

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: P1058065

Luminaire Tested: S122RDR-S675D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058065  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S675D850-X4F0-XX-UDD-WVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

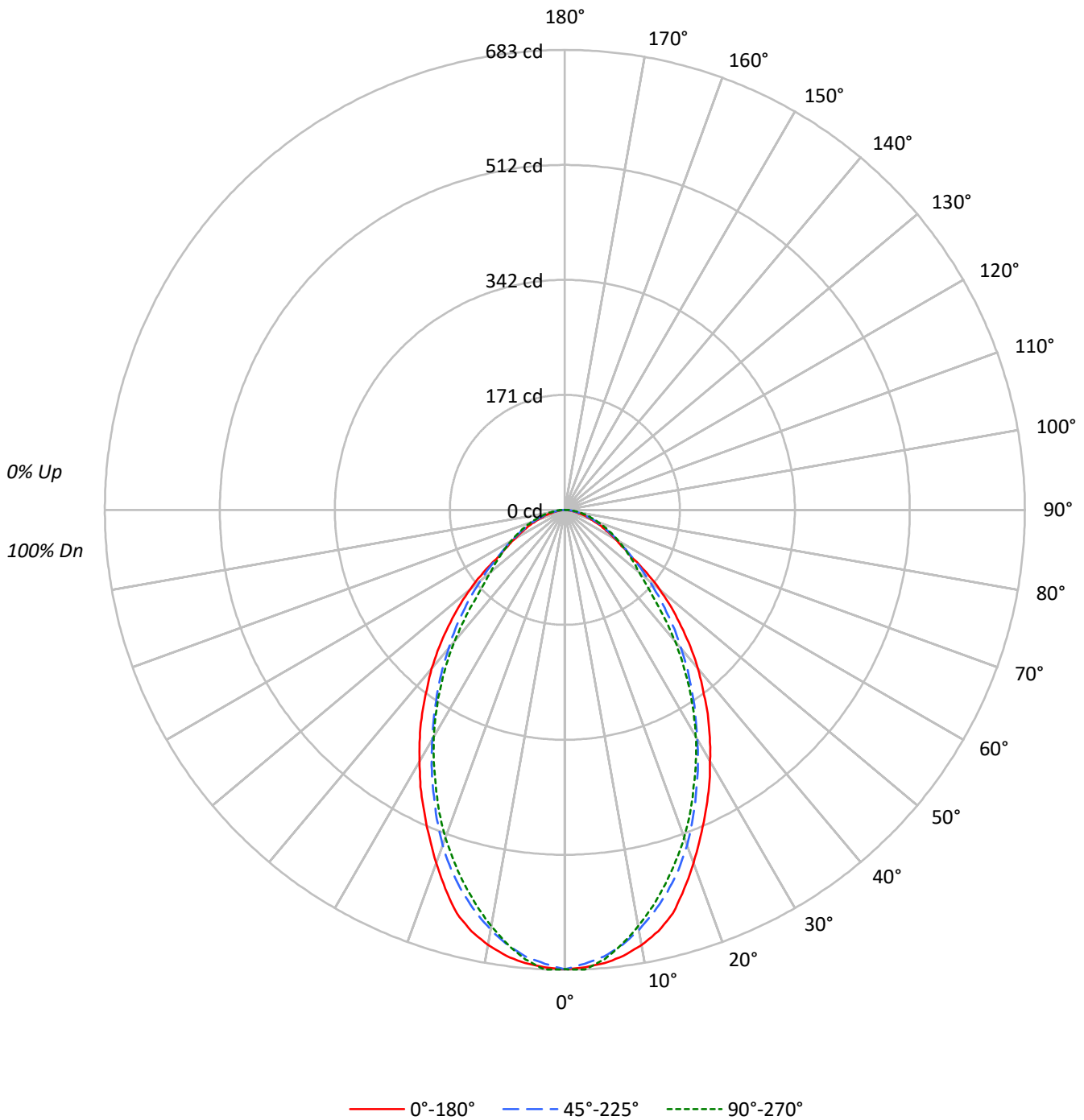
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1036.2 lumens  
Efficiency: N/A  
Efficacy: 40.2 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02  
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

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

	0°	45°	90°
0°	12590	12590	12590
5°	12516	12336	12416
10°	12295	11868	11765
15°	11850	11227	11000
20°	10965	10411	10176
25°	10064	9400	9223
30°	9190	8380	8286
35°	8321	7416	7244
40°	7407	6463	6123
45°	6378	5556	4903
50°	5271	4679	4117
55°	3809	3880	3706
60°	3166	3329	3369
65°	2703	2895	3083
70°	2228	2579	2811
75°	1861	2167	2559
80°	1381	1732	2306
85°	466	910	2075

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6378 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.1	6.1
10°-20°	166.1	16.0
20°-30°	214.9	20.7
30°-40°	210.8	20.3
40°-50°	166.0	16.0
50°-60°	108.8	10.5
60°-70°	66.2	6.4
70°-80°	33.1	3.2
80°-90°	7.1	0.7
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°	444.1	42.9
0°-40°	654.9	63.2
0°-60°	929.7	89.7
0°-90°	1036.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1036.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	682	682	682	682	682	
5°	676	676	666	670	670	64
15°	620	612	588	580	576	173
25°	494	478	462	460	453	227
35°	369	349	329	328	322	230
45°	244	229	213	198	188	188
55°	118	125	121	116	115	112
65°	62	63	66	70	71	62
75°	26	27	30	35	36	28
85°	2	3	4	8	10	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	682.3	682.3	682.3	682.3	682.3
2.5°	680.1	681.2	674.7	681.2	683.3
5°	675.7	675.7	666.0	670.3	670.3
7.5°	668.1	667.1	651.8	651.8	650.8
10°	656.2	651.8	633.4	630.1	627.9
12.5°	641.0	633.4	611.6	606.2	603.0
15°	620.3	611.6	587.7	580.1	575.8
17.5°	589.9	581.2	560.6	551.9	547.5
20°	558.4	545.4	530.2	522.6	518.2
22.5°	525.8	510.6	496.5	491.1	486.7
25°	494.3	478.0	461.7	459.5	453.0
27.5°	463.9	444.3	428.0	427.0	421.5
30°	431.3	410.7	393.3	394.4	388.9
32.5°	400.9	381.3	360.7	361.8	355.3
35°	369.4	348.7	329.2	328.1	321.6
37.5°	336.8	317.2	298.8	294.4	287.9
40°	307.5	287.9	268.3	260.7	254.2
42.5°	275.9	258.6	241.2	229.2	220.5
45°	244.4	229.2	212.9	197.7	187.9
47.5°	214.0	202.1	187.9	169.5	163.0
50°	183.6	174.9	163.0	146.7	143.4
52.5°	152.1	148.8	141.2	130.4	129.3
55°	118.4	124.9	120.6	116.2	115.2
57.5°	99.9	101.0	104.3	103.2	103.2
60°	85.8	85.8	90.2	91.3	91.3
62.5°	72.8	73.9	78.2	80.4	80.4
65°	61.9	63.0	66.3	69.5	70.6
67.5°	51.1	53.2	56.5	59.8	60.8
70°	41.3	43.5	47.8	51.1	52.1
72.5°	33.7	34.8	39.1	42.4	43.5
75°	26.1	27.2	30.4	34.8	35.9
77.5°	18.5	20.6	23.9	27.2	29.3
80°	13.0	14.1	16.3	20.6	21.7
82.5°	7.6	8.7	10.9	14.1	15.2
85°	2.2	3.3	4.3	7.6	9.8
87.5°	0.0	0.0	0.0	2.2	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)