

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: P1055209

Luminaire Tested: S122R3DR-S485D927-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055209
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-S485D927-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

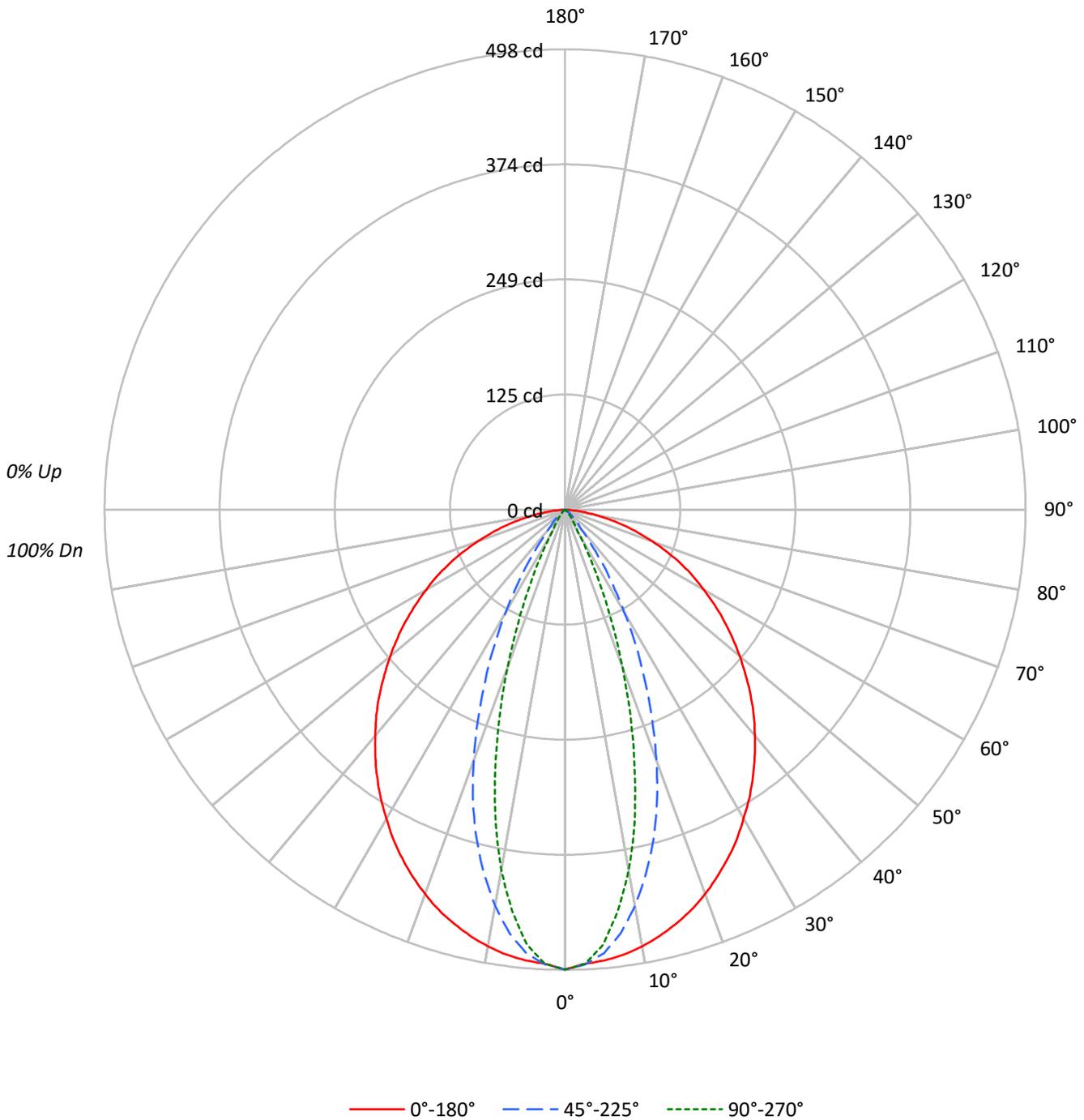
Lumens per Lamp: N/A
Luminaire Lumens: 452.8 lumens
Efficiency: N/A
Efficacy: 23.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	
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°	9429	9429	9429
5°	9313	9161	8986
10°	9234	8374	7626
15°	9101	7249	5712
20°	8928	5825	3655
25°	8707	4269	1877
30°	8447	2791	613
35°	8190	1547	356
40°	7894	623	198
45°	7601	413	78
50°	7268	236	32
55°	6937	112	20
60°	6567	42	0
65°	6182	27	0
70°	5545	33	0
75°	4773	44	0
80°	3622	0	0
85°	1500	130	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7601 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	9.9
10°-20°	103.7	22.9
20°-30°	105.3	23.2
30°-40°	79.0	17.4
40°-50°	55.3	12.2
50°-60°	33.8	7.5
60°-70°	20.2	4.5
70°-80°	9.3	2.1
80°-90°	1.7	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°	253.5	56.0
0°-40°	332.5	73.4
0°-60°	421.7	93.1
0°-90°	452.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	452.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	498	498	498	498	498	
5°	490	494	482	472	472	46
15°	464	439	370	313	291	131
25°	416	343	204	117	90	192
35°	354	230	67	20	15	221
45°	284	122	15	5	3	219
55°	210	37	3	1	1	188
65°	138	11	1	1	0	136
75°	65	1	1	1	0	69
85°	7	0	1	1	0	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	497.7	497.7	497.7	497.7	497.7
2.5°	492.0	499.4	492.6	491.4	492.0
5°	489.7	494.3	481.7	472.5	472.5
7.5°	485.7	485.7	462.2	443.4	437.6
10°	480.0	473.7	435.3	405.0	396.4
12.5°	472.5	457.7	403.9	361.0	347.2
15°	464.0	438.8	369.6	312.9	291.2
17.5°	454.2	417.6	331.2	260.9	235.7
20°	442.8	394.7	288.9	207.7	181.3
22.5°	430.2	369.6	246.0	160.2	132.1
25°	416.5	343.2	204.2	116.7	89.8
27.5°	402.2	315.8	165.9	80.1	54.9
30°	386.1	287.2	127.6	47.5	28.0
32.5°	370.7	259.7	95.5	25.7	20.6
35°	354.1	230.5	66.9	20.0	15.4
37.5°	337.0	203.1	41.2	14.9	11.4
40°	319.2	175.1	25.2	10.9	8.0
42.5°	302.1	148.7	20.0	7.4	5.1
45°	283.7	121.9	15.4	4.6	2.9
47.5°	264.9	97.3	11.4	2.9	1.7
50°	246.6	75.5	8.0	1.7	1.1
52.5°	228.3	55.5	5.1	1.1	0.6
55°	210.0	37.2	3.4	1.1	0.6
57.5°	191.6	26.3	2.3	0.6	0.6
60°	173.3	20.6	1.1	0.6	0.0
62.5°	156.2	16.0	1.1	0.6	0.6
65°	137.9	10.9	0.6	0.6	0.0
67.5°	118.4	6.9	0.6	0.6	0.0
70°	100.1	4.0	0.6	0.6	0.0
72.5°	82.4	2.3	0.6	0.6	0.0
75°	65.2	1.1	0.6	0.6	0.0
77.5°	48.6	0.6	0.0	0.6	0.0
80°	33.2	0.0	0.0	0.6	0.0
82.5°	19.5	0.0	0.0	0.6	0.0
85°	6.9	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)