

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: P1055196

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055196
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
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-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

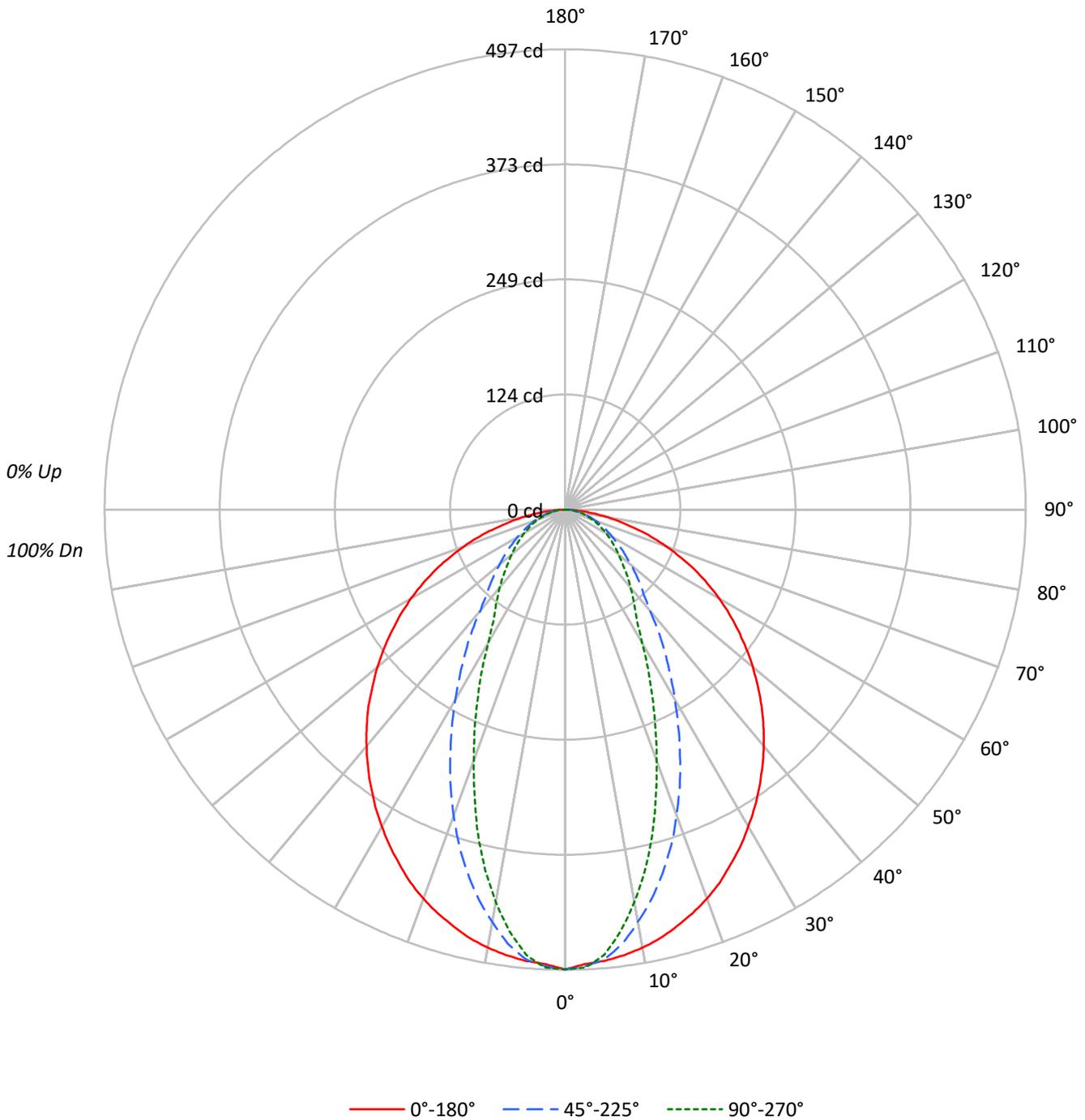
Lumens per Lamp: N/A
Luminaire Lumens: 751.2 lumens
Efficiency: N/A
Efficacy: 59.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				66
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				58
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				46
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				35
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9409	9409	9409
5°	9302	9271	9184
10°	9242	8699	8284
15°	9138	7973	7126
20°	9016	7091	5819
25°	8836	6129	4645
30°	8648	5178	3625
35°	8451	4332	3044
40°	8246	3512	2711
45°	8033	3071	2425
50°	7796	2718	2216
55°	7531	2454	2058
60°	7268	2236	1921
65°	6926	2049	1807
70°	6420	1911	1701
75°	5680	1735	1610
80°	4844	1626	1495
85°	3348	1435	1348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8033 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.5	6.1
10°-20°	114.9	15.3
20°-30°	141.6	18.8
30°-40°	135.8	18.1
40°-50°	117.2	15.6
50°-60°	90.9	12.1
60°-70°	62.2	8.3
70°-80°	33.8	4.5
80°-90°	9.3	1.2
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°	302.0	40.2
0°-40°	437.8	58.3
0°-60°	645.9	86.0
0°-90°	751.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	751.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	497	497	497	497	497	
5°	489	496	488	481	483	46
15°	466	452	406	373	363	131
25°	423	378	293	239	222	195
35°	365	290	187	140	132	229
45°	300	202	115	95	90	231
55°	228	121	74	64	62	204
65°	154	66	46	42	40	153
75°	78	30	24	22	22	83
85°	15	8	7	7	6	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	496.6	496.6	496.6	496.6	496.6
2.5°	491.2	499.5	493.7	493.7	495.0
5°	489.1	496.2	487.5	481.3	482.9
7.5°	485.4	490.4	473.0	459.7	459.3
10°	480.4	480.8	452.2	434.8	430.6
12.5°	474.2	467.6	431.0	404.9	398.6
15°	465.9	451.8	406.5	373.3	363.3
17.5°	457.2	435.6	380.4	338.8	325.1
20°	447.2	416.1	351.7	304.4	288.6
22.5°	436.0	397.4	323.1	271.1	254.5
25°	422.7	377.5	293.2	239.2	222.2
27.5°	409.8	357.1	264.5	210.9	193.5
30°	395.3	335.1	236.7	183.9	165.7
32.5°	380.8	312.7	210.9	158.2	144.5
35°	365.4	289.8	187.3	139.5	131.6
37.5°	349.6	267.4	164.8	127.1	120.0
40°	333.4	245.0	142.0	115.0	109.6
42.5°	316.8	223.0	126.2	105.1	100.1
45°	299.8	201.8	114.6	94.7	90.5
47.5°	281.5	180.6	103.4	86.0	82.2
50°	264.5	160.3	92.2	78.1	75.2
52.5°	246.2	140.4	83.0	71.0	68.5
55°	228.0	121.2	74.3	64.4	62.3
57.5°	210.1	103.0	66.0	58.1	56.5
60°	191.8	88.4	59.0	52.3	50.7
62.5°	173.2	76.8	52.3	46.9	45.3
65°	154.5	66.0	45.7	41.5	40.3
67.5°	135.0	55.6	39.9	36.5	35.7
70°	115.9	46.5	34.5	31.6	30.7
72.5°	97.2	37.8	29.1	27.0	26.2
75°	77.6	30.3	23.7	22.4	22.0
77.5°	60.6	23.7	19.1	18.3	17.9
80°	44.4	17.4	14.9	14.1	13.7
82.5°	29.5	12.0	10.8	10.4	10.0
85°	15.4	7.5	6.6	6.6	6.2
87.5°	5.0	3.3	3.3	3.3	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)