

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: P1055182

Luminaire Tested: S122R3DR-S290D927-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055182
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-S290D927-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

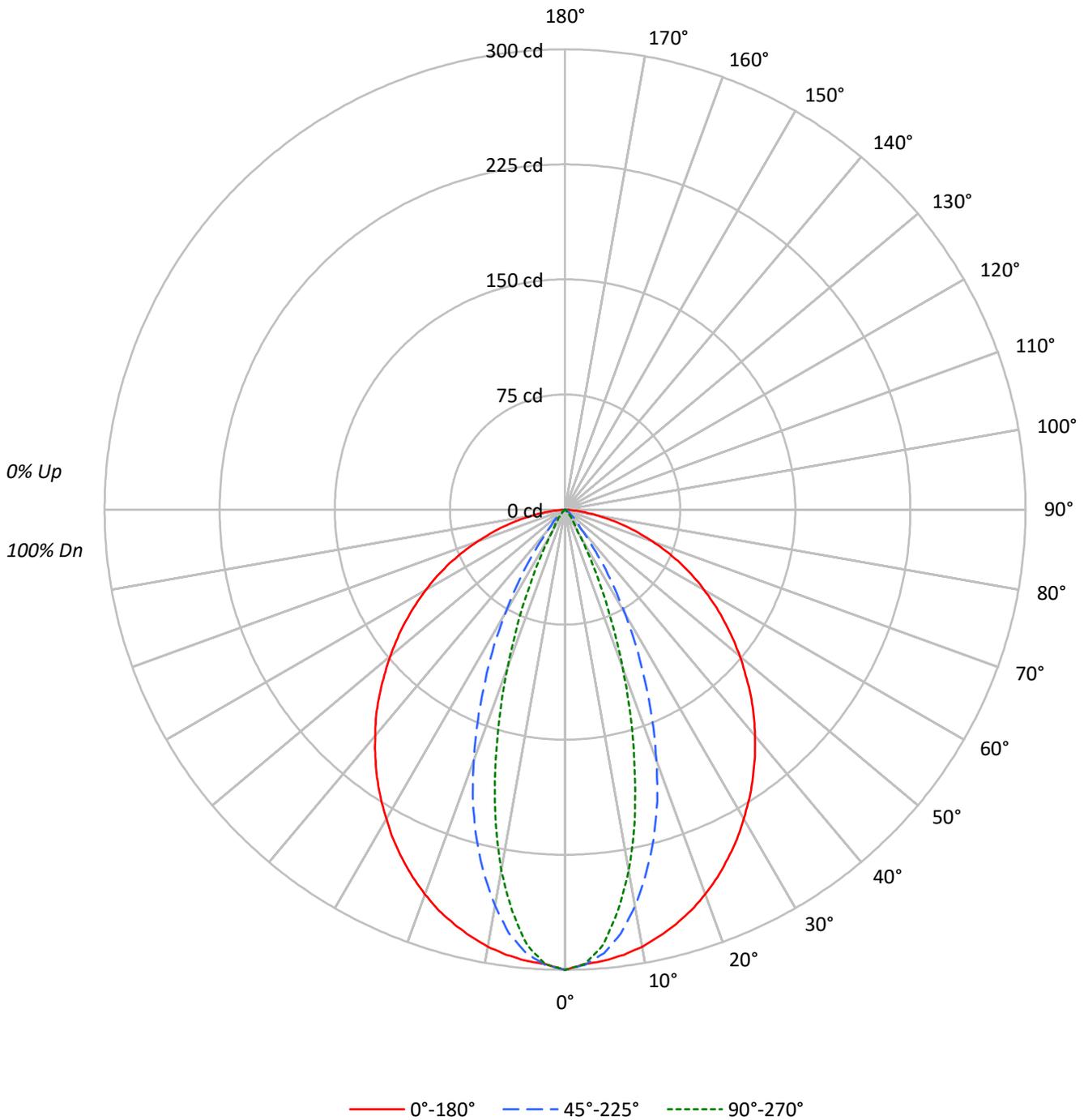
Lumens per Lamp: N/A
Luminaire Lumens: 272.8 lumens
Efficiency: N/A
Efficacy: 21.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
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	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°	5684	5684	5684
5°	5614	5521	5416
10°	5566	5048	4598
15°	5484	4368	3442
20°	5381	3510	2204
25°	5247	2573	1131
30°	5091	1682	370
35°	4936	932	215
40°	4758	376	119
45°	4582	249	46
50°	4380	141	21
55°	4178	69	10
60°	3960	27	0
65°	3725	13	0
70°	3340	17	0
75°	2877	22	0
80°	2182	0	0
85°	891	65	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4582 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.9	9.9
10°-20°	62.5	22.9
20°-30°	63.4	23.3
30°-40°	47.6	17.4
40°-50°	33.3	12.2
50°-60°	20.4	7.5
60°-70°	12.1	4.4
70°-80°	5.6	2.0
80°-90°	1.0	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°	152.8	56.0
0°-40°	200.4	73.5
0°-60°	254.1	93.1
0°-90°	272.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	272.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	300	300	300	300	300	
5°	295	298	290	285	285	28
15°	280	264	223	189	176	79
25°	251	207	123	70	54	116
35°	213	139	40	12	9	133
45°	171	73	9	3	2	132
55°	126	22	2	1	0	113
65°	83	7	0	0	0	82
75°	39	1	0	0	0	42
85°	4	0	0	0	0	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	300.0	300.0	300.0	300.0	300.0
2.5°	296.5	301.0	296.9	296.2	296.5
5°	295.2	297.9	290.3	284.8	284.8
7.5°	292.7	292.7	278.6	267.2	263.8
10°	289.3	285.5	262.4	244.1	239.0
12.5°	284.8	275.8	243.4	217.6	209.3
15°	279.6	264.5	222.7	188.6	175.5
17.5°	273.8	251.7	199.6	157.2	142.1
20°	266.9	237.9	174.1	125.2	109.3
22.5°	259.3	222.7	148.3	96.5	79.7
25°	251.0	206.9	123.1	70.3	54.1
27.5°	242.4	190.3	100.0	48.3	33.1
30°	232.7	173.1	76.9	28.6	16.9
32.5°	223.4	156.5	57.6	15.5	12.4
35°	213.4	139.0	40.3	12.1	9.3
37.5°	203.1	122.4	24.8	9.0	6.9
40°	192.4	105.5	15.2	6.6	4.8
42.5°	182.1	89.6	12.1	4.5	3.1
45°	171.0	73.4	9.3	2.8	1.7
47.5°	159.6	58.6	6.9	1.7	1.0
50°	148.6	45.5	4.8	1.0	0.7
52.5°	137.6	33.4	3.1	0.7	0.3
55°	126.5	22.4	2.1	0.7	0.3
57.5°	115.5	15.9	1.4	0.3	0.3
60°	104.5	12.4	0.7	0.3	0.0
62.5°	94.1	9.7	0.7	0.3	0.3
65°	83.1	6.6	0.3	0.3	0.0
67.5°	71.4	4.1	0.3	0.3	0.0
70°	60.3	2.4	0.3	0.3	0.0
72.5°	49.7	1.4	0.3	0.3	0.0
75°	39.3	0.7	0.3	0.3	0.0
77.5°	29.3	0.3	0.0	0.3	0.0
80°	20.0	0.0	0.0	0.3	0.0
82.5°	11.7	0.0	0.0	0.3	0.0
85°	4.1	0.0	0.3	0.3	0.0
87.5°	0.0	0.0	0.3	0.3	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)