

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: P1055252

Luminaire Tested: S122R3DR-S865D830-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055252
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-S865D830-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

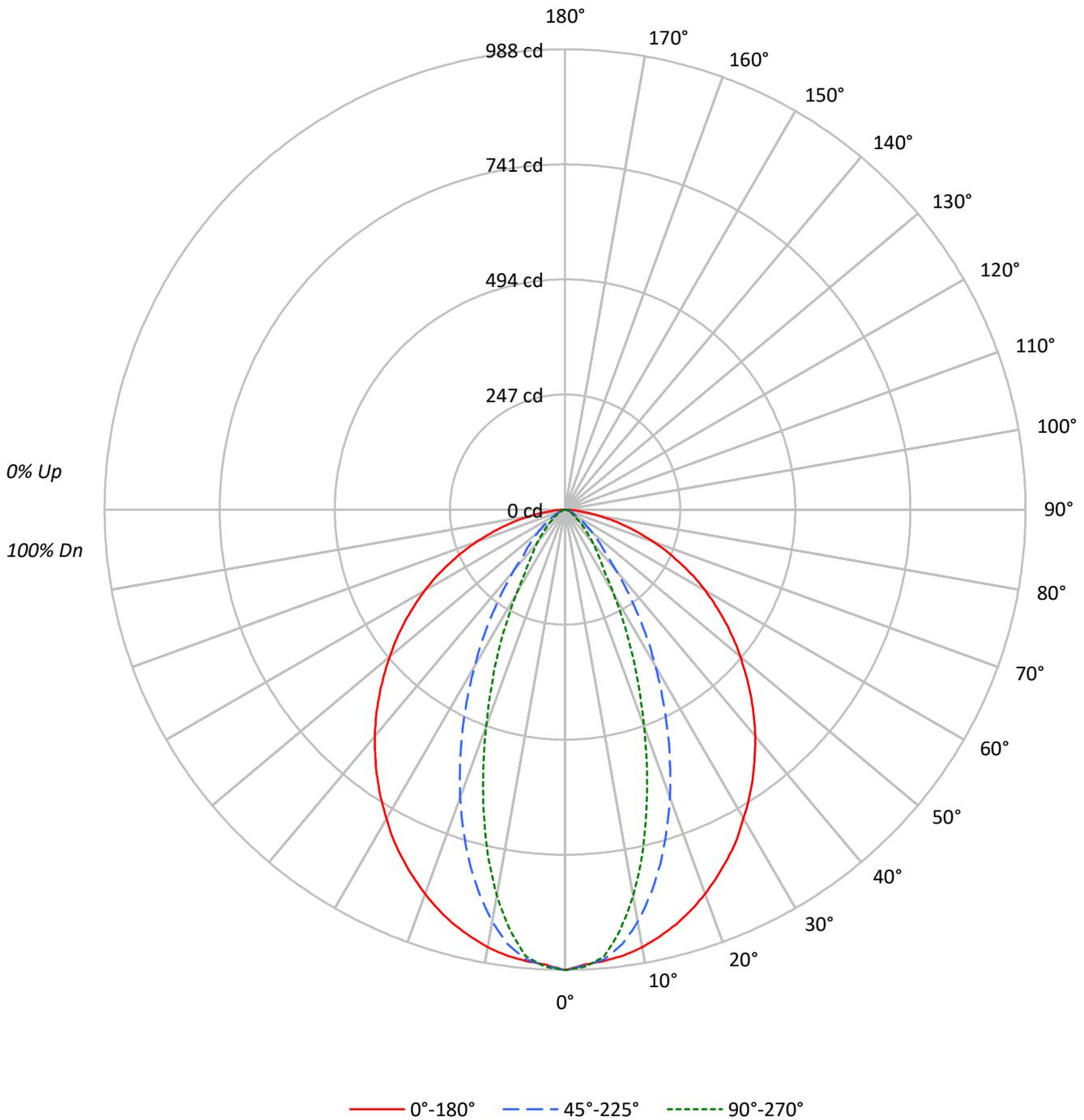
Lumens per Lamp: N/A
Luminaire Lumens: 1132.7 lumens
Efficiency: N/A
Efficacy: 32.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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: P105252

CATALOG NUMBER: S122R3DR-S865D830-X4F0-XX-UDD-FLL-S

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°	18726	18726	18726
5°	18497	18429	18313
10°	18361	17289	16195
15°	18078	15466	13208
20°	17704	13260	9964
25°	17269	10862	7116
30°	16747	8479	4531
35°	16248	6219	3025
40°	15697	4195	2278
45°	15090	2953	1624
50°	14457	2249	1144
55°	13843	1559	839
60°	13171	1057	690
65°	12216	762	542
70°	11140	604	471
75°	9663	534	351
80°	7670	393	393
85°	4217	522	261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15090 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	8.0
10°-20°	221.8	19.6
20°-30°	253.4	22.4
30°-40°	214.9	19.0
40°-50°	160.3	14.2
50°-60°	103.6	9.1
60°-70°	57.8	5.1
70°-80°	25.4	2.2
80°-90°	5.2	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°	565.5	49.9
0°-40°	780.4	68.9
0°-60°	1044.3	92.2
0°-90°	1132.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1132.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	988	988	988	988	988	
5°	973	985	969	959	963	92
15°	922	899	788	705	673	260
25°	826	729	520	380	340	380
35°	702	529	269	147	131	439
45°	563	334	110	72	61	435
55°	419	159	47	29	25	375
65°	272	58	17	13	12	271
75°	132	12	7	6	5	141
85°	19	1	2	1	1	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	988.4	988.4	988.4	988.4	988.4
2.5°	977.5	992.0	979.9	979.9	982.3
5°	972.6	984.7	969.0	959.3	962.9
7.5°	965.3	973.8	941.1	912.1	909.6
10°	954.4	958.1	898.7	853.9	841.8
12.5°	938.7	930.2	846.6	783.7	763.1
15°	921.7	898.7	788.5	704.9	673.4
17.5°	901.2	860.0	724.3	622.6	583.8
20°	878.1	820.0	657.7	536.6	494.2
22.5°	852.7	775.2	588.7	455.4	413.0
25°	826.1	729.2	519.6	380.3	340.4
27.5°	798.2	680.7	451.8	312.5	268.9
30°	765.5	631.0	387.6	247.1	207.1
32.5°	735.2	579.0	328.2	191.4	157.5
35°	702.5	529.3	268.9	146.6	130.8
37.5°	668.6	479.6	216.8	123.5	110.2
40°	634.7	430.0	169.6	104.2	92.1
42.5°	599.6	381.5	130.8	87.2	75.1
45°	563.2	334.3	110.2	71.5	60.6
47.5°	526.9	287.1	92.1	56.9	48.4
50°	490.5	242.2	76.3	44.8	38.8
52.5°	455.4	199.9	60.6	36.3	31.5
55°	419.1	158.7	47.2	29.1	25.4
57.5°	382.7	123.5	36.3	24.2	21.8
60°	347.6	93.3	27.9	19.4	18.2
62.5°	311.3	75.1	21.8	15.7	14.5
65°	272.5	58.1	17.0	13.3	12.1
67.5°	237.4	42.4	13.3	10.9	9.7
70°	201.1	29.1	10.9	9.7	8.5
72.5°	165.9	18.2	8.5	7.3	7.3
75°	132.0	12.1	7.3	6.1	4.8
77.5°	100.5	7.3	4.8	4.8	3.6
80°	70.3	4.8	3.6	3.6	3.6
82.5°	43.6	3.6	2.4	2.4	2.4
85°	19.4	1.2	2.4	1.2	1.2
87.5°	3.6	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)