

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: P1055193

Luminaire Tested: S122R3DR-S290D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055193
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-S290D940-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

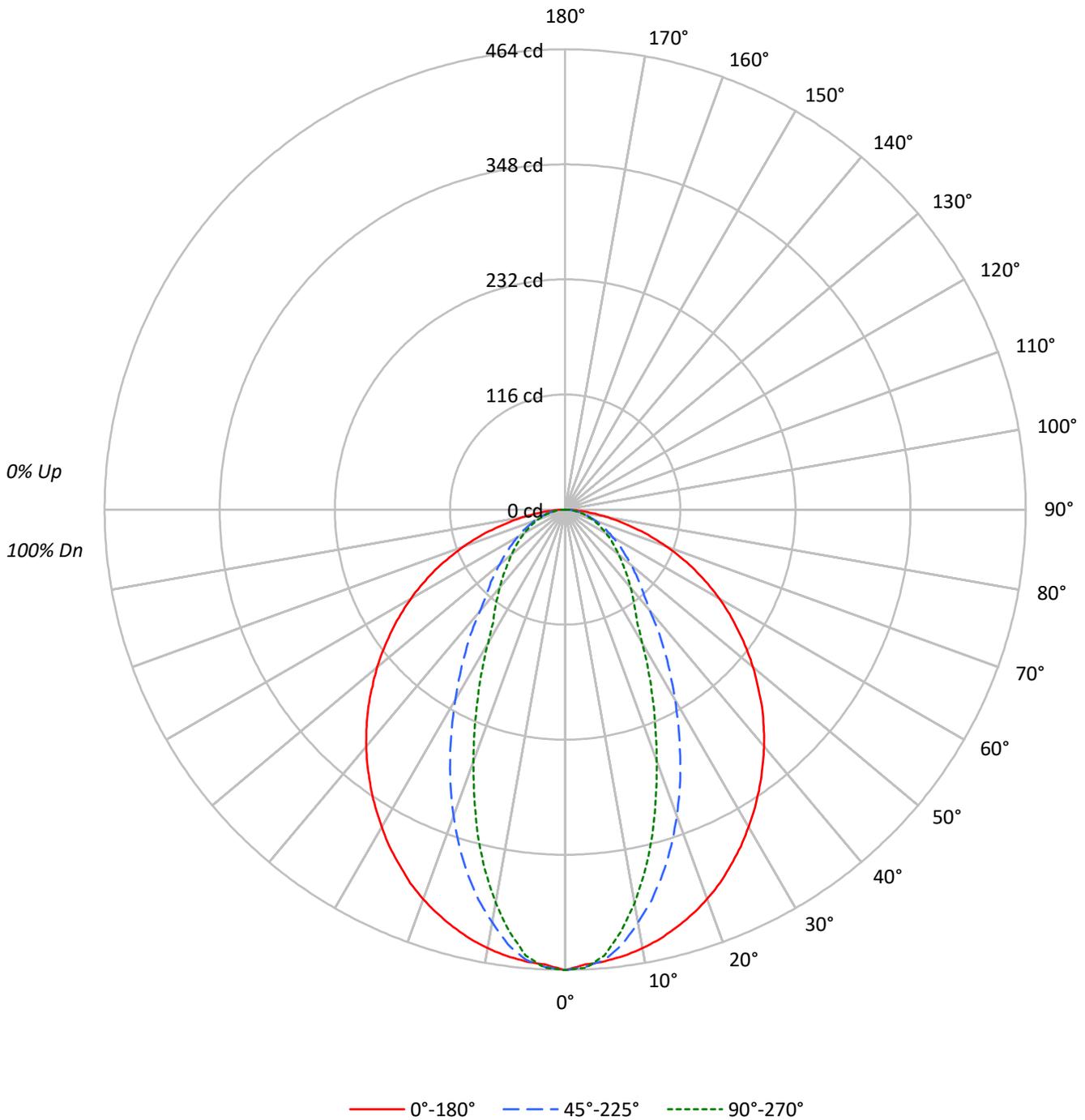
Lumens per Lamp: N/A
Luminaire Lumens: 702.1 lumens
Efficiency: N/A
Efficacy: 55.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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				
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8795	8795	8795
5°	8695	8667	8585
10°	8640	8132	7743
15°	8542	7453	6661
20°	8428	6627	5438
25°	8259	5728	4340
30°	8083	4839	3389
35°	7898	4048	2845
40°	7709	3282	2535
45°	7508	2870	2267
50°	7286	2541	2072
55°	7039	2296	1922
60°	6794	2088	1796
65°	6473	1914	1686
70°	5999	1784	1590
75°	5314	1618	1508
80°	4528	1527	1397
85°	3130	1348	1261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7508 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.5	6.1
10°-20°	107.4	15.3
20°-30°	132.3	18.8
30°-40°	127.0	18.1
40°-50°	109.5	15.6
50°-60°	85.0	12.1
60°-70°	58.2	8.3
70°-80°	31.6	4.5
80°-90°	8.7	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°	282.3	40.2
0°-40°	409.2	58.3
0°-60°	603.7	86.0
0°-90°	702.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	702.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	464	464	464	464	464	
5°	457	464	456	450	451	43
15°	436	422	380	349	340	123
25°	395	353	274	224	208	182
35°	342	271	175	130	123	214
45°	280	189	107	88	85	216
55°	213	113	70	60	58	191
65°	144	62	43	39	38	143
75°	73	28	22	21	21	78
85°	14	7	6	6	6	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	464.2	464.2	464.2	464.2	464.2
2.5°	459.2	466.9	461.5	461.5	462.6
5°	457.2	463.8	455.7	449.8	451.4
7.5°	453.7	458.4	442.1	429.7	429.3
10°	449.1	449.4	422.7	406.4	402.5
12.5°	443.2	437.0	402.9	378.4	372.6
15°	435.5	422.3	380.0	348.9	339.6
17.5°	427.3	407.1	355.5	316.7	303.9
20°	418.0	388.9	328.7	284.5	269.7
22.5°	407.5	371.4	302.0	253.4	237.9
25°	395.1	352.8	274.0	223.6	207.6
27.5°	383.1	333.8	247.2	197.2	180.9
30°	369.5	313.2	221.2	171.9	154.9
32.5°	355.9	292.3	197.2	147.9	135.1
35°	341.5	270.9	175.0	130.4	123.0
37.5°	326.8	250.0	154.1	118.8	112.2
40°	311.7	229.0	132.7	107.5	102.5
42.5°	296.1	208.4	118.0	98.2	93.5
45°	280.2	188.6	107.1	88.5	84.6
47.5°	263.1	168.8	96.6	80.3	76.8
50°	247.2	149.8	86.2	73.0	70.3
52.5°	230.2	131.2	77.6	66.4	64.0
55°	213.1	113.3	69.5	60.2	58.2
57.5°	196.4	96.3	61.7	54.3	52.8
60°	179.3	82.7	55.1	48.9	47.4
62.5°	161.8	71.8	48.9	43.9	42.3
65°	144.4	61.7	42.7	38.8	37.6
67.5°	126.1	52.0	37.3	34.2	33.4
70°	108.3	43.5	32.2	29.5	28.7
72.5°	90.8	35.3	27.2	25.2	24.5
75°	72.6	28.3	22.1	21.0	20.6
77.5°	56.7	22.1	17.9	17.1	16.7
80°	41.5	16.3	14.0	13.2	12.8
82.5°	27.6	11.3	10.1	9.7	9.3
85°	14.4	7.0	6.2	6.2	5.8
87.5°	4.7	3.1	3.1	3.1	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)