

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: P1056033

Luminaire Tested: S124R3DR-S350D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056033
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-S350D950-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

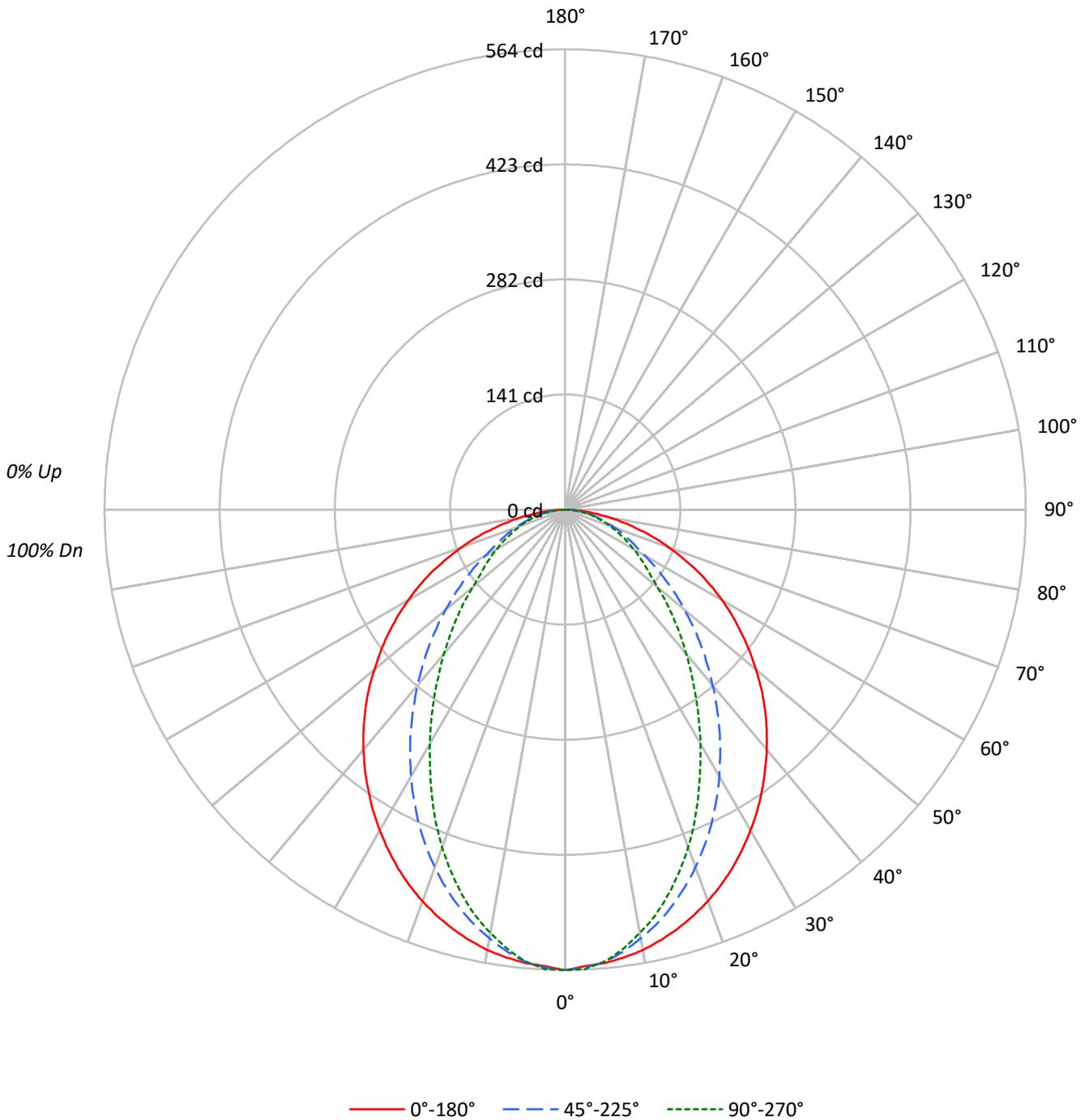
Lumens per Lamp: N/A
Luminaire Lumens: 1124.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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									
RC	80									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	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86			86																
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73			73																
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63			63																
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55			55																
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49			49																
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43			43																
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39			39																
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35			35																
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32			32																
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29			29																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4989	4989	4989
5°	4950	4938	4935
10°	4921	4791	4730
15°	4869	4611	4470
20°	4805	4391	4146
25°	4727	4140	3768
30°	4634	3854	3383
35°	4535	3554	3011
40°	4433	3244	2665
45°	4325	2943	2342
50°	4192	2627	2022
55°	4065	2311	1837
60°	3920	1982	1703
65°	3745	1799	1590
70°	3477	1665	1502
75°	3150	1530	1418
80°	2749	1415	1334
85°	2110	1309	1217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4325 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	4.7
10°-20°	142.5	12.7
20°-30°	197.3	17.6
30°-40°	211.8	18.8
40°-50°	192.6	17.1
50°-60°	151.7	13.5
60°-70°	103.8	9.2
70°-80°	55.9	5.0
80°-90°	15.8	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°	392.4	34.9
0°-40°	604.2	53.8
0°-60°	948.4	84.4
0°-90°	1124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	564	564	564	564	564	
5°	558	564	556	554	556	53
15°	532	526	504	490	488	150
25°	485	465	424	394	386	223
35°	420	387	329	289	279	263
45°	346	302	235	195	187	267
55°	264	213	150	121	119	236
65°	179	128	86	76	76	177
75°	92	56	45	41	42	98
85°	21	14	13	12	12	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	564.3	564.3	564.3	564.3	564.3
2.5°	560.2	566.8	561.8	562.6	563.5
5°	557.7	563.9	556.4	553.5	556.0
7.5°	553.5	557.7	546.0	540.6	543.1
10°	548.1	548.9	533.6	525.7	526.9
12.5°	540.6	538.6	519.9	508.7	509.5
15°	531.9	526.1	503.7	490.0	488.3
17.5°	522.0	512.4	485.8	468.4	465.1
20°	510.7	497.9	466.7	444.3	440.6
22.5°	498.3	481.7	446.0	419.4	414.0
25°	484.6	464.7	424.4	393.6	386.2
27.5°	469.6	446.4	401.1	367.5	357.9
30°	453.9	427.3	377.5	341.3	331.4
32.5°	437.7	407.8	353.4	315.2	304.8
35°	420.2	387.4	329.3	289.4	279.0
37.5°	402.4	366.2	304.8	264.5	253.7
40°	384.1	345.1	281.1	239.6	230.9
42.5°	365.4	323.5	257.9	216.3	208.4
45°	345.9	301.9	235.4	194.7	187.3
47.5°	326.0	279.9	212.6	174.4	167.3
50°	304.8	257.9	191.0	154.5	147.0
52.5°	284.4	235.4	170.2	135.0	131.2
55°	263.7	213.4	149.9	120.8	119.2
57.5°	242.9	191.4	131.2	109.6	108.0
60°	221.7	169.8	112.1	98.0	96.3
62.5°	200.6	148.7	98.0	86.8	86.0
65°	179.0	127.9	86.0	76.4	76.0
67.5°	156.1	108.0	75.2	67.3	66.9
70°	134.5	88.0	64.4	58.1	58.1
72.5°	114.2	69.8	54.4	49.4	49.4
75°	92.2	56.1	44.8	41.1	41.5
77.5°	72.7	44.0	36.1	33.6	33.6
80°	54.0	32.8	27.8	25.7	26.2
82.5°	36.5	22.8	19.9	18.7	18.7
85°	20.8	14.1	12.9	12.0	12.0
87.5°	7.5	6.6	6.2	5.4	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)