

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: P1055230

Luminaire Tested: S122R3DR-S675D840-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

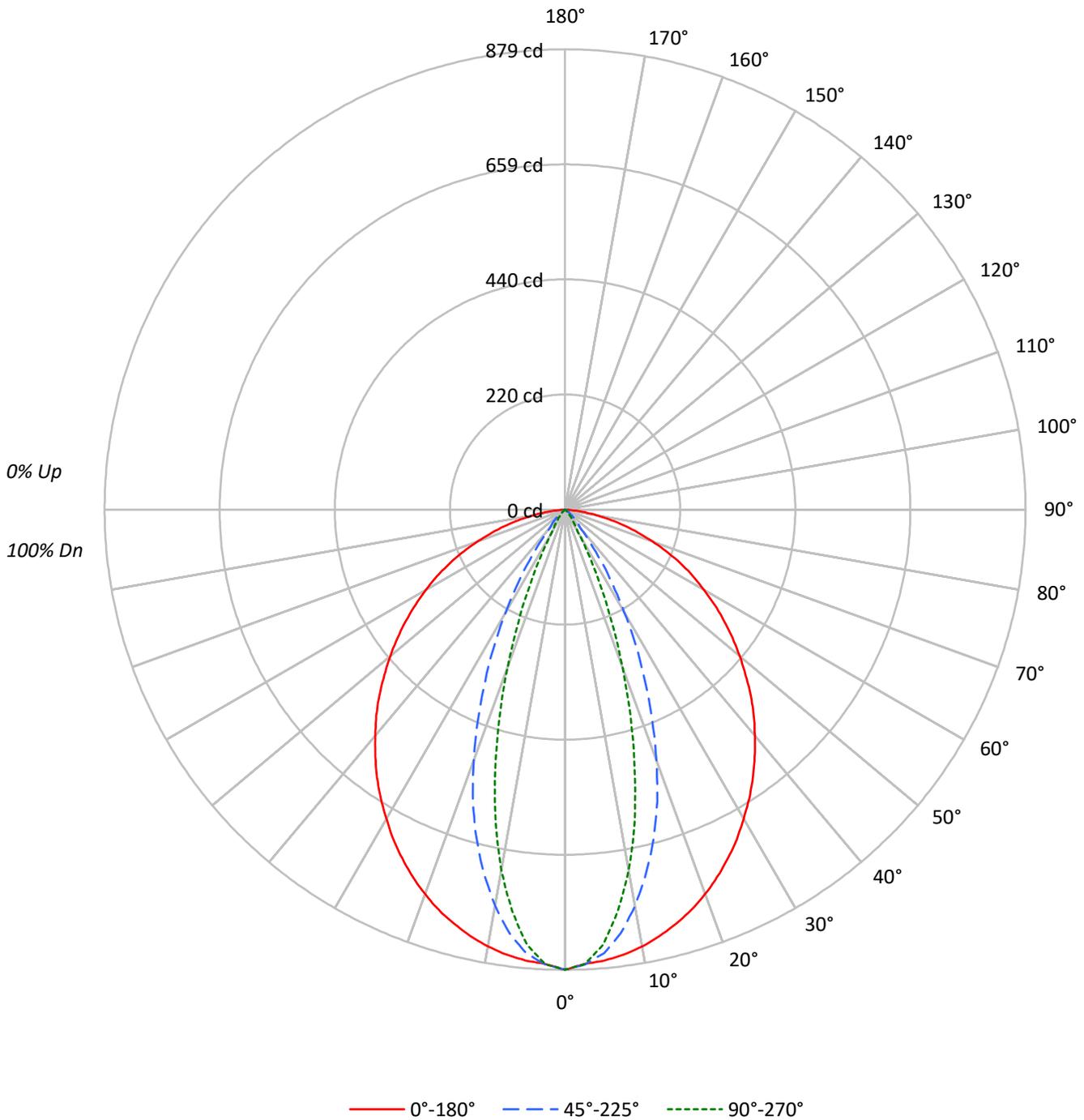
Test Method: LM-79-2019  
Report Number: P1055230  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122R3DR-S675D840-X4F0-XX-UDD-FLL-B  
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 799.3 lumens  
Efficiency: N/A  
Efficacy: 30.3 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7  
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





TEST NUMBER: P1055230

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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	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	56
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43

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

	0°	45°	90°
0°	16646	16646	16646
5°	16441	16171	15865
10°	16300	14784	13463
15°	16064	12796	10082
20°	15758	10282	6454
25°	15369	7536	3313
30°	14913	4927	1083
35°	14458	2734	631
40°	13937	1098	349
45°	13421	731	134
50°	12830	416	59
55°	12241	201	33
60°	11595	76	0
65°	10912	45	0
70°	9788	55	0
75°	8425	73	0
80°	6394	0	0
85°	2630	217	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13421 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.8	9.9
10°-20°	183.0	22.9
20°-30°	185.8	23.2
30°-40°	139.4	17.4
40°-50°	97.6	12.2
50°-60°	59.8	7.5
60°-70°	35.6	4.5
70°-80°	16.4	2.1
80°-90°	2.9	0.4
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°	447.6	56.0
0°-40°	587.0	73.4
0°-60°	744.4	93.1
0°-90°	799.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	799.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	864	872	850	834	834	82
15°	819	775	652	552	514	231
25°	735	606	360	206	158	338
35°	625	407	118	35	27	391
45°	501	215	27	8	5	386
55°	371	66	6	2	1	331
65°	243	19	1	1	0	240
75°	115	2	1	1	0	122
85°	12	0	1	1	0	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	878.6	878.6	878.6	878.6	878.6
2.5°	868.5	881.6	869.5	867.5	868.5
5°	864.5	872.5	850.3	834.2	834.2
7.5°	857.4	857.4	816.0	782.7	772.6
10°	847.3	836.2	768.5	715.0	699.8
12.5°	834.2	807.9	713.0	637.2	613.0
15°	819.0	774.6	652.4	552.4	514.0
17.5°	801.8	737.2	584.7	460.5	416.1
20°	781.6	696.8	510.0	366.6	320.1
22.5°	759.4	652.4	434.2	282.8	233.3
25°	735.2	605.9	360.5	206.0	158.5
27.5°	709.9	557.4	292.9	141.4	96.9
30°	681.7	507.0	225.2	83.8	49.5
32.5°	654.4	458.5	168.6	45.4	36.4
35°	625.1	407.0	118.2	35.3	27.3
37.5°	594.8	358.5	72.7	26.3	20.2
40°	563.5	309.0	44.4	19.2	14.1
42.5°	533.2	262.6	35.3	13.1	9.1
45°	500.9	215.1	27.3	8.1	5.0
47.5°	467.6	171.7	20.2	5.0	3.0
50°	435.3	133.3	14.1	3.0	2.0
52.5°	402.9	98.0	9.1	2.0	1.0
55°	370.6	65.6	6.1	2.0	1.0
57.5°	338.3	46.5	4.0	1.0	1.0
60°	306.0	36.4	2.0	1.0	0.0
62.5°	275.7	28.3	2.0	1.0	1.0
65°	243.4	19.2	1.0	1.0	0.0
67.5°	209.0	12.1	1.0	1.0	0.0
70°	176.7	7.1	1.0	1.0	0.0
72.5°	145.4	4.0	1.0	1.0	0.0
75°	115.1	2.0	1.0	1.0	0.0
77.5°	85.8	1.0	0.0	1.0	0.0
80°	58.6	0.0	0.0	1.0	0.0
82.5°	34.3	0.0	0.0	1.0	0.0
85°	12.1	0.0	1.0	1.0	0.0
87.5°	0.0	0.0	1.0	1.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)