

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: P1055153

Luminaire Tested: S122R3DR-S1005D850-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055153
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-S1005D850-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

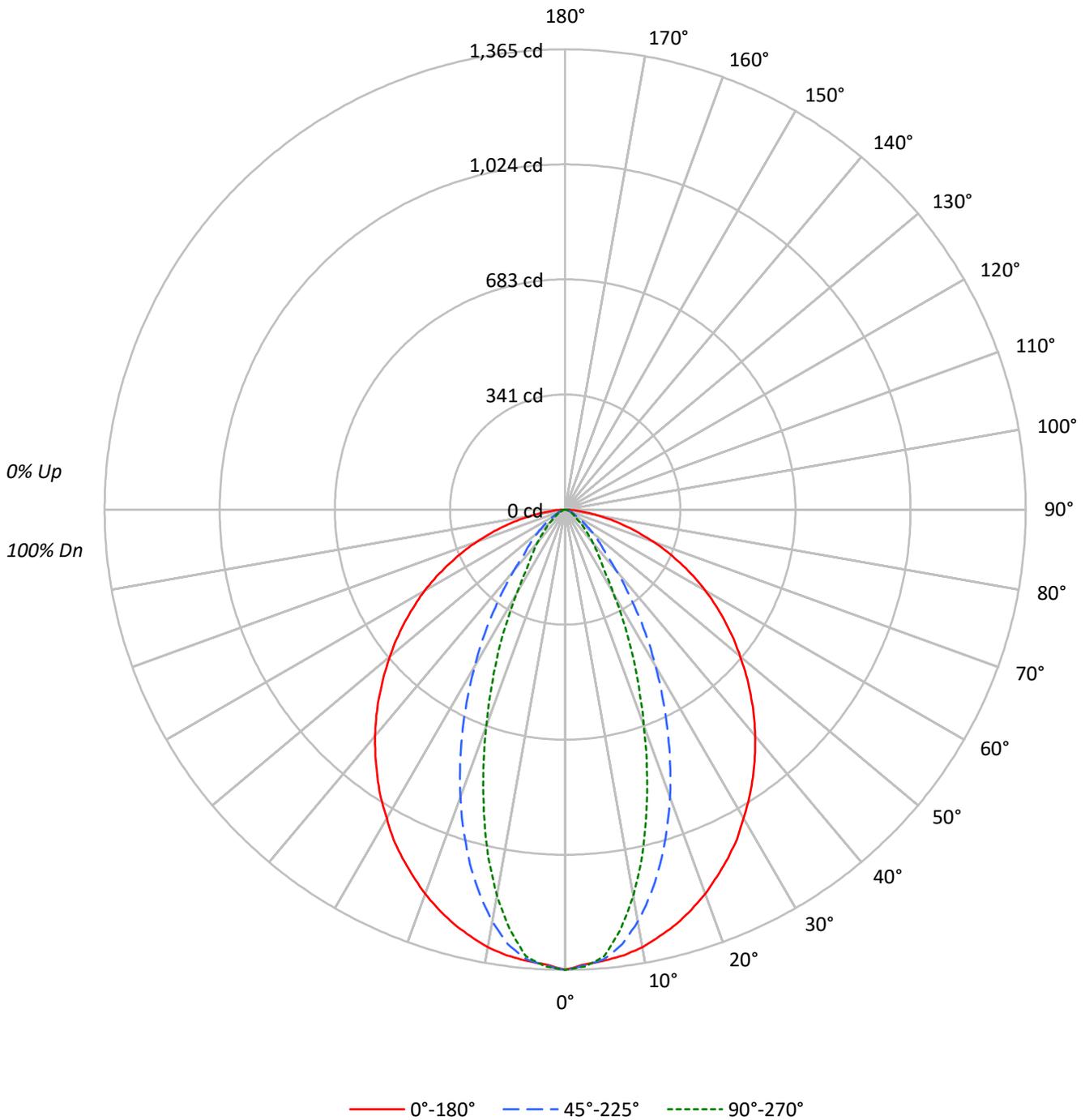
Lumens per Lamp: N/A
Luminaire Lumens: 1564.1 lumens
Efficiency: N/A
Efficacy: 37.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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: P1055153

CATALOG NUMBER: S122R3DR-S1005D850-X4F0-XX-UDD-FLL-S

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71			71	
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64			64	
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			58	
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45			45	
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42			42	
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25857	25857	25857
5°	25543	25446	25289
10°	25356	23875	22362
15°	24965	21356	18239
20°	24448	18311	13758
25°	23846	14999	9825
30°	23124	11708	6257
35°	22437	8588	4177
40°	21675	5792	3143
45°	20837	4078	2240
50°	19966	3107	1577
55°	19115	2154	1159
60°	18188	1459	951
65°	16869	1049	749
70°	15377	836	648
75°	13345	732	490
80°	10583	546	546
85°	5826	717	370

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20837 cd/sqm



TEST NUMBER: P1055153

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.8	8.0
10°-20°	306.3	19.6
20°-30°	349.9	22.4
30°-40°	296.7	19.0
40°-50°	221.4	14.2
50°-60°	143.1	9.1
60°-70°	79.8	5.1
70°-80°	35.0	2.2
80°-90°	7.2	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°	780.9	49.9
0°-40°	1077.6	68.9
0°-60°	1442.1	92.2
0°-90°	1564.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1564.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1343	1360	1338	1325	1330	127
15°	1273	1241	1089	973	930	358
25°	1141	1007	718	525	470	525
35°	970	731	371	202	181	606
45°	778	462	152	99	84	600
55°	579	219	65	40	35	517
65°	376	80	23	18	17	374
75°	182	17	10	8	7	194
85°	27	2	3	2	2	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1364.8	1364.8	1364.8	1364.8	1364.8
2.5°	1349.7	1369.8	1353.1	1353.1	1356.4
5°	1343.1	1359.8	1338.0	1324.7	1329.7
7.5°	1333.0	1344.7	1299.6	1259.4	1256.1
10°	1318.0	1323.0	1241.0	1179.1	1162.4
12.5°	1296.2	1284.5	1169.1	1082.1	1053.7
15°	1272.8	1241.0	1088.8	973.4	929.9
17.5°	1244.4	1187.5	1000.2	859.7	806.2
20°	1212.6	1132.3	908.2	740.9	682.4
22.5°	1177.5	1070.4	812.9	628.9	570.3
25°	1140.7	1006.9	717.5	525.2	470.0
27.5°	1102.2	940.0	623.9	431.5	371.3
30°	1057.0	871.4	535.2	341.2	286.0
32.5°	1015.2	799.5	453.3	264.3	217.4
35°	970.1	730.9	371.3	202.4	180.6
37.5°	923.2	662.3	299.4	170.6	152.2
40°	876.4	593.8	234.2	143.8	127.1
42.5°	827.9	526.9	180.6	120.4	103.7
45°	777.7	461.6	152.2	98.7	83.6
47.5°	727.6	396.4	127.1	78.6	66.9
50°	677.4	334.5	105.4	61.9	53.5
52.5°	628.9	276.0	83.6	50.2	43.5
55°	578.7	219.1	65.2	40.1	35.1
57.5°	528.5	170.6	50.2	33.5	30.1
60°	480.0	128.8	38.5	26.8	25.1
62.5°	429.8	103.7	30.1	21.7	20.1
65°	376.3	80.3	23.4	18.4	16.7
67.5°	327.8	58.5	18.4	15.1	13.4
70°	277.6	40.1	15.1	13.4	11.7
72.5°	229.1	25.1	11.7	10.0	10.0
75°	182.3	16.7	10.0	8.4	6.7
77.5°	138.8	10.0	6.7	6.7	5.0
80°	97.0	6.7	5.0	5.0	5.0
82.5°	60.2	5.0	3.3	3.3	3.3
85°	26.8	1.7	3.3	1.7	1.7
87.5°	5.0	1.7	1.7	1.7	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)