

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: P1055185

Luminaire Tested: S122R3DR-S290D930-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055185
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-S290D930-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

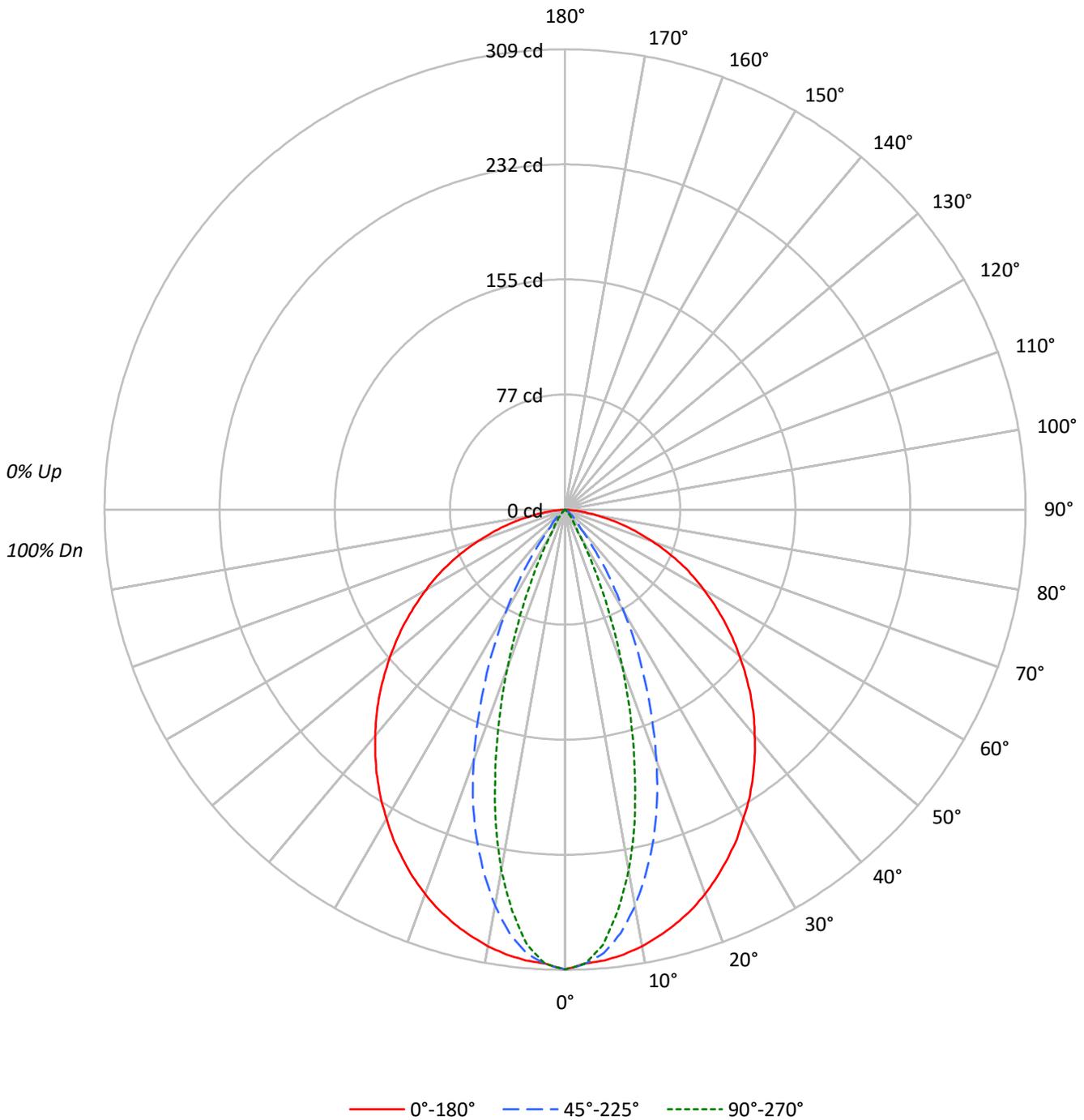
Lumens per Lamp: N/A
Luminaire Lumens: 281.0 lumens
Efficiency: N/A
Efficacy: 22.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	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	90																												
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	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	67	64	71	66	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	62	59	66	62	58	56																												
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	69	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	47	44	43																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5849	5849	5849
5°	5778	5683	5574
10°	5727	5196	4731
15°	5645	4496	3542
20°	5538	3613	2268
25°	5400	2649	1164
30°	5239	1730	381
35°	5081	960	222
40°	4897	386	124
45°	4716	257	48
50°	4507	147	21
55°	4301	69	13
60°	4073	27	0
65°	3833	18	0
70°	3440	22	0
75°	2965	29	0
80°	2248	0	0
85°	935	87	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4716 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.7	9.9
10°-20°	64.3	22.9
20°-30°	65.3	23.2
30°-40°	49.0	17.4
40°-50°	34.3	12.2
50°-60°	21.0	7.5
60°-70°	12.5	4.5
70°-80°	5.8	2.1
80°-90°	1.1	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°	157.3	56.0
0°-40°	206.3	73.4
0°-60°	261.6	93.1
0°-90°	281.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	281.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	309	309	309	309	309	
5°	304	307	299	293	293	29
15°	288	272	229	194	181	81
25°	258	213	127	72	56	119
35°	220	143	42	12	10	137
45°	176	76	10	3	2	136
55°	130	23	2	1	0	116
65°	86	7	0	0	0	84
75°	40	1	0	0	0	43
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°	308.7	308.7	308.7	308.7	308.7
2.5°	305.2	309.8	305.5	304.8	305.2
5°	303.8	306.6	298.8	293.1	293.1
7.5°	301.3	301.3	286.7	275.0	271.5
10°	297.7	293.8	270.1	251.2	245.9
12.5°	293.1	283.9	250.5	223.9	215.4
15°	287.8	272.2	229.2	194.1	180.6
17.5°	281.8	259.1	205.5	161.8	146.2
20°	274.7	244.9	179.2	128.8	112.5
22.5°	266.9	229.2	152.6	99.4	82.0
25°	258.3	212.9	126.7	72.4	55.7
27.5°	249.5	195.9	102.9	49.7	34.1
30°	239.5	178.1	79.1	29.5	17.4
32.5°	230.0	161.1	59.3	16.0	12.8
35°	219.7	143.0	41.5	12.4	9.6
37.5°	209.0	126.0	25.6	9.2	7.1
40°	198.0	108.6	15.6	6.7	5.0
42.5°	187.4	92.3	12.4	4.6	3.2
45°	176.0	75.6	9.6	2.8	1.8
47.5°	164.3	60.3	7.1	1.8	1.1
50°	152.9	46.8	5.0	1.1	0.7
52.5°	141.6	34.4	3.2	0.7	0.4
55°	130.2	23.1	2.1	0.7	0.4
57.5°	118.9	16.3	1.4	0.4	0.4
60°	107.5	12.8	0.7	0.4	0.0
62.5°	96.9	9.9	0.7	0.4	0.4
65°	85.5	6.7	0.4	0.4	0.0
67.5°	73.5	4.3	0.4	0.4	0.0
70°	62.1	2.5	0.4	0.4	0.0
72.5°	51.1	1.4	0.4	0.4	0.0
75°	40.5	0.7	0.4	0.4	0.0
77.5°	30.2	0.4	0.0	0.4	0.0
80°	20.6	0.0	0.0	0.4	0.0
82.5°	12.1	0.0	0.0	0.4	0.0
85°	4.3	0.0	0.4	0.4	0.0
87.5°	0.0	0.0	0.4	0.4	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)