

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: P1056021

Luminaire Tested: S124R3DR-S350D927-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056021
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S350D927-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

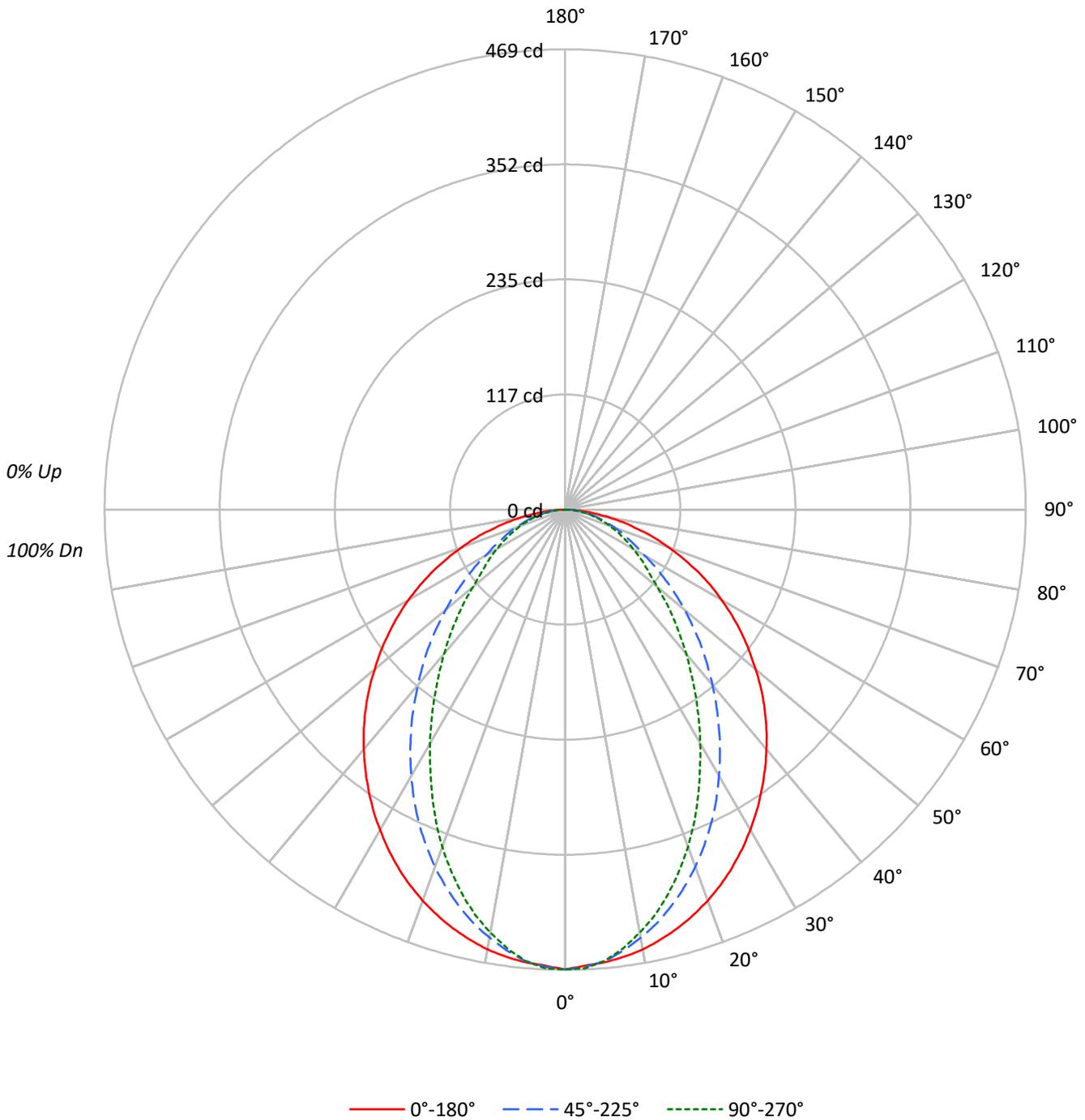
Lumens per Lamp: N/A
Luminaire Lumens: 933.3 lumens
Efficiency: N/A
Efficacy: 74.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	110	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4143	4143	4143
5°	4110	4100	4098
10°	4086	3978	3929
15°	4043	3828	3712
20°	3990	3647	3442
25°	3926	3438	3129
30°	3848	3200	2810
35°	3766	2951	2501
40°	3681	2694	2213
45°	3591	2444	1944
50°	3481	2182	1679
55°	3376	1919	1526
60°	3255	1646	1415
65°	3109	1494	1320
70°	2887	1380	1249
75°	2613	1271	1179
80°	2281	1176	1105
85°	1745	1085	1014

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3591 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.6	4.7
10°-20°	118.3	12.7
20°-30°	163.9	17.6
30°-40°	175.9	18.8
40°-50°	159.9	17.1
50°-60°	126.0	13.5
60°-70°	86.2	9.2
70°-80°	46.4	5.0
80°-90°	13.1	1.4
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°	325.8	34.9
0°-40°	501.7	53.8
0°-60°	787.6	84.4
0°-90°	933.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	933.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	469	469	469	469	469	
5°	463	468	462	460	462	44
15°	442	437	418	407	406	125
25°	402	386	352	327	321	185
35°	349	322	273	240	232	218
45°	287	251	196	162	156	221
55°	219	177	124	100	99	196
65°	149	106	71	63	63	147
75°	76	46	37	34	34	82
85°	17	12	11	10	10	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	468.6	468.6	468.6	468.6	468.6
2.5°	465.1	470.7	466.5	467.2	467.9
5°	463.1	468.2	462.0	459.6	461.7
7.5°	459.6	463.1	453.4	448.9	451.0
10°	455.1	455.8	443.1	436.5	437.6
12.5°	448.9	447.2	431.7	422.4	423.1
15°	441.7	436.9	418.2	406.9	405.5
17.5°	433.4	425.5	403.4	388.9	386.2
20°	424.1	413.4	387.6	368.9	365.8
22.5°	413.8	400.0	370.3	348.3	343.8
25°	402.4	385.8	352.4	326.9	320.7
27.5°	390.0	370.7	333.1	305.2	297.2
30°	376.9	354.8	313.4	283.4	275.2
32.5°	363.4	338.6	293.4	261.7	253.1
35°	348.9	321.7	273.4	240.3	231.7
37.5°	334.1	304.1	253.1	219.6	210.7
40°	318.9	286.5	233.4	199.0	191.7
42.5°	303.4	268.6	214.1	179.6	173.1
45°	287.2	250.7	195.5	161.7	155.5
47.5°	270.7	232.4	176.5	144.8	139.0
50°	253.1	214.1	158.6	128.3	122.1
52.5°	236.2	195.5	141.4	112.1	109.0
55°	219.0	177.2	124.5	100.3	99.0
57.5°	201.7	159.0	109.0	91.0	89.6
60°	184.1	141.0	93.1	81.4	80.0
62.5°	166.5	123.4	81.4	72.1	71.4
65°	148.6	106.2	71.4	63.4	63.1
67.5°	129.6	89.6	62.4	55.9	55.5
70°	111.7	73.1	53.4	48.3	48.3
72.5°	94.8	57.9	45.2	41.0	41.0
75°	76.5	46.5	37.2	34.1	34.5
77.5°	60.3	36.5	30.0	27.9	27.9
80°	44.8	27.2	23.1	21.4	21.7
82.5°	30.3	19.0	16.6	15.5	15.5
85°	17.2	11.7	10.7	10.0	10.0
87.5°	6.2	5.5	5.2	4.5	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)