

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: P1055161

Luminaire Tested: S122R3DR-S1005D935-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055161
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-S1005D935-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

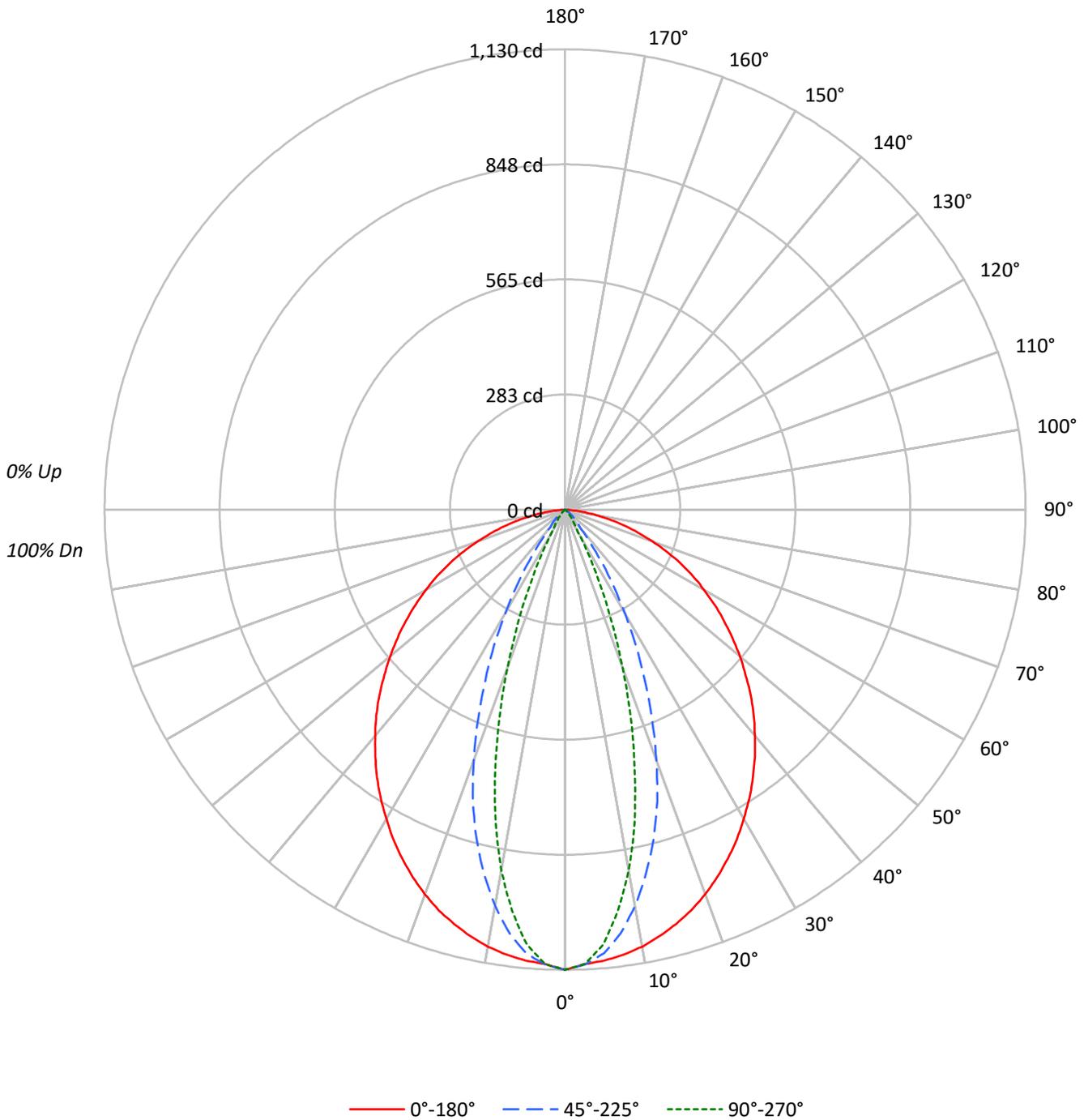
Lumens per Lamp: N/A
Luminaire Lumens: 1027.8 lumens
Efficiency: N/A
Efficacy: 24.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81				81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61				61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	59	66	62	58	56				56
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52				52
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49				49
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45				45
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	47	44	43				43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21403	21403	21403
5°	21139	20795	20399
10°	20960	19011	17312
15°	20656	16452	12963
20°	20265	13222	8299
25°	19761	9691	4262
30°	19175	6336	1391
35°	18591	3513	812
40°	17921	1412	450
45°	17258	940	174
50°	16497	536	77
55°	15743	258	43
60°	14910	99	0
65°	14027	58	0
70°	12586	72	0
75°	10834	95	0
80°	8216	0	0
85°	3391	283	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17258 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	9.9
10°-20°	235.3	22.9
20°-30°	238.9	23.2
30°-40°	179.3	17.4
40°-50°	125.5	12.2
50°-60°	76.8	7.5
60°-70°	45.8	4.5
70°-80°	21.1	2.1
80°-90°	3.8	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°	575.5	56.0
0°-40°	754.8	73.4
0°-60°	957.2	93.1
0°-90°	1027.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1027.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1112	1122	1093	1073	1073	105
15°	1053	996	839	710	661	297
25°	945	779	464	265	204	435
35°	804	523	152	45	35	502
45°	644	277	35	10	6	496
55°	477	84	8	3	1	426
65°	313	25	1	1	0	308
75°	148	3	1	1	0	157
85°	16	0	1	1	0	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1129.7	1129.7	1129.7	1129.7	1129.7
2.5°	1116.7	1133.6	1118.0	1115.4	1116.7
5°	1111.5	1121.9	1093.4	1072.6	1072.6
7.5°	1102.4	1102.4	1049.2	1006.4	993.4
10°	1089.5	1075.2	988.2	919.4	899.9
12.5°	1072.6	1038.8	916.8	819.4	788.2
15°	1053.1	996.0	838.8	710.3	660.9
17.5°	1031.0	947.9	751.8	592.1	535.0
20°	1005.1	896.0	655.8	471.4	411.6
22.5°	976.5	838.8	558.4	363.6	300.0
25°	945.3	779.1	463.6	264.9	203.9
27.5°	912.9	716.8	376.6	181.8	124.7
30°	876.5	651.9	289.6	107.8	63.6
32.5°	841.4	589.5	216.9	58.4	46.7
35°	803.8	523.3	151.9	45.4	35.1
37.5°	764.8	461.0	93.5	33.8	26.0
40°	724.6	397.3	57.1	24.7	18.2
42.5°	685.6	337.6	45.4	16.9	11.7
45°	644.1	276.6	35.1	10.4	6.5
47.5°	601.2	220.7	26.0	6.5	3.9
50°	559.7	171.4	18.2	3.9	2.6
52.5°	518.1	126.0	11.7	2.6	1.3
55°	476.6	84.4	7.8	2.6	1.3
57.5°	435.0	59.7	5.2	1.3	1.3
60°	393.5	46.7	2.6	1.3	0.0
62.5°	354.5	36.4	2.6	1.3	1.3
65°	312.9	24.7	1.3	1.3	0.0
67.5°	268.8	15.6	1.3	1.3	0.0
70°	227.2	9.1	1.3	1.3	0.0
72.5°	187.0	5.2	1.3	1.3	0.0
75°	148.0	2.6	1.3	1.3	0.0
77.5°	110.4	1.3	0.0	1.3	0.0
80°	75.3	0.0	0.0	1.3	0.0
82.5°	44.1	0.0	0.0	1.3	0.0
85°	15.6	0.0	1.3	1.3	0.0
87.5°	0.0	0.0	1.3	1.3	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)