

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: P1055203

Luminaire Tested: S122R3DR-S485D840-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055203
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-S485D840-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, 80 CRI LEDS
Ballast/Driver: -

Summary

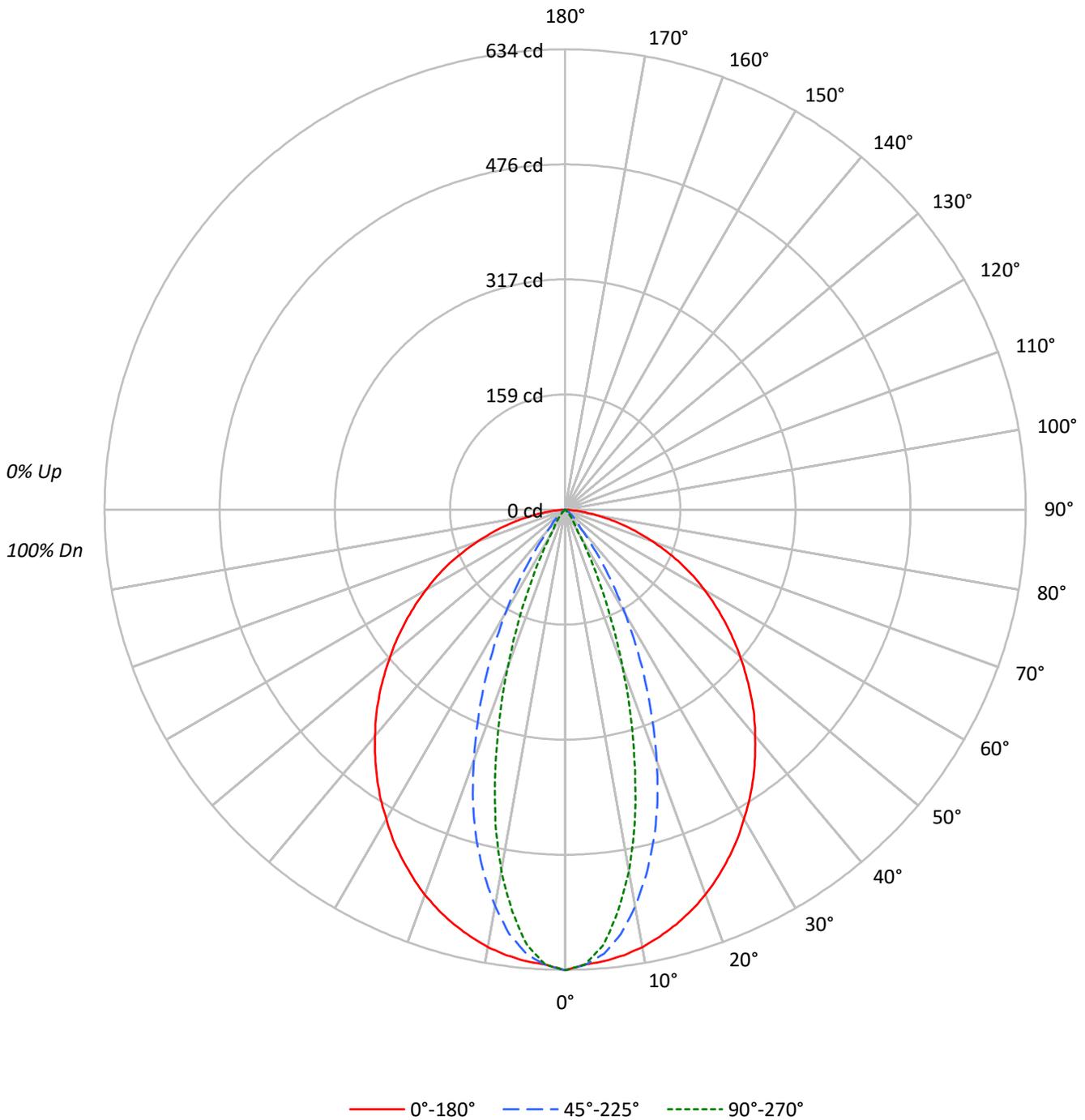
Lumens per Lamp: N/A
Luminaire Lumens: 577.2 lumens
Efficiency: N/A
Efficacy: 30.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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										
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	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	63	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°	12021	12021	12021
5°	11873	11677	11457
10°	11772	10677	9723
15°	11600	9240	7281
20°	11381	7426	4661
25°	11098	5444	2394
30°	10770	3557	781
35°	10440	1973	456
40°	10063	794	252
45°	9691	528	96
50°	9264	301	44
55°	8839	145	23
60°	8374	57	0
65°	7881	31	0
70°	7068	39	0
75°	6083	51	0
80°	4615	0	0
85°	1913	152	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9691 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	9.9
10°-20°	132.2	22.9
20°-30°	134.2	23.2
30°-40°	100.7	17.4
40°-50°	70.5	12.2
50°-60°	43.2	7.5
60°-70°	25.7	4.5
70°-80°	11.8	2.1
80°-90°	2.1	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°	323.2	56.0
0°-40°	423.9	73.4
0°-60°	537.6	93.1
0°-90°	577.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	577.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	624	630	614	602	602	59
15°	591	559	471	399	371	167
25°	531	438	260	149	114	244
35°	451	294	85	26	20	282
45°	362	155	20	6	4	279
55°	268	47	4	2	1	239
65°	176	14	1	1	0	173
75°	83	2	1	1	0	88
85°	9	0	1	1	0	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	634.5	634.5	634.5	634.5	634.5
2.5°	627.2	636.7	627.9	626.4	627.2
5°	624.3	630.1	614.0	602.4	602.4
7.5°	619.2	619.2	589.3	565.2	557.9
10°	611.9	603.8	555.0	516.3	505.4
12.5°	602.4	583.4	514.9	460.2	442.7
15°	591.4	559.4	471.1	398.9	371.2
17.5°	579.0	532.4	422.2	332.5	300.5
20°	564.5	503.2	368.3	264.7	231.2
22.5°	548.4	471.1	313.6	204.2	168.5
25°	530.9	437.6	260.4	148.8	114.5
27.5°	512.7	402.6	211.5	102.1	70.0
30°	492.3	366.1	162.6	60.5	35.7
32.5°	472.6	331.1	121.8	32.8	26.3
35°	451.4	293.9	85.3	25.5	19.7
37.5°	429.5	258.9	52.5	19.0	14.6
40°	406.9	223.2	32.1	13.9	10.2
42.5°	385.1	189.6	25.5	9.5	6.6
45°	361.7	155.3	19.7	5.8	3.6
47.5°	337.7	124.0	14.6	3.6	2.2
50°	314.3	96.3	10.2	2.2	1.5
52.5°	291.0	70.7	6.6	1.5	0.7
55°	267.6	47.4	4.4	1.5	0.7
57.5°	244.3	33.5	2.9	0.7	0.7
60°	221.0	26.3	1.5	0.7	0.0
62.5°	199.1	20.4	1.5	0.7	0.7
65°	175.8	13.9	0.7	0.7	0.0
67.5°	151.0	8.8	0.7	0.7	0.0
70°	127.6	5.1	0.7	0.7	0.0
72.5°	105.0	2.9	0.7	0.7	0.0
75°	83.1	1.5	0.7	0.7	0.0
77.5°	62.0	0.7	0.0	0.7	0.0
80°	42.3	0.0	0.0	0.7	0.0
82.5°	24.8	0.0	0.0	0.7	0.0
85°	8.8	0.0	0.7	0.7	0.0
87.5°	0.0	0.0	0.7	0.7	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)