

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: P1055220

Luminaire Tested: S122R3DR-S485D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055220
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S485D940-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

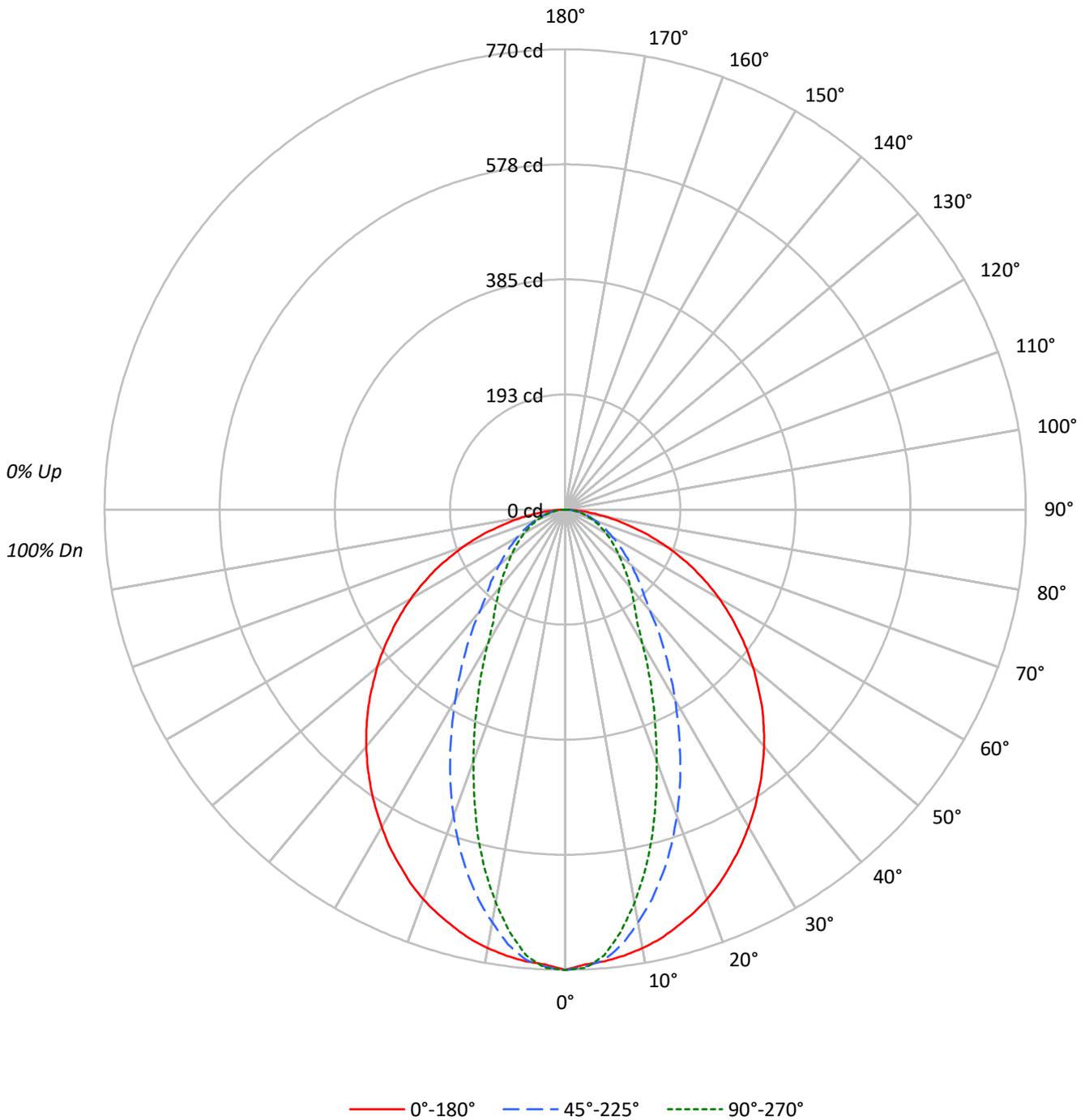
Lumens per Lamp: N/A
Luminaire Lumens: 1164.9 lumens
Efficiency: N/A
Efficacy: 61.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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: P105220

CATALOG NUMBER: S122R3DR-S485D940-X4F0-XX-UDD-FLL-W

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				66
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				58
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				46
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				35
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14592	14592	14592
5°	14427	14378	14243
10°	14332	13492	12847
15°	14171	12365	11051
20°	13982	10996	9022
25°	13703	9503	7202
30°	13410	8029	5620
35°	13107	6717	4721
40°	12789	5446	4204
45°	12456	4761	3762
50°	12090	4215	3437
55°	11676	3808	3191
60°	11273	3463	2978
65°	10737	3174	2802
70°	9954	2958	2642
75°	8813	2686	2496
80°	7517	2531	2324
85°	5174	2239	2109

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12456 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	6.1
10°-20°	178.2	15.3
20°-30°	219.6	18.8
30°-40°	210.6	18.1
40°-50°	181.7	15.6
50°-60°	141.0	12.1
60°-70°	96.5	8.3
70°-80°	52.4	4.5
80°-90°	14.4	1.2
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°	468.3	40.2
0°-40°	679.0	58.3
0°-60°	1001.6	86.0
0°-90°	1164.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1164.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	770	770	770	770	770	
5°	759	770	756	746	749	72
15°	722	701	630	579	563	204
25°	656	585	455	371	344	302
35°	567	450	290	216	204	354
45°	465	313	178	147	140	358
55°	354	188	115	100	97	316
65°	240	102	71	64	62	236
75°	120	47	37	35	34	129
85°	24	12	10	10	10	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	770.2	770.2	770.2	770.2	770.2
2.5°	761.8	774.7	765.6	765.6	767.6
5°	758.6	769.5	756.0	746.3	748.9
7.5°	752.8	760.5	733.5	712.8	712.2
10°	745.0	745.7	701.3	674.2	667.8
12.5°	735.4	725.1	668.4	627.8	618.2
15°	722.5	700.6	630.4	578.9	563.4
17.5°	709.0	675.5	589.9	525.5	504.2
20°	693.5	645.2	545.4	472.0	447.5
22.5°	676.1	616.3	501.0	420.5	394.7
25°	655.5	585.3	454.6	370.9	344.5
27.5°	635.6	553.8	410.2	327.1	300.1
30°	613.0	519.7	367.0	285.3	256.9
32.5°	590.5	484.9	327.1	245.3	224.1
35°	566.7	449.5	290.4	216.4	204.1
37.5°	542.2	414.7	255.6	197.0	186.1
40°	517.1	379.9	220.2	178.4	170.0
42.5°	491.3	345.8	195.8	162.9	155.2
45°	464.9	313.0	177.7	146.8	140.4
47.5°	436.6	280.1	160.3	133.3	127.5
50°	410.2	248.6	143.0	121.1	116.6
52.5°	381.9	217.7	128.8	110.1	106.3
55°	353.5	188.0	115.3	99.8	96.6
57.5°	325.8	159.7	102.4	90.2	87.6
60°	297.5	137.2	91.4	81.1	78.6
62.5°	268.5	119.1	81.1	72.8	70.2
65°	239.5	102.4	70.8	64.4	62.5
67.5°	209.3	86.3	61.8	56.7	55.4
70°	179.7	72.1	53.4	48.9	47.7
72.5°	150.7	58.6	45.1	41.9	40.6
75°	120.4	47.0	36.7	34.8	34.1
77.5°	94.0	36.7	29.6	28.3	27.7
80°	68.9	27.0	23.2	21.9	21.3
82.5°	45.7	18.7	16.7	16.1	15.5
85°	23.8	11.6	10.3	10.3	9.7
87.5°	7.7	5.2	5.2	5.2	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)