

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: P1055158

Luminaire Tested: S122R3DR-S1005D930-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055158
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-S1005D930-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, 90 CRI LEDS
Ballast/Driver: -

Summary

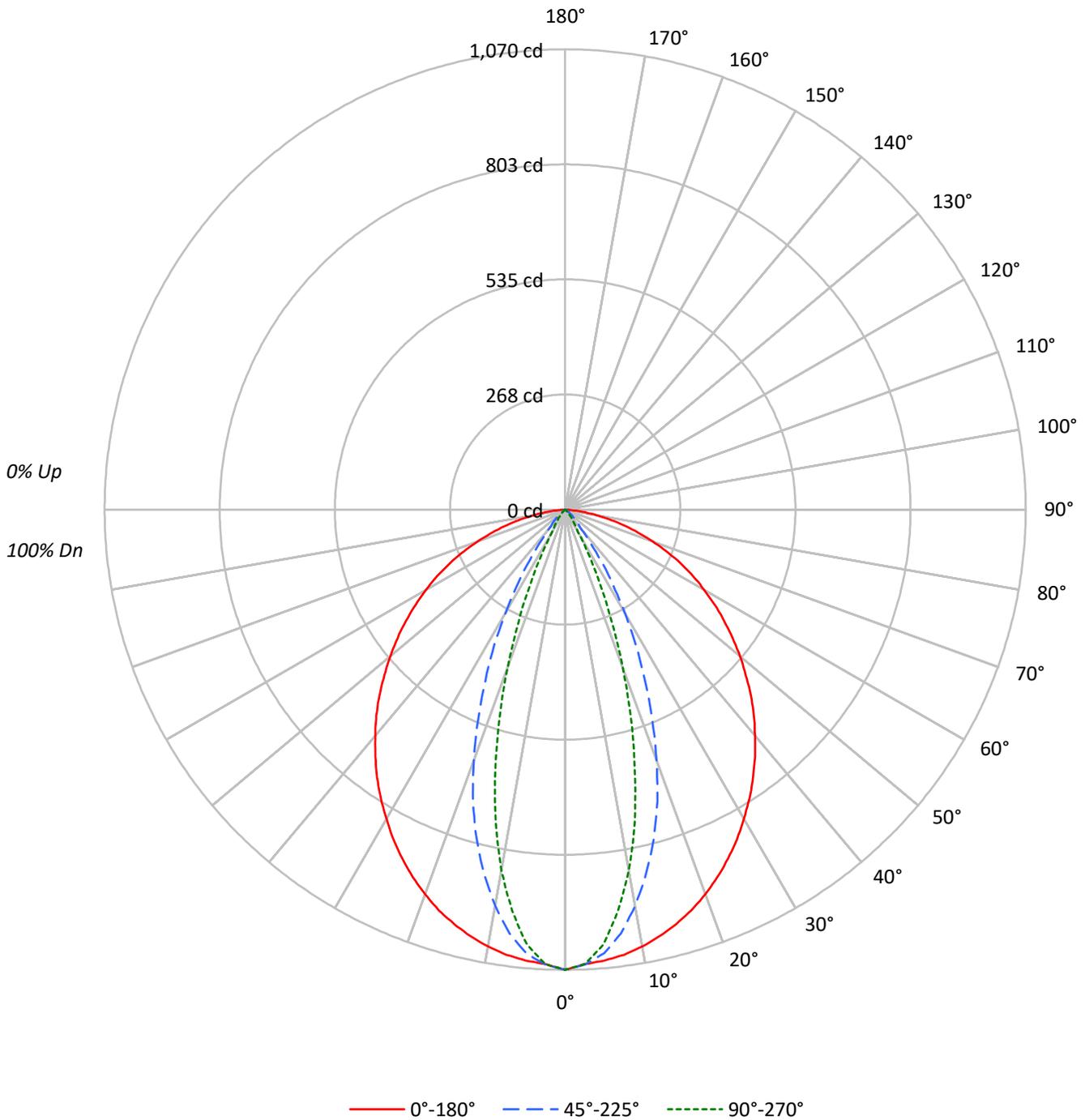
Lumens per Lamp: N/A
Luminaire Lumens: 973.2 lumens
Efficiency: N/A
Efficacy: 23.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	48	44	43				43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20268	20268	20268
5°	20017	19690	19317
10°	19846	18001	16393
15°	19559	15580	12277
20°	19188	12518	7859
25°	18714	9177	4035
30°	18158	5999	1319
35°	17603	3328	768
40°	16969	1338	425
45°	16341	890	163
50°	15621	507	74
55°	14907	244	40
60°	14118	95	0
65°	13283	54	0
70°	11921	66	0
75°	10263	88	0
80°	7779	0	0
85°	3217	261	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16341 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.9	9.9
10°-20°	222.8	22.9
20°-30°	226.2	23.2
30°-40°	169.8	17.4
40°-50°	118.9	12.2
50°-60°	72.8	7.5
60°-70°	43.3	4.5
70°-80°	20.0	2.1
80°-90°	3.6	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°	545.0	56.0
0°-40°	714.7	73.4
0°-60°	906.3	93.1
0°-90°	973.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	973.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1052	1062	1035	1016	1016	100
15°	997	943	794	673	626	281
25°	895	738	439	251	193	412
35°	761	496	144	43	33	476
45°	610	262	33	10	6	470
55°	451	80	7	2	1	404
65°	296	23	1	1	0	292
75°	140	2	1	1	0	149
85°	15	0	1	1	0	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1069.8	1069.8	1069.8	1069.8	1069.8
2.5°	1057.5	1073.4	1058.7	1056.2	1057.5
5°	1052.5	1062.4	1035.3	1015.7	1015.7
7.5°	1043.9	1043.9	993.5	952.9	940.6
10°	1031.6	1018.1	935.7	870.6	852.1
12.5°	1015.7	983.7	868.1	775.9	746.4
15°	997.2	943.1	794.3	672.6	625.9
17.5°	976.3	897.6	711.9	560.7	506.6
20°	951.7	848.4	620.9	446.3	389.8
22.5°	924.7	794.3	528.7	344.3	284.0
25°	895.2	737.8	439.0	250.8	193.0
27.5°	864.4	678.7	356.6	172.1	118.0
30°	830.0	617.3	274.2	102.1	60.3
32.5°	796.8	558.2	205.3	55.3	44.3
35°	761.1	495.5	143.9	43.0	33.2
37.5°	724.2	436.5	88.5	32.0	24.6
40°	686.1	376.3	54.1	23.4	17.2
42.5°	649.2	319.7	43.0	16.0	11.1
45°	609.9	261.9	33.2	9.8	6.1
47.5°	569.3	209.0	24.6	6.1	3.7
50°	530.0	162.3	17.2	3.7	2.5
52.5°	490.6	119.3	11.1	2.5	1.2
55°	451.3	79.9	7.4	2.5	1.2
57.5°	411.9	56.6	4.9	1.2	1.2
60°	372.6	44.3	2.5	1.2	0.0
62.5°	335.7	34.4	2.5	1.2	1.2
65°	296.3	23.4	1.2	1.2	0.0
67.5°	254.5	14.8	1.2	1.2	0.0
70°	215.2	8.6	1.2	1.2	0.0
72.5°	177.1	4.9	1.2	1.2	0.0
75°	140.2	2.5	1.2	1.2	0.0
77.5°	104.5	1.2	0.0	1.2	0.0
80°	71.3	0.0	0.0	1.2	0.0
82.5°	41.8	0.0	0.0	1.2	0.0
85°	14.8	0.0	1.2	1.2	0.0
87.5°	0.0	0.0	1.2	1.2	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)