

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: P1055239

Luminaire Tested: S122R3DR-S675D930-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055239
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-S675D930-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

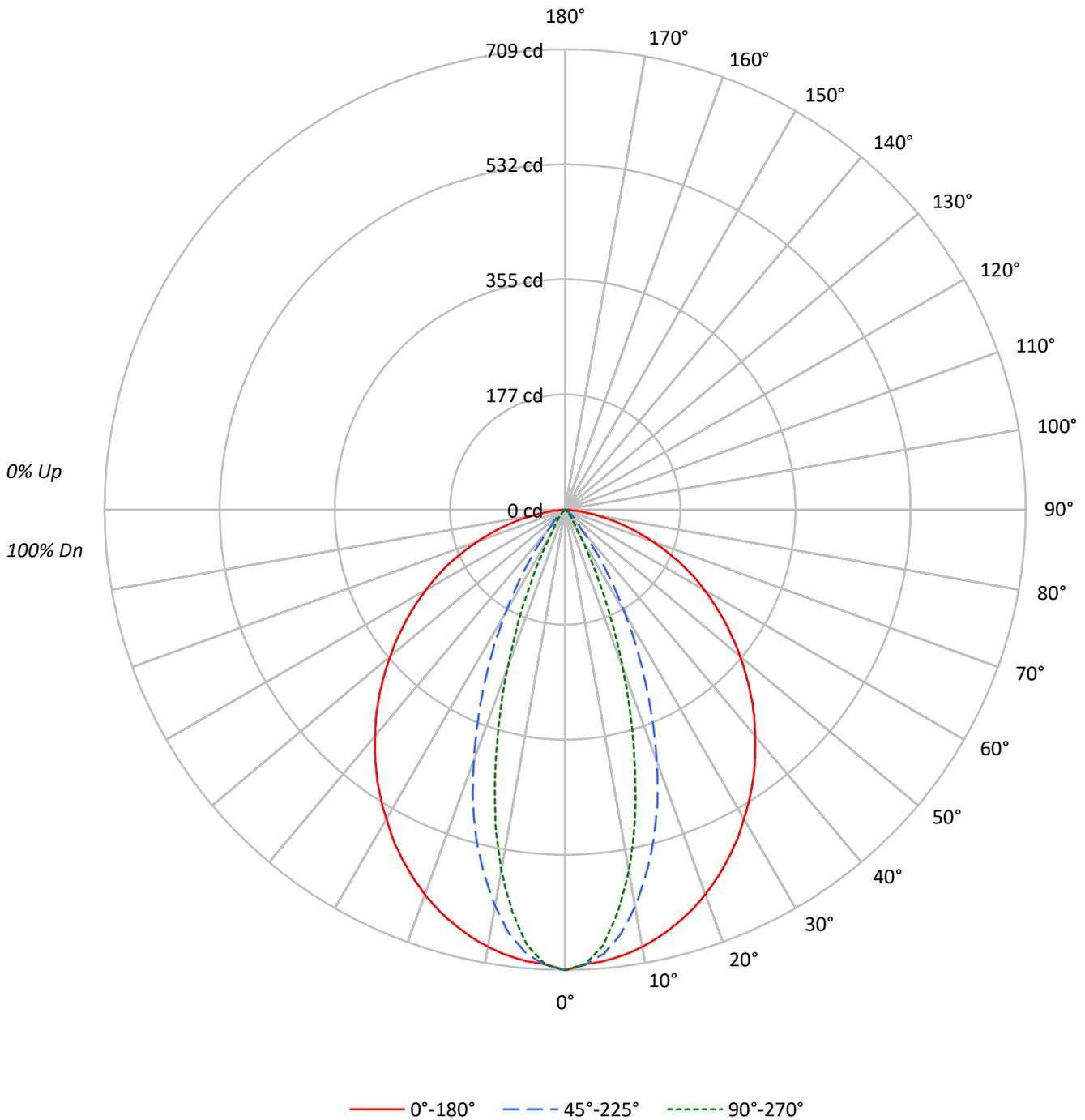
Lumens per Lamp: N/A
Luminaire Lumens: 645.3 lumens
Efficiency: N/A
Efficacy: 24.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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





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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	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°	13438	13438	13438
5°	13273	13056	12807
10°	13159	11935	10870
15°	12969	10331	8140
20°	12722	8301	5212
25°	12407	6085	2676
30°	12039	3977	873
35°	11673	2206	509
40°	11251	888	282
45°	10835	589	110
50°	10357	336	47
55°	9883	162	26
60°	9359	61	0
65°	8809	36	0
70°	7905	44	0
75°	6800	59	0
80°	5161	0	0
85°	2130	174	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10835 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	9.9
10°-20°	147.7	22.9
20°-30°	150.0	23.2
30°-40°	112.6	17.4
40°-50°	78.8	12.2
50°-60°	48.2	7.5
60°-70°	28.7	4.5
70°-80°	13.2	2.1
80°-90°	2.4	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°	361.3	56.0
0°-40°	473.9	73.4
0°-60°	601.0	93.1
0°-90°	645.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	645.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	709	709	709	709	709	
5°	698	704	686	673	673	66
15°	661	625	527	446	415	186
25°	594	489	291	166	128	273
35°	505	329	95	28	22	315
45°	404	174	22	6	4	312
55°	299	53	5	2	1	268
65°	196	16	1	1	0	194
75°	93	2	1	1	0	99
85°	10	0	1	1	0	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	709.3	709.3	709.3	709.3	709.3
2.5°	701.2	711.8	702.0	700.3	701.2
5°	697.9	704.4	686.5	673.4	673.4
7.5°	692.2	692.2	658.8	631.9	623.7
10°	684.0	675.1	620.4	577.2	565.0
12.5°	673.4	652.2	575.6	514.5	494.9
15°	661.2	625.3	526.7	446.0	415.0
17.5°	647.4	595.2	472.1	371.8	335.9
20°	631.0	562.6	411.7	296.0	258.5
22.5°	613.1	526.7	350.6	228.3	188.3
25°	593.5	489.2	291.1	166.3	128.0
27.5°	573.2	450.0	236.4	114.1	78.3
30°	550.3	409.3	181.8	67.7	39.9
32.5°	528.3	370.1	136.2	36.7	29.4
35°	504.7	328.6	95.4	28.5	22.0
37.5°	480.2	289.4	58.7	21.2	16.3
40°	454.9	249.5	35.9	15.5	11.4
42.5°	430.5	212.0	28.5	10.6	7.3
45°	404.4	173.7	22.0	6.5	4.1
47.5°	377.5	138.6	16.3	4.1	2.4
50°	351.4	107.6	11.4	2.4	1.6
52.5°	325.3	79.1	7.3	1.6	0.8
55°	299.2	53.0	4.9	1.6	0.8
57.5°	273.1	37.5	3.3	0.8	0.8
60°	247.0	29.4	1.6	0.8	0.0
62.5°	222.6	22.8	1.6	0.8	0.8
65°	196.5	15.5	0.8	0.8	0.0
67.5°	168.8	9.8	0.8	0.8	0.0
70°	142.7	5.7	0.8	0.8	0.0
72.5°	117.4	3.3	0.8	0.8	0.0
75°	92.9	1.6	0.8	0.8	0.0
77.5°	69.3	0.8	0.0	0.8	0.0
80°	47.3	0.0	0.0	0.8	0.0
82.5°	27.7	0.0	0.0	0.8	0.0
85°	9.8	0.0	0.8	0.8	0.0
87.5°	0.0	0.0	0.8	0.8	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)