	209.0
30°	227.1	210.9	193.7	188.2	181.0
32.5°	203.6	185.5	168.3	162.0	155.7
35°	179.2	161.1	143.0	136.7	128.5
37.5°	155.7	138.5	120.4	110.4	103.2
40°	130.3	115.8	98.6	86.0	76.9
42.5°	107.7	95.0	78.7	62.4	53.4
45°	84.2	74.2	60.6	40.7	30.8
47.5°	62.4	55.2	44.3	23.5	16.3
50°	41.6	38.9	29.0	11.8	10.0
52.5°	22.6	24.4	17.2	7.2	8.1
55°	5.4	10.9	9.0	5.4	6.3
57.5°	0.9	1.8	4.5	4.5	4.5
60°	0.9	0.9	1.8	2.7	3.6
62.5°	0.9	0.0	0.9	1.8	2.7
65°	0.0	0.0	0.9	0.9	1.8
67.5°	0.0	0.0	0.0	0.9	0.9
70°	0.0	0.0	0.0	0.9	0.9
72.5°	0.0	0.0	0.0	0.0	0.9
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00