

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: P1058514

Luminaire Tested: S122RDR-H675D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058514  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-H675D950-X4F0-XX-UDD-SVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

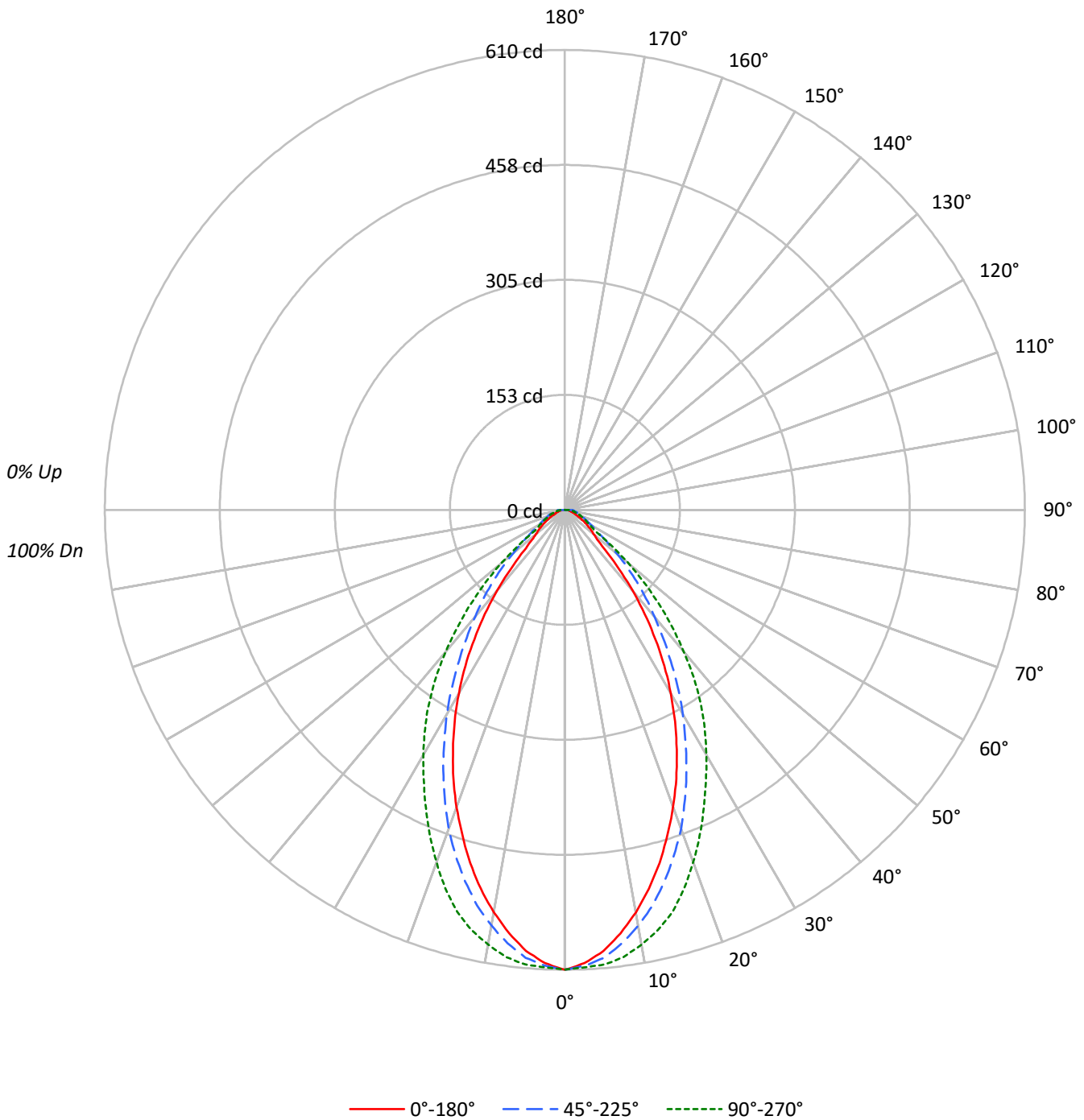
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 739.8 lumens  
Efficiency: N/A  
Efficacy: 31.5 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95  
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	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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			89	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65			65	
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59			59	
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54	
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50			50	
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46			46	
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42			42	
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39			39	

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

	0°	45°	90°
0°	11254	11254	11254
5°	10879	11045	11214
10°	10154	10495	10969
15°	9263	9747	10543
20°	8240	8844	9769
25°	7140	7767	8875
30°	5985	6663	7994
35°	4715	5512	7085
40°	3363	4454	5916
45°	1986	3523	4588
50°	1430	2549	3123
55°	1197	1837	1573
60°	971	1473	1340
65°	790	1306	1227
70°	685	1273	1176
75°	649	1290	1162
80°	669	1541	1254
85°	953	2498	1546

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4588 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.9	7.6
10°-20°	143.7	19.4
20°-30°	177.3	24.0
30°-40°	157.7	21.3
40°-50°	100.7	13.6
50°-60°	48.3	6.5
60°-70°	28.4	3.8
70°-80°	18.1	2.4
80°-90°	9.7	1.3
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°	376.9	51.0
0°-40°	534.6	72.3
0°-60°	683.6	92.4
0°-90°	739.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	739.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	610	610	610	610	610	
5°	587	598	596	600	605	55
15°	485	497	510	534	552	135
25°	351	364	382	409	436	161
35°	209	226	245	282	314	130
45°	76	99	135	157	176	64
55°	37	48	57	55	49	34
65°	18	33	30	27	28	18
75°	9	20	18	17	16	10
85°	4	11	12	10	7	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	609.9	609.9	609.9	609.9	609.9
2.5°	601.8	611.7	605.4	605.4	607.2
5°	587.3	598.1	596.3	599.9	605.4
7.5°	566.4	578.2	580.0	590.0	598.1
10°	541.9	554.6	560.1	574.6	585.4
12.5°	514.8	527.4	537.4	555.5	570.9
15°	484.9	496.6	510.2	533.8	551.9
17.5°	452.2	467.6	481.2	505.7	526.5
20°	419.6	434.1	450.4	474.0	497.5
22.5°	386.1	399.7	416.0	440.4	467.6
25°	350.7	364.3	381.5	408.7	435.9
27.5°	316.3	329.9	346.2	376.1	405.1
30°	280.9	294.5	312.7	343.5	375.2
32.5°	245.6	260.1	278.2	311.8	345.3
35°	209.3	225.7	244.7	281.8	314.5
37.5°	174.0	190.3	213.9	250.1	280.9
40°	139.6	158.6	184.9	217.5	245.6
42.5°	106.0	126.9	159.5	185.8	210.3
45°	76.1	98.8	135.0	156.8	175.8
47.5°	58.0	74.3	111.5	128.7	142.3
50°	49.8	59.8	88.8	101.5	108.8
52.5°	43.5	52.6	70.7	77.0	77.0
55°	37.2	48.0	57.1	55.3	48.9
57.5°	31.7	43.5	47.1	39.9	41.7
60°	26.3	39.9	39.9	35.3	36.3
62.5°	21.8	37.2	34.4	30.8	31.7
65°	18.1	32.6	29.9	27.2	28.1
67.5°	14.5	29.0	26.3	24.5	24.5
70°	12.7	26.3	23.6	21.8	21.8
72.5°	10.9	22.7	20.8	19.0	19.0
75°	9.1	19.9	18.1	17.2	16.3
77.5°	8.2	17.2	16.3	14.5	13.6
80°	6.3	14.5	14.5	13.6	11.8
82.5°	5.4	12.7	12.7	11.8	10.0
85°	4.5	10.9	11.8	10.0	7.3
87.5°	3.6	10.0	10.0	8.2	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	10.08	11.36	10.45	11.67	11.99	9.88	11.15	10.24	11.46	11.78
	3H	11.31	12.45	11.69	12.78	13.14	11.47	12.61	11.85	12.94	13.30
	4H	11.77	12.83	12.17	13.18	13.56	12.18	13.24	12.59	13.59	13.98
	6H	12.15	13.12	12.56	13.49	13.89	12.84	13.81	13.25	14.18	14.58
	8H	12.30	13.22	12.73	13.61	14.02	13.17	14.09	13.60	14.48	14.89
	12H	12.46	13.34	12.89	13.72	14.15	13.47	14.35	13.90	14.73	15.16
4H	2H	10.63	11.69	11.03	12.04	12.42	10.47	11.53	10.87	11.88	12.26
	3H	12.33	13.20	12.74	13.60	14.01	12.31	13.18	12.72	13.58	13.99
	4H	13.12	13.90	13.56	14.32	14.77	13.18	13.96	13.61	14.38	14.82
	6H	13.76	14.44	14.23	14.89	15.35	14.02	14.70	14.49	15.15	15.61
	8H	14.01	14.65	14.48	15.09	15.56	14.45	15.08	14.92	15.53	16.00
	12H	14.26	14.82	14.74	15.30	15.77	14.85	15.41	15.34	15.90	16.37
8H	4H	13.54	14.17	14.01	14.62	15.09	13.59	14.23	14.06	14.67	15.15
	6H	14.52	15.04	15.02	15.53	16.01	14.68	15.20	15.18	15.70	16.18
	8H	15.01	15.47	15.53	15.99	16.48	15.27	15.74	15.80	16.26	16.75
	12H	15.51	15.92	16.02	16.42	16.99	15.88	16.29	16.40	16.79	17.36
12H	4H	13.61	14.17	14.09	14.65	15.12	13.67	14.23	14.16	14.71	15.19
	6H	14.68	15.15	15.21	15.67	16.16	14.84	15.31	15.37	15.83	16.32
	8H	15.32	15.73	15.84	16.23	16.80	15.56	15.97	16.07	16.47	17.04