

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: P1058101

Luminaire Tested: S122RDR-S675D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058101  
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-S675D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

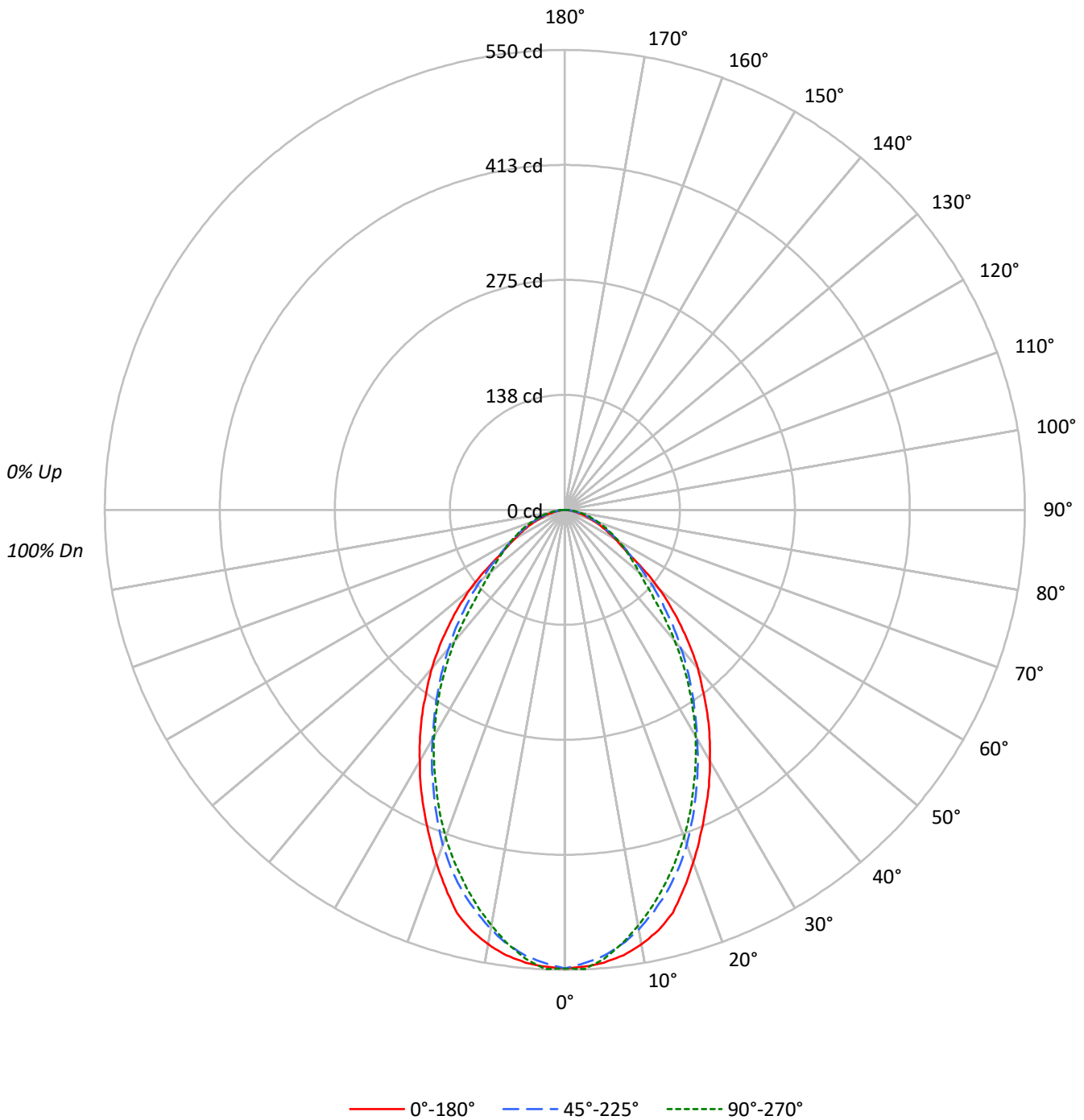
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 833.1 lumens  
Efficiency: N/A  
Efficacy: 32.3 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	10123	10123	10123
5°	10064	9919	9984
10°	9886	9543	9460
15°	9529	9028	8845
20°	8817	8371	8183
25°	8093	7560	7417
30°	7389	6737	6663
35°	6690	5963	5825
40°	5955	5198	4924
45°	5128	4468	3943
50°	4237	3761	3310
55°	3063	3121	2979
60°	2546	2676	2709
65°	2174	2327	2480
70°	1791	2072	2261
75°	1497	1747	2053
80°	1116	1392	1860
85°	360	741	1673

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5128 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.7	6.1
10°-20°	133.5	16.0
20°-30°	172.8	20.7
30°-40°	169.5	20.3
40°-50°	133.5	16.0
50°-60°	87.5	10.5
60°-70°	53.3	6.4
70°-80°	26.6	3.2
80°-90°	5.7	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°	357.1	42.9
0°-40°	526.6	63.2
0°-60°	747.5	89.7
0°-90°	833.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	833.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	549	549	549	549	549	
5°	543	543	536	539	539	51
15°	499	492	473	466	463	139
25°	398	384	371	370	364	183
35°	297	280	265	264	259	185
45°	196	184	171	159	151	151
55°	95	100	97	94	93	90
65°	50	51	53	56	57	50
75°	21	22	24	28	29	22
85°	2	3	4	6	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	548.6	548.6	548.6	548.6	548.6
2.5°	546.8	547.7	542.5	547.7	549.5
5°	543.3	543.3	535.5	539.0	539.0
7.5°	537.2	536.4	524.1	524.1	523.3
10°	527.6	524.1	509.3	506.7	504.9
12.5°	515.4	509.3	491.8	487.4	484.8
15°	498.8	491.8	472.6	466.5	463.0
17.5°	474.3	467.3	450.7	443.8	440.3
20°	449.0	438.5	426.3	420.2	416.7
22.5°	422.8	410.6	399.2	394.8	391.3
25°	397.5	384.4	371.3	369.5	364.3
27.5°	373.0	357.3	344.2	343.3	338.9
30°	346.8	330.2	316.2	317.1	312.7
32.5°	322.3	306.6	290.0	290.9	285.6
35°	297.0	280.4	264.7	263.8	258.6
37.5°	270.8	255.1	240.2	236.7	231.5
40°	247.2	231.5	215.8	209.7	204.4
42.5°	221.9	207.9	193.9	184.3	177.3
45°	196.5	184.3	171.2	159.0	151.1
47.5°	172.1	162.5	151.1	136.3	131.0
50°	147.6	140.6	131.0	117.9	115.3
52.5°	122.3	119.7	113.6	104.8	104.0
55°	95.2	100.5	97.0	93.5	92.6
57.5°	80.4	81.2	83.9	83.0	83.0
60°	69.0	69.0	72.5	73.4	73.4
62.5°	58.5	59.4	62.9	64.6	64.6
65°	49.8	50.7	53.3	55.9	56.8
67.5°	41.1	42.8	45.4	48.0	48.9
70°	33.2	34.9	38.4	41.1	41.9
72.5°	27.1	28.0	31.4	34.1	34.9
75°	21.0	21.8	24.5	28.0	28.8
77.5°	14.9	16.6	19.2	21.8	23.6
80°	10.5	11.4	13.1	16.6	17.5
82.5°	6.1	7.0	8.7	11.4	12.2
85°	1.7	2.6	3.5	6.1	7.9
87.5°	0.0	0.0	0.0	1.7	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)