

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: P1058057

Luminaire Tested: S122RDR-S675D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058057  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S675D840-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

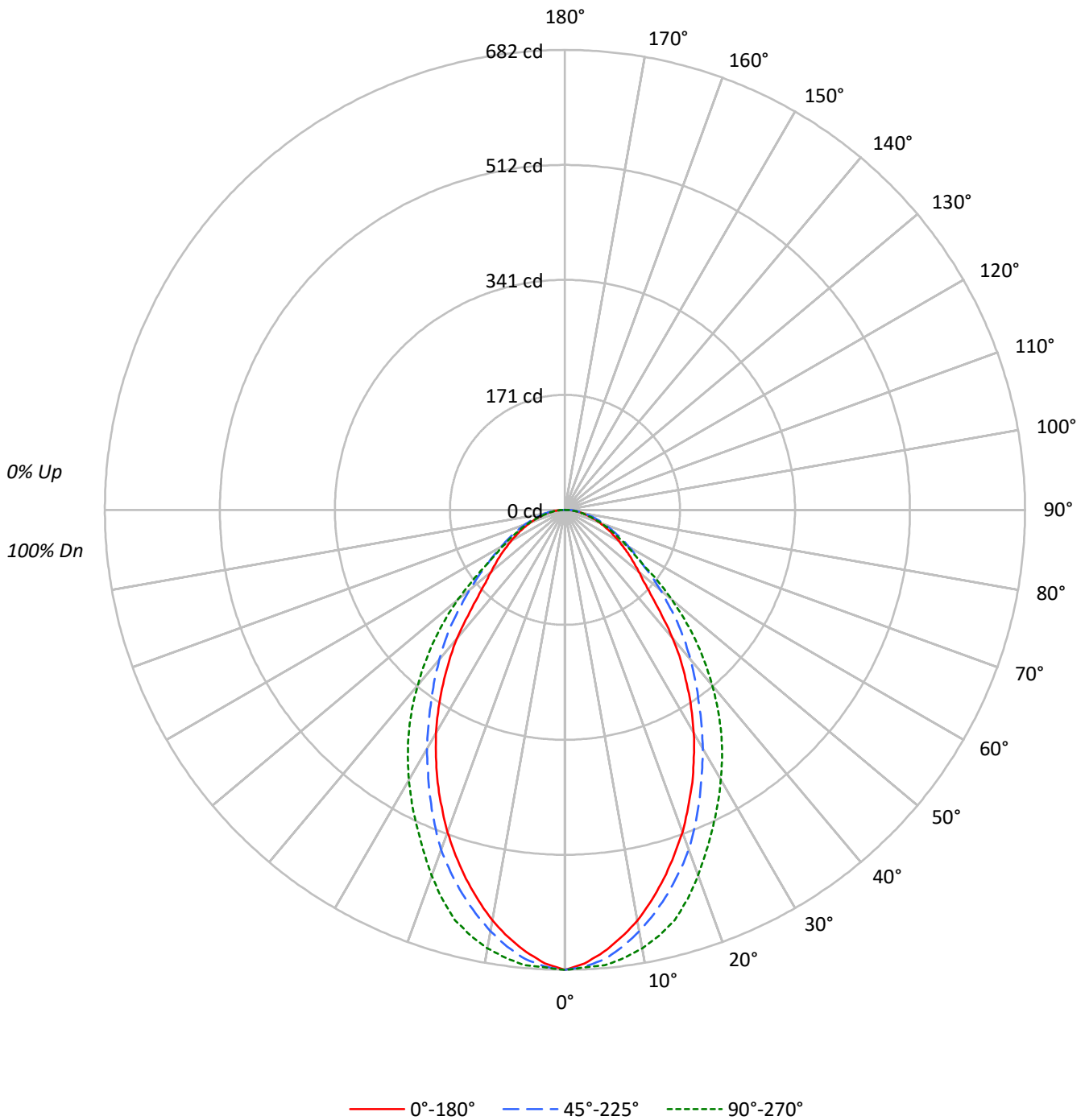
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1110.7 lumens  
Efficiency: N/A  
Efficacy: 43.0 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87			87	
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76			76	
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66			66	
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59			59	
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52			52	
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47			47	
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43			43	
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39			39	
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36			36	
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33			33	

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

	0°	45°	90°
0°	12586	12586	12586
5°	12194	12396	12560
10°	11593	11891	12372
15°	10818	11252	12028
20°	9993	10537	11334
25°	9091	9614	10563
30°	8141	8712	9850
35°	7091	7783	9098
40°	5986	6964	8180
45°	4755	6148	7155
50°	4094	5285	5939
55°	3725	4523	4555
60°	3399	4019	3871
65°	3113	3633	3414
70°	2886	3367	3043
75°	2681	3173	2681
80°	2529	3050	2423
85°	2519	3133	2096

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7155 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.0	5.7
10°-20°	166.5	15.0
20°-30°	219.1	19.7
30°-40°	220.3	19.8
40°-50°	178.5	16.1
50°-60°	123.0	11.1
60°-70°	80.5	7.2
70°-80°	44.8	4.0
80°-90°	15.2	1.4
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°	448.5	40.4
0°-40°	668.7	60.2
0°-60°	970.2	87.4
0°-90°	1110.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1110.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	682	682	682	682	682	
5°	658	671	669	672	678	62
15°	566	580	589	611	630	159
25°	446	458	472	493	519	205
35°	315	330	346	376	404	196
45°	182	203	236	256	274	144
55°	116	129	141	144	142	104
65°	71	85	83	79	78	71
75°	38	46	44	40	38	40
85°	12	16	15	13	10	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	682.1	682.1	682.1	682.1	682.1
2.5°	673.2	685.1	678.1	678.1	679.1
5°	658.3	671.2	669.2	672.2	678.1
7.5°	639.5	653.4	653.4	662.3	670.2
10°	618.7	632.6	634.6	648.4	660.3
12.5°	593.0	606.9	612.8	630.6	646.5
15°	566.3	580.1	589.0	610.8	629.6
17.5°	537.6	551.4	563.3	586.1	604.9
20°	508.9	521.7	536.6	556.4	577.2
22.5°	477.2	491.0	504.9	523.7	547.5
25°	446.5	458.4	472.2	493.0	518.8
27.5°	413.8	426.7	439.6	464.3	491.0
30°	382.1	395.0	408.9	434.6	462.3
32.5°	348.5	362.3	376.2	404.9	433.6
35°	314.8	329.7	345.5	376.2	403.9
37.5°	282.1	298.0	316.8	348.5	372.2
40°	248.5	265.3	289.1	316.8	339.6
42.5°	212.8	233.6	262.3	286.1	306.9
45°	182.2	202.9	235.6	256.4	274.2
47.5°	159.4	176.2	207.9	225.7	240.6
50°	142.6	155.4	184.1	197.0	206.9
52.5°	128.7	141.6	161.4	170.3	173.2
55°	115.8	128.7	140.6	143.5	141.6
57.5°	103.0	116.8	123.7	120.8	120.8
60°	92.1	106.9	108.9	104.9	104.9
62.5°	81.2	96.0	96.0	91.1	91.1
65°	71.3	85.1	83.2	79.2	78.2
67.5°	62.4	75.2	72.3	68.3	67.3
70°	53.5	65.3	62.4	57.4	56.4
72.5°	45.5	56.4	52.5	48.5	46.5
75°	37.6	46.5	44.5	39.6	37.6
77.5°	30.7	37.6	35.6	31.7	29.7
80°	23.8	29.7	28.7	24.7	22.8
82.5°	17.8	22.8	21.8	18.8	15.8
85°	11.9	15.8	14.8	12.9	9.9
87.5°	5.9	10.9	9.9	8.9	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)