

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: P1055549

Luminaire Tested: S123R3DR-S1000D830-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055549
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S1000D830-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

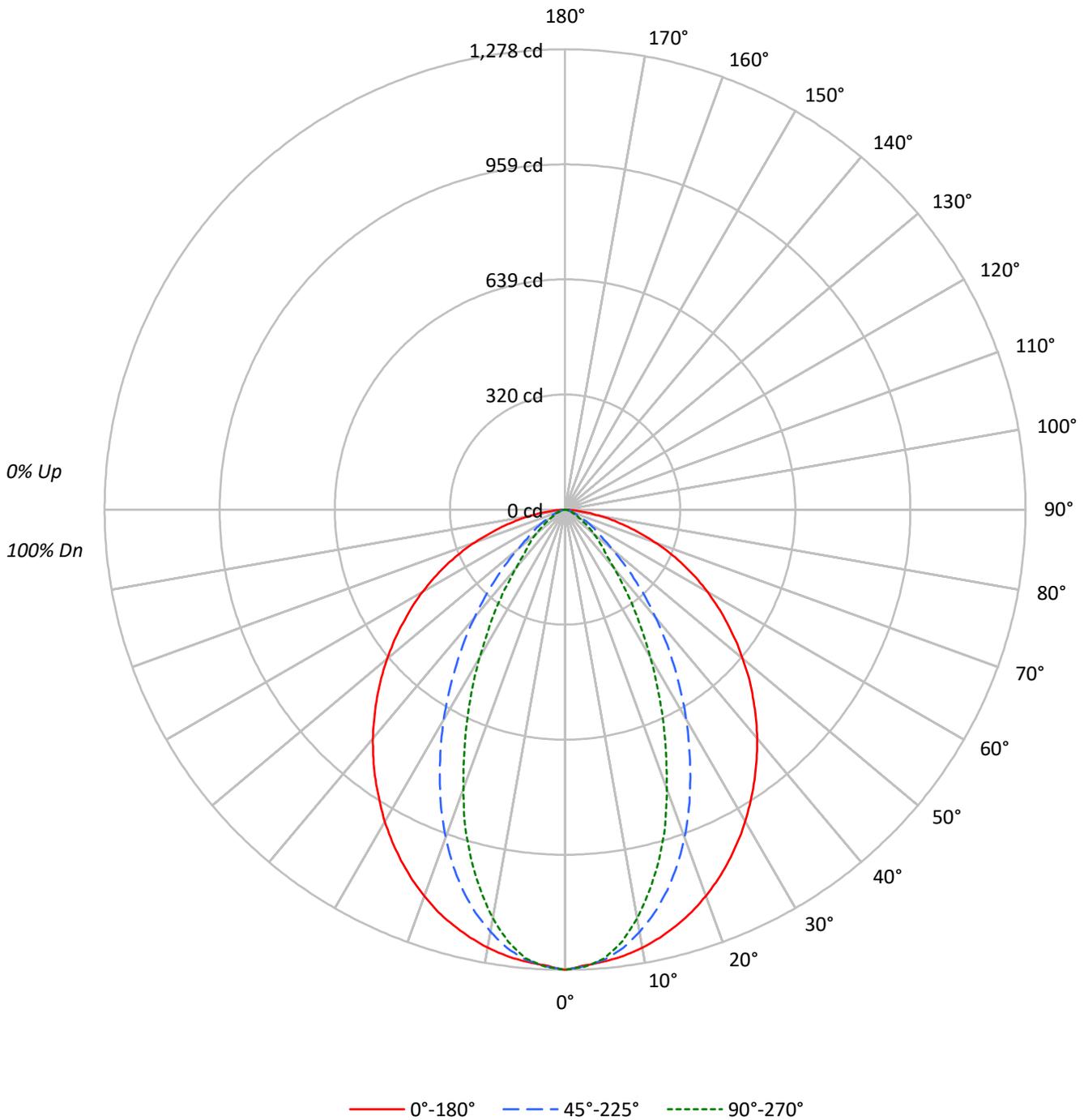
Lumens per Lamp: N/A
Luminaire Lumens: 1777.1 lumens
Efficiency: N/A
Efficacy: 51.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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





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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				100
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15406	15406	15406
5°	15245	15186	15143
10°	15124	14576	14117
15°	14922	13666	12563
20°	14655	12432	10582
25°	14308	10940	8539
30°	13928	9375	6577
35°	13495	7737	4867
40°	13058	6157	3318
45°	12576	4605	2500
50°	12064	3204	1954
55°	11534	2342	1425
60°	10981	1753	1022
65°	10333	1175	796
70°	9352	853	642
75°	8068	620	508
80°	6478	507	424
85°	3348	498	332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12576 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.1	6.6
10°-20°	307.5	17.3
20°-30°	386.3	21.7
30°-40°	359.8	20.2
40°-50°	275.4	15.5
50°-60°	183.1	10.3
60°-70°	98.7	5.6
70°-80°	40.4	2.3
80°-90°	7.7	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°	811.9	45.7
0°-40°	1171.7	65.9
0°-60°	1630.2	91.7
0°-90°	1777.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1777.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1260	1273	1255	1250	1251	120
15°	1196	1176	1095	1031	1006	337
25°	1076	1003	822	686	642	495
35°	917	781	526	372	331	573
45°	738	545	270	159	147	569
55°	549	317	111	78	68	492
65°	362	122	41	30	28	358
75°	173	29	13	12	11	185
85°	24	4	4	4	2	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1277.8	1277.8	1277.8	1277.8	1277.8
2.5°	1266.9	1282.7	1269.4	1270.6	1270.6
5°	1259.7	1273.0	1254.8	1250.0	1251.2
7.5°	1250.0	1258.5	1228.2	1212.4	1210.0
10°	1235.4	1237.9	1190.6	1162.8	1153.1
12.5°	1217.3	1208.8	1147.0	1101.0	1082.8
15°	1195.5	1176.1	1094.9	1030.8	1006.5
17.5°	1171.3	1138.6	1035.6	952.0	923.0
20°	1142.2	1096.2	969.0	864.8	824.8
22.5°	1110.7	1051.3	898.7	775.2	730.4
25°	1075.6	1002.9	822.4	685.6	641.9
27.5°	1039.2	950.8	747.3	600.8	556.0
30°	1000.5	897.5	673.4	518.4	472.4
32.5°	958.1	839.4	597.1	442.1	396.1
35°	916.9	781.2	525.7	371.8	330.7
37.5°	873.3	723.1	456.6	310.1	264.0
40°	829.7	663.8	391.2	249.5	210.8
42.5°	783.7	604.4	329.5	198.6	168.4
45°	737.6	545.1	270.1	158.7	146.6
47.5°	691.6	485.7	218.0	136.9	124.8
50°	643.2	428.8	170.8	116.3	104.2
52.5°	597.1	371.8	133.2	95.7	84.8
55°	548.7	317.3	111.4	77.5	67.8
57.5°	503.9	261.6	92.1	60.6	53.3
60°	455.4	212.0	72.7	47.2	42.4
62.5°	409.4	165.9	55.7	37.5	33.9
65°	362.2	122.3	41.2	30.3	27.9
67.5°	314.9	88.4	31.5	24.2	23.0
70°	265.3	66.6	24.2	19.4	18.2
72.5°	218.0	47.2	18.2	15.7	14.5
75°	173.2	29.1	13.3	12.1	10.9
77.5°	133.2	17.0	9.7	9.7	8.5
80°	93.3	9.7	7.3	7.3	6.1
82.5°	56.9	6.1	4.8	4.8	4.8
85°	24.2	3.6	3.6	3.6	2.4
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)