

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: P1055224

Luminaire Tested: S122R3DR-S675D830-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055224
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-S675D830-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, 80 CRI LEDS
Ballast/Driver: -

Summary

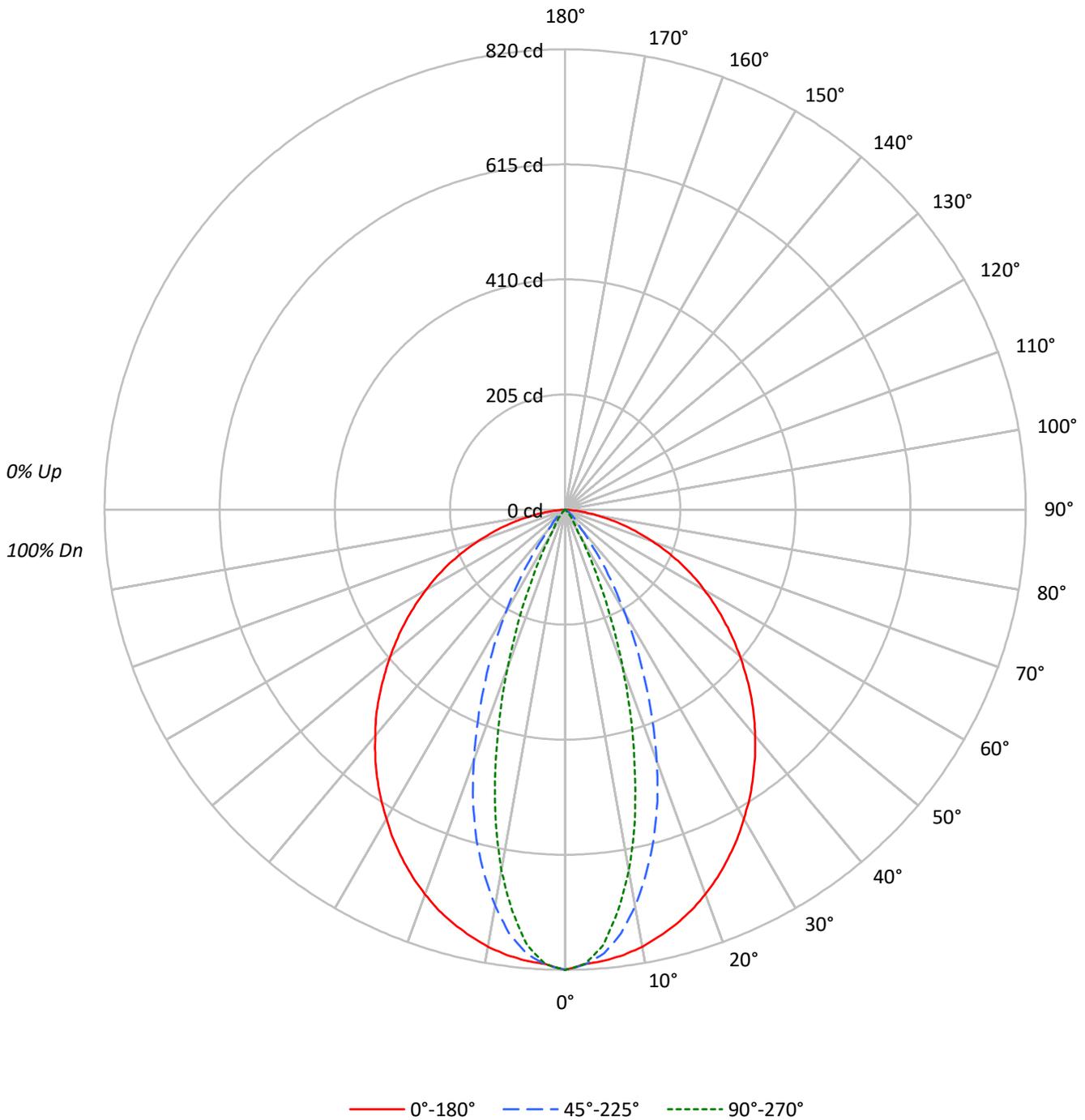
Lumens per Lamp: N/A
Luminaire Lumens: 746.0 lumens
Efficiency: N/A
Efficacy: 28.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P105224

CATALOG NUMBER: S122R3DR-S675D830-X4F0-XX-UDD-FLL-B

Luminous Intensity Polar Plot





TEST NUMBER: P105224

CATALOG NUMBER: S122R3DR-S675D830-X4F0-XX-UDD-FLL-B

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°	15536	15536	15536
5°	15344	15093	14806
10°	15214	13800	12566
15°	14993	11943	9411
20°	14708	9597	6024
25°	14345	7034	3094
30°	13918	4599	1011
35°	13493	2551	587
40°	13007	1026	326
45°	12526	681	126
50°	11973	389	56
55°	11425	188	30
60°	10822	72	0
65°	10185	40	0
70°	9134	50	0
75°	7869	66	0
80°	5968	0	0
85°	2456	196	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12526 cd/sqm



TEST NUMBER: P1055224

CATALOG NUMBER: S122R3DR-S675D830-X4F0-XX-UDD-FLL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.5	9.9
10°-20°	170.8	22.9
20°-30°	173.4	23.2
30°-40°	130.1	17.4
40°-50°	91.1	12.2
50°-60°	55.8	7.5
60°-70°	33.2	4.5
70°-80°	15.3	2.1
80°-90°	2.7	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°	417.7	56.0
0°-40°	547.9	73.4
0°-60°	694.8	93.1
0°-90°	746.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	746.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	807	814	794	778	778	77
15°	764	723	609	516	480	215
25°	686	566	336	192	148	316
35°	583	380	110	33	25	365
45°	468	201	25	8	5	360
55°	346	61	6	2	1	309
65°	227	18	1	1	0	224
75°	108	2	1	1	0	114
85°	11	0	1	1	0	19
90°	0	0	0	0	0	



TEST NUMBER: P1055224

CATALOG NUMBER: S122R3DR-S675D830-X4F0-XX-UDD-FLL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	820.0	820.0	820.0	820.0	820.0
2.5°	810.6	822.8	811.5	809.6	810.6
5°	806.8	814.4	793.6	778.5	778.5
7.5°	800.2	800.2	761.6	730.5	721.0
10°	790.8	780.4	717.3	667.3	653.2
12.5°	778.5	754.0	665.4	594.7	572.1
15°	764.4	722.9	608.9	515.6	479.8
17.5°	748.4	688.1	545.7	429.8	388.3
20°	729.5	650.4	476.0	342.1	298.8
22.5°	708.8	608.9	405.3	263.9	217.7
25°	686.2	565.5	336.5	192.3	148.0
27.5°	662.6	520.3	273.3	132.0	90.5
30°	636.2	473.2	210.2	78.2	46.2
32.5°	610.8	427.9	157.4	42.4	33.9
35°	583.4	379.8	110.3	33.0	25.4
37.5°	555.2	334.6	67.9	24.5	18.9
40°	525.9	288.4	41.5	17.9	13.2
42.5°	497.7	245.1	33.0	12.3	8.5
45°	467.5	200.8	25.4	7.5	4.7
47.5°	436.4	160.2	18.9	4.7	2.8
50°	406.2	124.4	13.2	2.8	1.9
52.5°	376.1	91.4	8.5	1.9	0.9
55°	345.9	61.3	5.7	1.9	0.9
57.5°	315.8	43.4	3.8	0.9	0.9
60°	285.6	33.9	1.9	0.9	0.0
62.5°	257.3	26.4	1.9	0.9	0.9
65°	227.2	17.9	0.9	0.9	0.0
67.5°	195.1	11.3	0.9	0.9	0.0
70°	164.9	6.6	0.9	0.9	0.0
72.5°	135.7	3.8	0.9	0.9	0.0
75°	107.5	1.9	0.9	0.9	0.0
77.5°	80.1	0.9	0.0	0.9	0.0
80°	54.7	0.0	0.0	0.9	0.0
82.5°	32.0	0.0	0.0	0.9	0.0
85°	11.3	0.0	0.9	0.9	0.0
87.5°	0.0	0.0	0.9	0.9	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)