

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: P1055218

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055218
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-S485D940-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

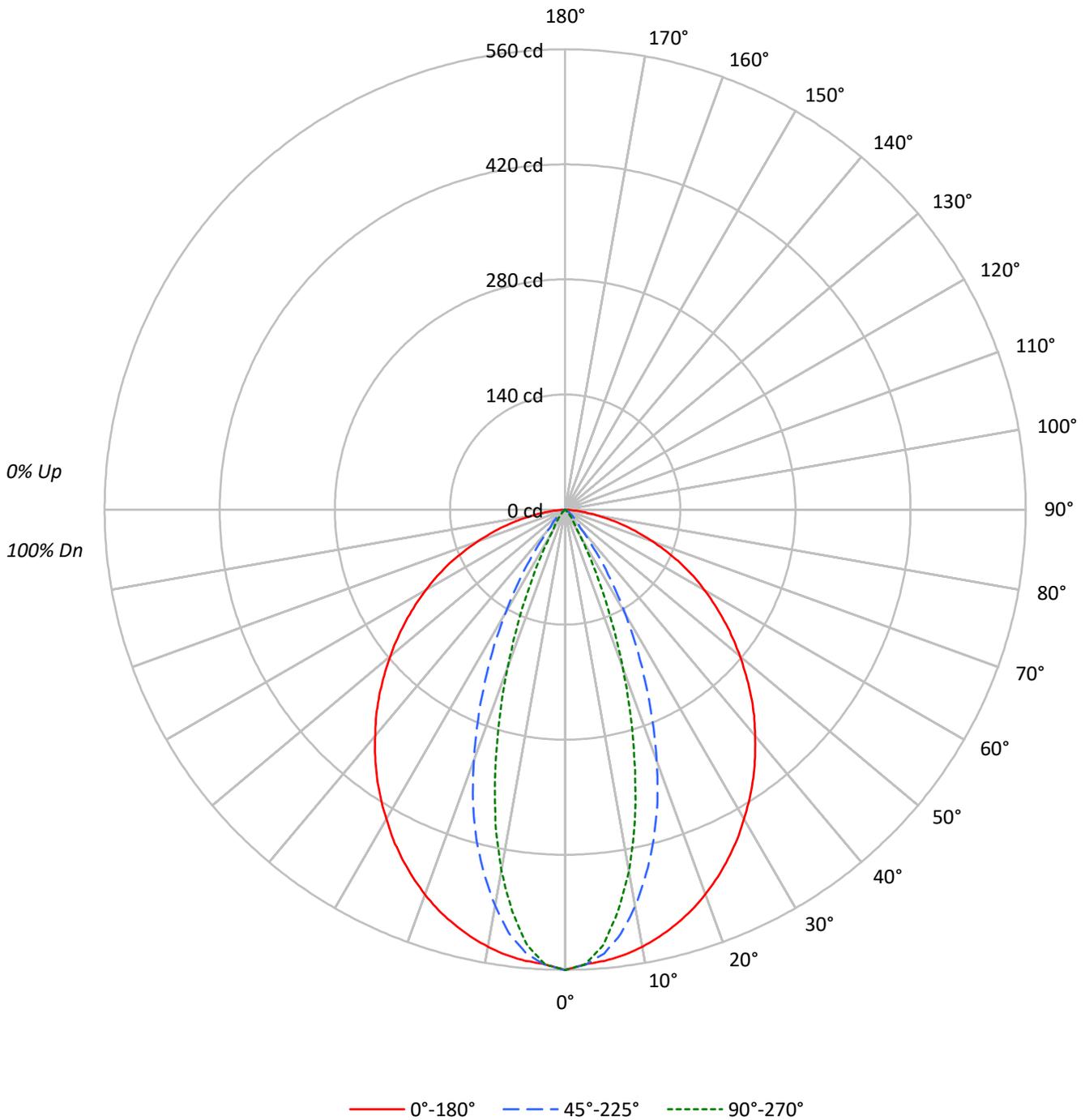
Lumens per Lamp: N/A
Luminaire Lumens: 509.6 lumens
Efficiency: N/A
Efficacy: 26.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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																												
1	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91																												
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57																												
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52																												
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49																												
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45																												
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10613	10613	10613
5°	10483	10312	10116
10°	10394	9427	8586
15°	10243	8160	6430
20°	10049	6557	4115
25°	9800	4806	2113
30°	9510	3142	691
35°	9219	1742	402
40°	8886	700	223
45°	8558	466	86
50°	8179	265	38
55°	7805	129	20
60°	7393	49	0
65°	6958	27	0
70°	6243	33	0
75°	5373	44	0
80°	4070	0	0
85°	1674	130	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8558 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.2	9.9
10°-20°	116.7	22.9
20°-30°	118.5	23.2
30°-40°	88.9	17.4
40°-50°	62.3	12.2
50°-60°	38.1	7.5
60°-70°	22.7	4.4
70°-80°	10.4	2.0
80°-90°	1.9	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°	285.4	56.0
0°-40°	374.3	73.4
0°-60°	474.6	93.1
0°-90°	509.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	509.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	560	560	560	560	560	
5°	551	556	542	532	532	52
15°	522	494	416	352	328	147
25°	469	386	230	131	101	216
35°	399	260	75	22	17	249
45°	319	137	17	5	3	246
55°	236	42	4	1	1	211
65°	155	12	1	1	0	153
75°	73	1	1	1	0	78
85°	8	0	1	1	0	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	560.2	560.2	560.2	560.2	560.2
2.5°	553.8	562.2	554.4	553.1	553.8
5°	551.2	556.4	542.2	531.9	531.9
7.5°	546.7	546.7	520.3	499.1	492.6
10°	540.3	533.2	490.0	455.9	446.3
12.5°	531.9	515.2	454.6	406.3	390.9
15°	522.2	493.9	416.0	352.2	327.8
17.5°	511.3	470.1	372.8	293.6	265.3
20°	498.4	444.3	325.2	233.8	204.1
22.5°	484.2	416.0	276.9	180.3	148.8
25°	468.8	386.4	229.9	131.4	101.1
27.5°	452.7	355.5	186.7	90.2	61.8
30°	434.7	323.3	143.6	53.4	31.6
32.5°	417.3	292.4	107.5	29.0	23.2
35°	398.6	259.5	75.3	22.5	17.4
37.5°	379.3	228.6	46.4	16.7	12.9
40°	359.3	197.0	28.3	12.2	9.0
42.5°	340.0	167.4	22.5	8.4	5.8
45°	319.4	137.2	17.4	5.2	3.2
47.5°	298.1	109.5	12.9	3.2	1.9
50°	277.5	85.0	9.0	1.9	1.3
52.5°	256.9	62.5	5.8	1.3	0.6
55°	236.3	41.9	3.9	1.3	0.6
57.5°	215.7	29.6	2.6	0.6	0.6
60°	195.1	23.2	1.3	0.6	0.0
62.5°	175.8	18.0	1.3	0.6	0.6
65°	155.2	12.2	0.6	0.6	0.0
67.5°	133.3	7.7	0.6	0.6	0.0
70°	112.7	4.5	0.6	0.6	0.0
72.5°	92.7	2.6	0.6	0.6	0.0
75°	73.4	1.3	0.6	0.6	0.0
77.5°	54.7	0.6	0.0	0.6	0.0
80°	37.3	0.0	0.0	0.6	0.0
82.5°	21.9	0.0	0.0	0.6	0.0
85°	7.7	0.0	0.6	0.6	0.0
87.5°	0.0	0.0	0.6	0.6	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)