

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: P1058485

Luminaire Tested: S122RDR-H675D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058485  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-H675D930-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

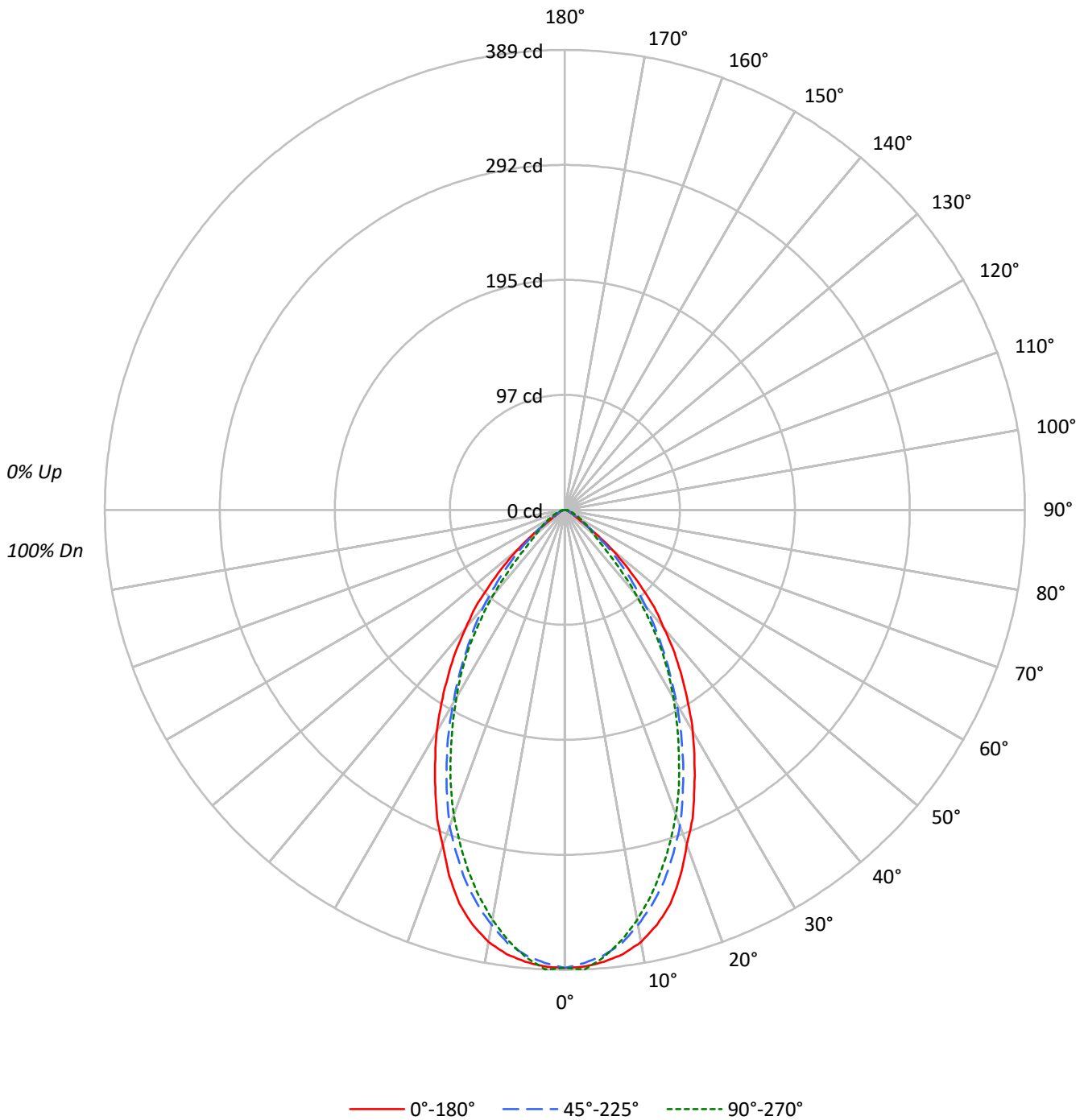
Lumens per Lamp: N/A  
Luminaire Lumens: 416.7 lumens  
Efficiency: N/A  
Efficacy: 17.7 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

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

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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	113	110	107	104	110	107	105	103	103	101	99		100	98	96		96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89		93	90	87		90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80		86	82	79		84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73		80	76	72		78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67		74	70	66		73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61		69	64	61		68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56		65	60	56		64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52		61	56	52		60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48		57	52	48		56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45		54	49	45		53	48	45	44

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7150	7150	7150
5°	7105	7005	7033
10°	6955	6680	6594
15°	6589	6205	6027
20°	5922	5589	5390
25°	5275	4817	4644
30°	4613	4021	3906
35°	3886	3257	3154
40°	3129	2570	2274
45°	2341	1855	1352
50°	1464	1200	887
55°	499	647	721
60°	284	399	572
65°	201	271	441
70°	167	210	334
75°	107	164	278
80°	85	159	244
85°	0	0	169

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2341 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.7	8.6
10°-20°	91.4	21.9
20°-30°	110.1	26.4
30°-40°	94.0	22.6
40°-50°	55.1	13.2
50°-60°	19.9	4.8
60°-70°	7.1	1.7
70°-80°	2.8	0.7
80°-90°	0.5	0.1
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°	237.2	56.9
0°-40°	331.2	79.5
0°-60°	406.3	97.5
0°-90°	416.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	416.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	388	388	388	388	388	
5°	384	384	378	380	380	36
15°	345	340	325	319	316	96
25°	259	248	237	233	228	119
35°	172	159	145	143	140	108
45°	90	80	71	60	52	69
55°	16	22	20	21	22	19
65°	5	5	6	8	10	5
75°	2	2	2	3	4	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	387.5	387.5	387.5	387.5	387.5
2.5°	386.7	387.5	383.6	387.5	389.0
5°	383.6	384.4	378.2	379.7	379.7
7.5°	378.9	378.2	369.7	368.1	367.3
10°	371.2	368.9	356.5	354.2	351.9
12.5°	359.6	355.0	341.8	338.0	334.9
15°	344.9	339.5	324.8	318.6	315.5
17.5°	324.8	318.6	304.7	298.5	295.4
20°	301.6	295.4	284.6	277.6	274.5
22.5°	282.3	272.2	260.6	256.0	252.1
25°	259.1	248.3	236.6	232.8	228.1
27.5°	237.4	224.3	212.7	209.6	205.7
30°	216.5	202.6	188.7	188.7	183.3
32.5°	194.1	181.0	166.3	165.5	162.4
35°	172.5	159.3	144.6	143.1	140.0
37.5°	152.4	139.2	125.3	120.6	116.8
40°	129.9	118.3	106.7	99.0	94.4
42.5°	112.1	99.0	87.4	78.1	71.9
45°	89.7	80.4	71.1	59.5	51.8
47.5°	69.6	63.4	55.7	42.5	38.7
50°	51.0	47.9	41.8	31.7	30.9
52.5°	32.5	34.0	30.2	24.7	27.1
55°	15.5	21.7	20.1	20.9	22.4
57.5°	10.1	10.8	14.7	17.0	18.6
60°	7.7	7.7	10.8	13.9	15.5
62.5°	6.2	6.2	8.5	11.6	12.4
65°	4.6	5.4	6.2	8.5	10.1
67.5°	3.9	3.9	4.6	7.0	7.7
70°	3.1	3.1	3.9	5.4	6.2
72.5°	2.3	2.3	3.1	4.6	4.6
75°	1.5	2.3	2.3	3.1	3.9
77.5°	1.5	1.5	1.5	2.3	3.1
80°	0.8	0.8	1.5	1.5	2.3
82.5°	0.8	0.8	0.8	0.8	1.5
85°	0.0	0.0	0.0	0.8	0.8
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	2.71	3.87	3.07	4.18	4.50	6.11	7.28	6.48	7.59	7.90
	3H	3.24	4.26	3.62	4.59	4.96	6.84	7.86	7.22	8.20	8.56
	4H	3.36	4.31	3.77	4.66	5.05	7.06	8.01	7.46	8.36	8.75
	6H	3.43	4.30	3.85	4.67	5.07	7.21	8.07	7.62	8.45	8.84
	8H	3.44	4.26	3.88	4.65	5.06	7.24	8.05	7.67	8.45	8.85
	12H	3.41	4.19	3.84	4.57	5.00	7.24	8.02	7.67	8.40	8.83
4H	2H	3.02	3.97	3.43	4.32	4.71	6.08	7.03	6.49	7.38	7.77
	3H	3.69	4.46	4.10	4.86	5.27	6.96	7.72	7.37	8.13	8.54
	4H	3.92	4.60	4.36	5.02	5.47	7.24	7.92	7.67	8.34	8.79
	6H	4.03	4.62	4.50	5.07	5.54	7.46	8.04	7.92	8.49	8.96
	8H	4.05	4.60	4.53	5.05	5.52	7.50	8.05	7.97	8.49	8.97
	12H	4.02	4.50	4.51	4.99	5.46	7.52	8.00	8.01	8.48	8.96
8H	4H	4.02	4.57	4.49	5.02	5.49	7.17	7.71	7.64	8.16	8.63
	6H	4.18	4.62	4.69	5.13	5.61	7.42	7.86	7.93	8.36	8.84
	8H	4.24	4.63	4.76	5.15	5.65	7.48	7.87	8.01	8.39	8.89
	12H	4.22	4.56	4.74	5.06	5.64	7.54	7.89	8.06	8.39	8.96
12H	4H	4.01	4.48	4.49	4.97	5.45	7.12	7.60	7.61	8.08	8.56
	6H	4.18	4.58	4.71	5.10	5.59	7.37	7.76	7.90	8.28	8.78
	8H	4.26	4.61	4.78	5.11	5.68	7.45	7.80	7.97	8.30	8.87