

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: P1055194

Luminaire Tested: S122R3DR-S290D950-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055194
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-S290D950-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

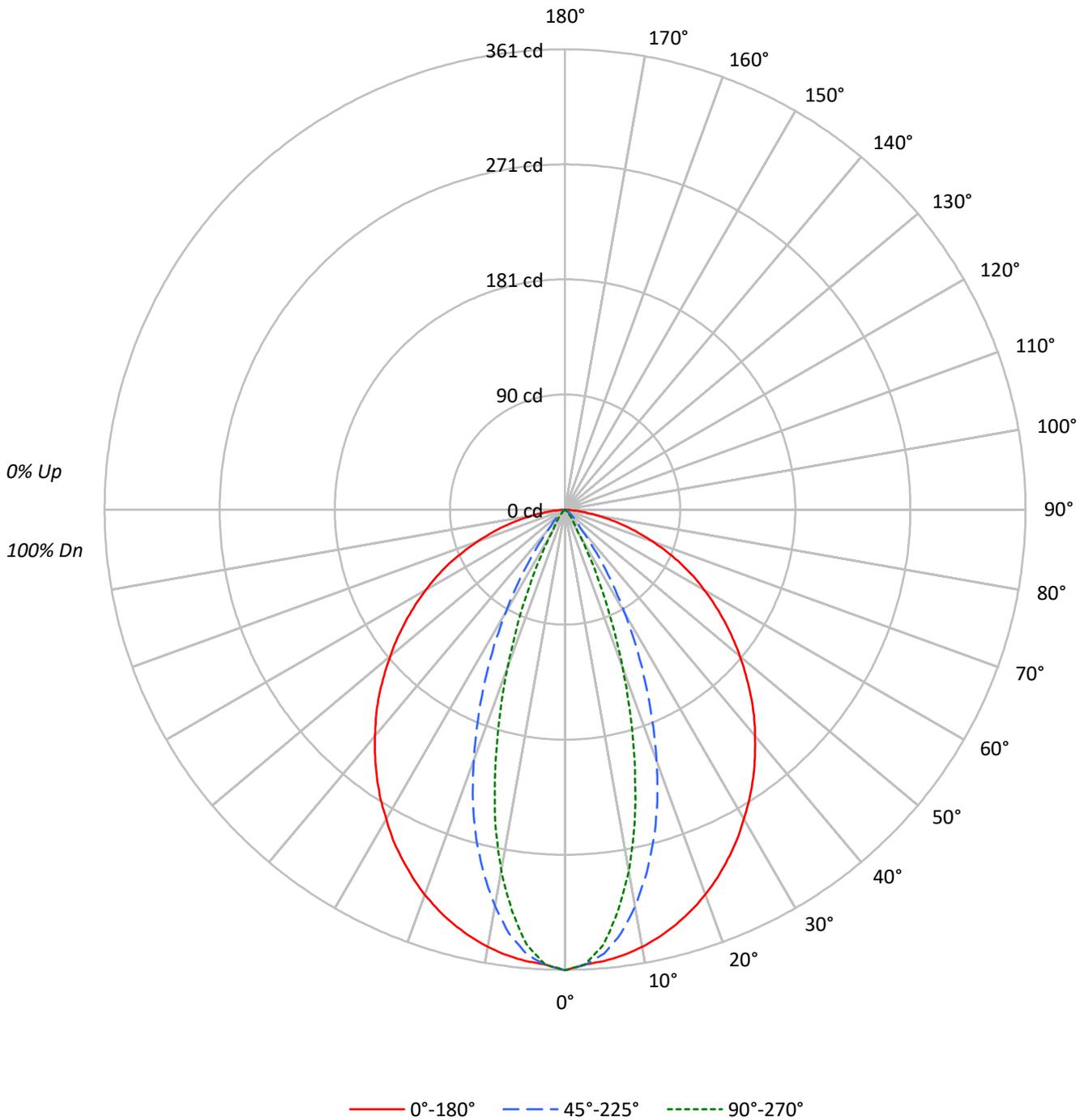
Lumens per Lamp: N/A
Luminaire Lumens: 328.6 lumens
Efficiency: N/A
Efficacy: 26.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	6845	6845	6845
5°	6759	6649	6523
10°	6703	6079	5537
15°	6606	5261	4146
20°	6480	4228	2653
25°	6319	3098	1363
30°	6132	2026	444
35°	5944	1124	259
40°	5730	453	143
45°	5519	300	56
50°	5276	171	24
55°	5034	83	13
60°	4767	30	0
65°	4487	18	0
70°	4027	22	0
75°	3462	29	0
80°	2629	0	0
85°	1087	87	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5519 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.4	9.9
10°-20°	75.2	22.9
20°-30°	76.4	23.2
30°-40°	57.3	17.4
40°-50°	40.1	12.2
50°-60°	24.6	7.5
60°-70°	14.6	4.5
70°-80°	6.7	2.1
80°-90°	1.2	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°	184.0	56.0
0°-40°	241.4	73.4
0°-60°	306.1	93.1
0°-90°	328.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	328.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	361	361	361	361	361	
5°	355	359	350	343	343	34
15°	337	318	268	227	211	95
25°	302	249	148	85	65	139
35°	257	167	49	14	11	161
45°	206	88	11	3	2	159
55°	152	27	2	1	0	136
65°	100	8	0	0	0	99
75°	47	1	0	0	0	50
85°	5	0	0	0	0	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	361.3	361.3	361.3	361.3	361.3
2.5°	357.1	362.5	357.5	356.7	357.1
5°	355.4	358.8	349.6	343.0	343.0
7.5°	352.5	352.5	335.5	321.8	317.7
10°	348.4	343.8	316.0	294.0	287.8
12.5°	343.0	332.2	293.2	262.0	252.1
15°	336.8	318.5	268.2	227.1	211.4
17.5°	329.7	303.1	240.4	189.3	171.1
20°	321.4	286.5	209.7	150.7	131.6
22.5°	312.3	268.2	178.6	116.3	95.9
25°	302.3	249.1	148.2	84.7	65.2
27.5°	291.9	229.2	120.4	58.1	39.9
30°	280.3	208.5	92.6	34.5	20.3
32.5°	269.1	188.5	69.3	18.7	14.9
35°	257.0	167.3	48.6	14.5	11.2
37.5°	244.6	147.4	29.9	10.8	8.3
40°	231.7	127.1	18.3	7.9	5.8
42.5°	219.2	108.0	14.5	5.4	3.7
45°	206.0	88.4	11.2	3.3	2.1
47.5°	192.3	70.6	8.3	2.1	1.2
50°	179.0	54.8	5.8	1.2	0.8
52.5°	165.7	40.3	3.7	0.8	0.4
55°	152.4	27.0	2.5	0.8	0.4
57.5°	139.1	19.1	1.7	0.4	0.4
60°	125.8	14.9	0.8	0.4	0.0
62.5°	113.4	11.6	0.8	0.4	0.4
65°	100.1	7.9	0.4	0.4	0.0
67.5°	86.0	5.0	0.4	0.4	0.0
70°	72.7	2.9	0.4	0.4	0.0
72.5°	59.8	1.7	0.4	0.4	0.0
75°	47.3	0.8	0.4	0.4	0.0
77.5°	35.3	0.4	0.0	0.4	0.0
80°	24.1	0.0	0.0	0.4	0.0
82.5°	14.1	0.0	0.0	0.4	0.0
85°	5.0	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)