

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: P1056027

Luminaire Tested: S124R3DR-S350D935-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056027
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-S350D935-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

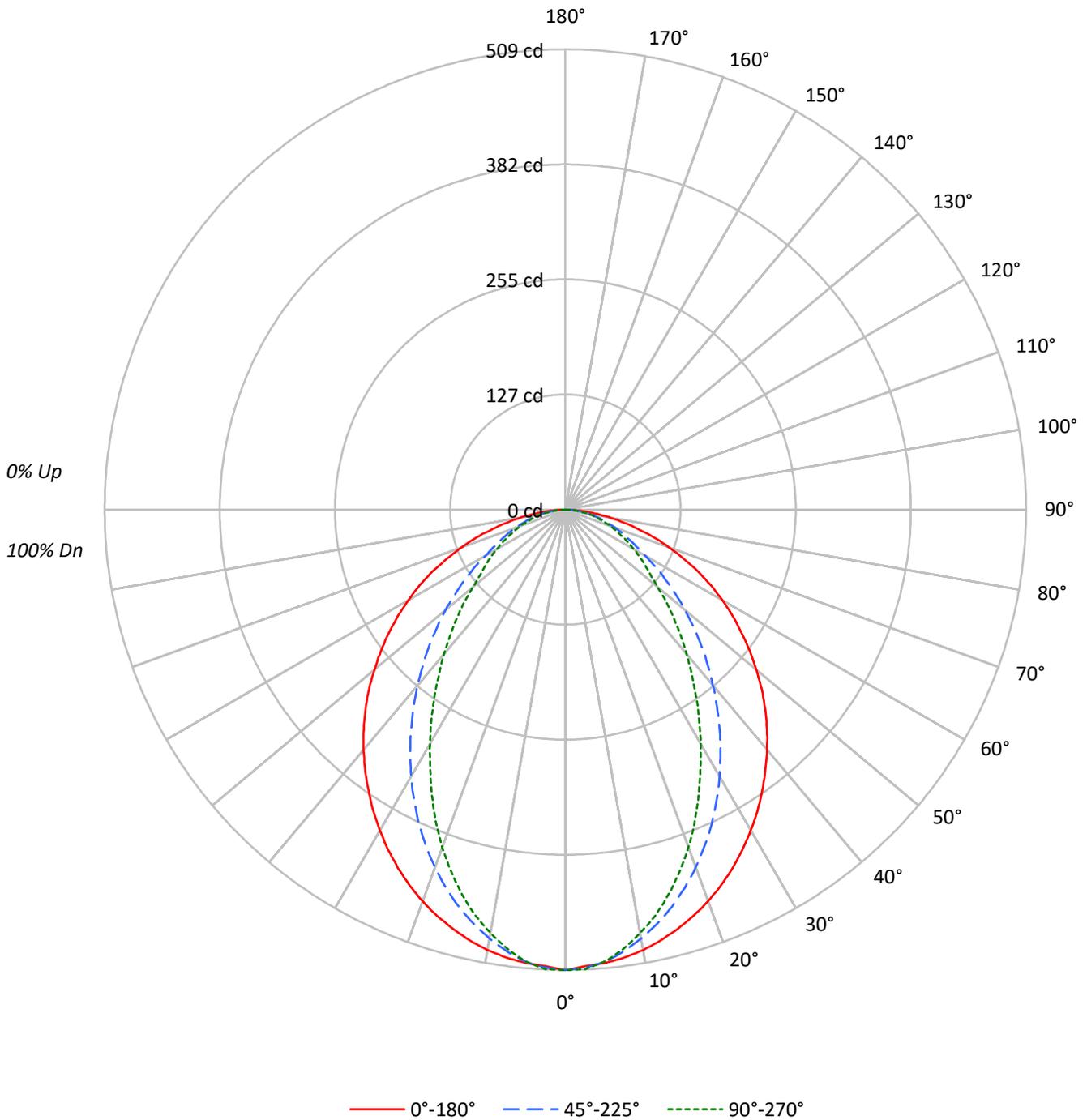
Lumens per Lamp: N/A
Luminaire Lumens: 1014.4 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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°	4503	4503	4503
5°	4467	4457	4454
10°	4441	4324	4270
15°	4394	4161	4034
20°	4337	3963	3741
25°	4266	3736	3400
30°	4182	3478	3054
35°	4094	3208	2718
40°	4001	2928	2405
45°	3904	2657	2113
50°	3784	2371	1825
55°	3669	2086	1659
60°	3538	1789	1537
65°	3379	1623	1435
70°	3138	1502	1357
75°	2842	1383	1281
80°	2480	1278	1202
85°	1897	1177	1106

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3904 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	4.7
10°-20°	128.6	12.7
20°-30°	178.1	17.6
30°-40°	191.1	18.8
40°-50°	173.8	17.1
50°-60°	136.9	13.5
60°-70°	93.7	9.2
70°-80°	50.4	5.0
80°-90°	14.3	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°	354.1	34.9
0°-40°	545.3	53.8
0°-60°	856.0	84.4
0°-90°	1014.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1014.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	509	509	509	509	509	
5°	503	509	502	500	502	48
15°	480	475	455	442	441	135
25°	437	419	383	355	348	201
35°	379	350	297	261	252	237
45°	312	272	212	176	169	241
55°	238	193	135	109	108	213
65°	162	115	78	69	69	159
75°	83	51	40	37	38	89
85°	19	13	12	11	11	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	509.3	509.3	509.3	509.3	509.3
2.5°	505.5	511.5	507.0	507.8	508.5
5°	503.3	508.9	502.2	499.6	501.8
7.5°	499.6	503.3	492.8	487.9	490.2
10°	494.7	495.4	481.6	474.4	475.6
12.5°	487.9	486.1	469.2	459.1	459.8
15°	480.1	474.8	454.6	442.2	440.7
17.5°	471.1	462.5	438.5	422.7	419.7
20°	461.0	449.3	421.2	401.0	397.6
22.5°	449.7	434.7	402.5	378.5	373.6
25°	437.3	419.4	383.0	355.3	348.5
27.5°	423.9	402.9	362.0	331.7	323.0
30°	409.6	385.6	340.7	308.1	299.1
32.5°	395.0	368.0	318.9	284.4	275.1
35°	379.3	349.6	297.2	261.2	251.8
37.5°	363.1	330.5	275.1	238.7	229.0
40°	346.7	311.4	253.7	216.2	208.4
42.5°	329.8	291.9	232.7	195.2	188.1
45°	312.2	272.4	212.5	175.8	169.0
47.5°	294.2	252.6	191.9	157.4	151.0
50°	275.1	232.7	172.4	139.4	132.7
52.5°	256.7	212.5	153.7	121.8	118.4
55°	238.0	192.6	135.3	109.1	107.6
57.5°	219.2	172.8	118.4	98.9	97.4
60°	200.1	153.3	101.2	88.4	86.9
62.5°	181.0	134.2	88.4	78.3	77.6
65°	161.5	115.4	77.6	69.0	68.6
67.5°	140.9	97.4	67.8	60.7	60.3
70°	121.4	79.4	58.1	52.5	52.5
72.5°	103.1	63.0	49.1	44.6	44.6
75°	83.2	50.6	40.5	37.1	37.5
77.5°	65.6	39.7	32.6	30.4	30.4
80°	48.7	29.6	25.1	23.2	23.6
82.5°	33.0	20.6	18.0	16.9	16.9
85°	18.7	12.7	11.6	10.9	10.9
87.5°	6.7	6.0	5.6	4.9	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)