

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: P1055234

Luminaire Tested: S122R3DR-S675D850-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055234  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122R3DR-S675D850-X4F0-XX-UDD-FLL-S  
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

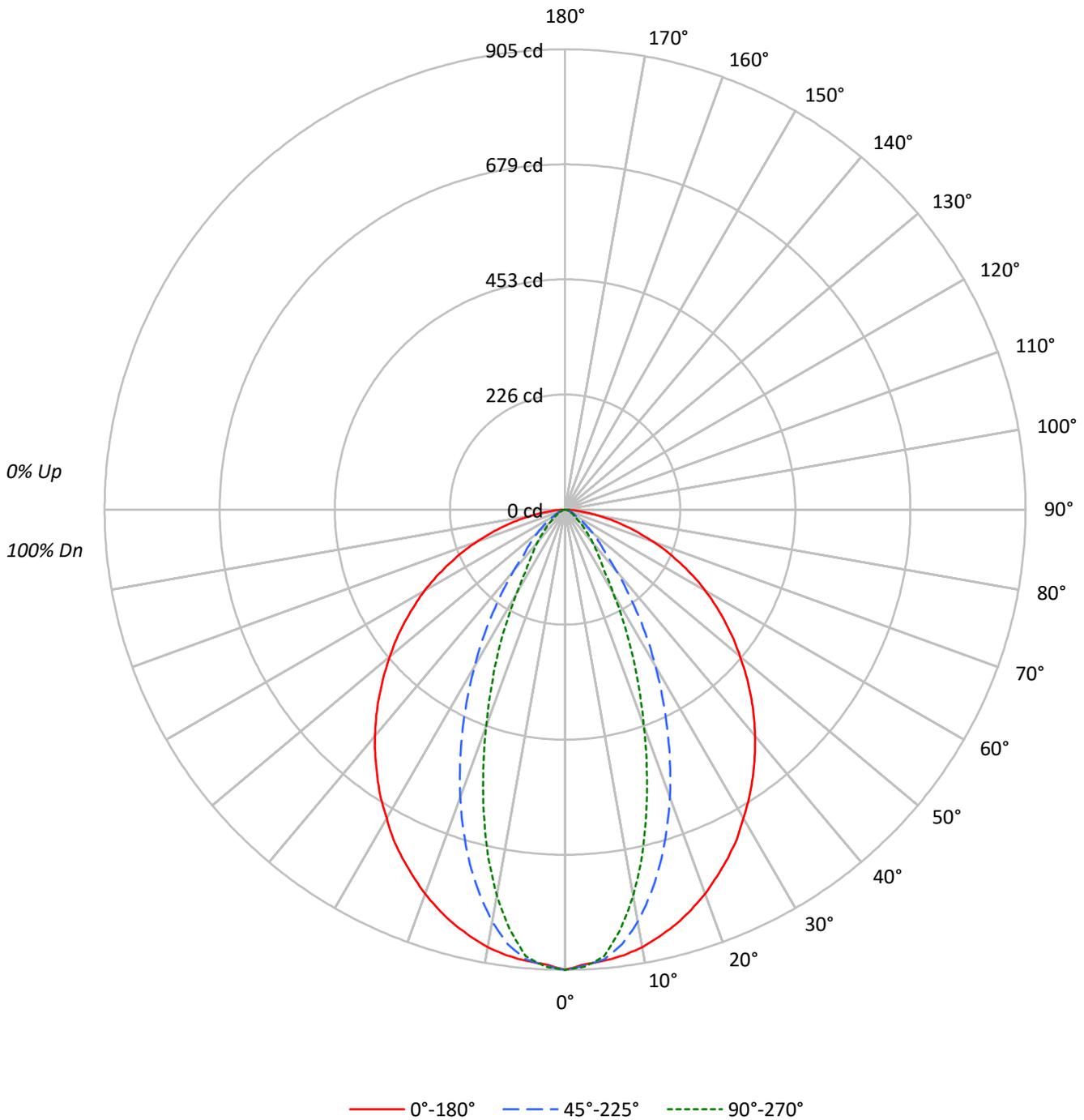
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1037.1 lumens  
Efficiency: N/A  
Efficacy: 39.3 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81  
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.4  
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				
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71				
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64				
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58				
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53				
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45				
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39				

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

	0°	45°	90°
0°	17144	17144	17144
5°	16936	16873	16768
10°	16812	15831	14829
15°	16552	14161	12094
20°	16210	12141	9123
25°	15810	9946	6514
30°	15333	7764	4148
35°	14876	5694	2771
40°	14372	3841	2085
45°	13817	2703	1484
50°	13237	2060	1046
55°	12674	1430	770
60°	12061	966	629
65°	11185	695	498
70°	10198	554	432
75°	8850	490	322
80°	7015	360	360
85°	3848	478	239

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13817 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.7	8.0
10°-20°	203.1	19.6
20°-30°	232.0	22.4
30°-40°	196.7	19.0
40°-50°	146.8	14.2
50°-60°	94.9	9.1
60°-70°	52.9	5.1
70°-80°	23.2	2.2
80°-90°	4.8	0.5
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°	517.8	49.9
0°-40°	714.5	68.9
0°-60°	956.2	92.2
0°-90°	1037.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1037.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	890	902	887	878	882	85
15°	844	823	722	645	617	238
25°	756	668	476	348	312	348
35°	643	485	246	134	120	402
45°	516	306	101	65	55	398
55°	384	145	43	27	23	343
65°	250	53	16	12	11	248
75°	121	11	7	6	4	129
85°	18	1	2	1	1	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	904.9	904.9	904.9	904.9	904.9
2.5°	895.0	908.3	897.2	897.2	899.4
5°	890.5	901.6	887.2	878.3	881.7
7.5°	883.9	891.6	861.7	835.1	832.9
10°	873.9	877.2	822.9	781.8	770.8
12.5°	859.5	851.7	775.2	717.5	698.7
15°	843.9	822.9	722.0	645.4	616.6
17.5°	825.1	787.4	663.2	570.0	534.5
20°	804.0	750.8	602.2	491.3	452.5
22.5°	780.7	709.8	539.0	417.0	378.2
25°	756.3	667.6	475.8	348.2	311.6
27.5°	730.8	623.3	413.7	286.1	246.2
30°	700.9	577.8	354.9	226.2	189.6
32.5°	673.2	530.1	300.5	175.2	144.2
35°	643.2	484.6	246.2	134.2	119.8
37.5°	612.2	439.2	198.5	113.1	100.9
40°	581.1	393.7	155.3	95.4	84.3
42.5°	549.0	349.3	119.8	79.8	68.8
45°	515.7	306.1	100.9	65.4	55.4
47.5°	482.4	262.8	84.3	52.1	44.4
50°	449.1	221.8	69.9	41.0	35.5
52.5°	417.0	183.0	55.4	33.3	28.8
55°	383.7	145.3	43.3	26.6	23.3
57.5°	350.4	113.1	33.3	22.2	20.0
60°	318.3	85.4	25.5	17.7	16.6
62.5°	285.0	68.8	20.0	14.4	13.3
65°	249.5	53.2	15.5	12.2	11.1
67.5°	217.4	38.8	12.2	10.0	8.9
70°	184.1	26.6	10.0	8.9	7.8
72.5°	151.9	16.6	7.8	6.7	6.7
75°	120.9	11.1	6.7	5.5	4.4
77.5°	92.0	6.7	4.4	4.4	3.3
80°	64.3	4.4	3.3	3.3	3.3
82.5°	39.9	3.3	2.2	2.2	2.2
85°	17.7	1.1	2.2	1.1	1.1
87.5°	3.3	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)