

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: P1056042

Luminaire Tested: S124R3DR-S575D840-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056042
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-S575D840-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

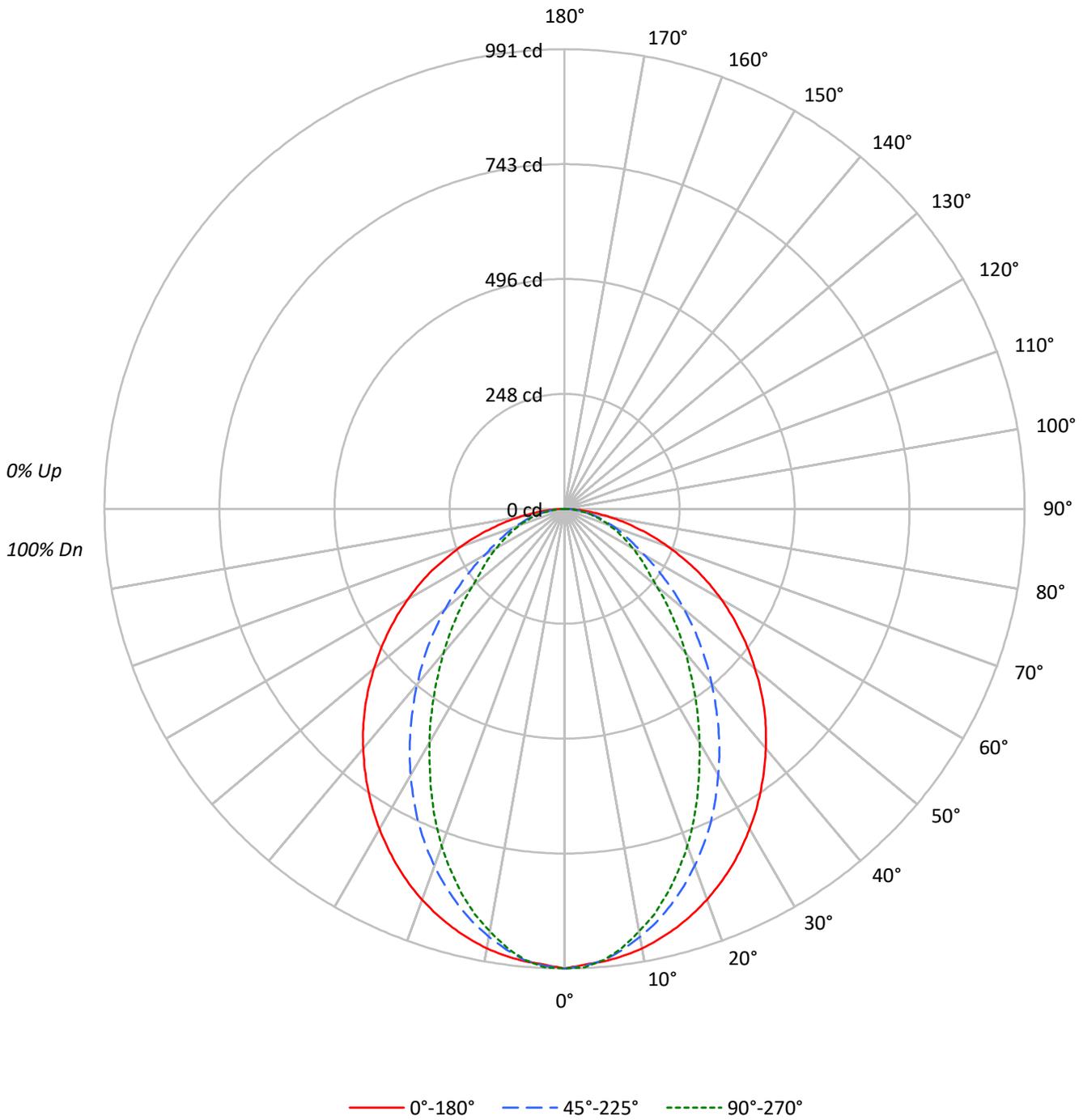
Lumens per Lamp: N/A
Luminaire Lumens: 1974.0 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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									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	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°	8763	8763	8763
5°	8692	8673	8667
10°	8642	8413	8308
15°	8551	8097	7850
20°	8440	7712	7281
25°	8303	7271	6616
30°	8138	6768	5942
35°	7965	6242	5290
40°	7786	5698	4680
45°	7596	5170	4112
50°	7363	4615	3551
55°	7138	4059	3226
60°	6886	3482	2992
65°	6575	3159	2793
70°	6108	2921	2639
75°	5531	2692	2490
80°	4827	2490	2337
85°	3703	2293	2140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7596 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.3	4.7
10°-20°	250.3	12.7
20°-30°	346.6	17.6
30°-40°	372.0	18.8
40°-50°	338.3	17.1
50°-60°	266.4	13.5
60°-70°	182.3	9.2
70°-80°	98.1	5.0
80°-90°	27.8	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°	689.1	34.9
0°-40°	1061.1	53.8
0°-60°	1665.7	84.4
0°-90°	1974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1974.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	991	991	991	991	991	
5°	979	990	977	972	976	93
15°	934	924	885	860	858	263
25°	851	816	745	691	678	392
35°	738	680	578	508	490	462
45°	608	530	414	342	329	468
55°	463	375	263	212	209	414
65°	314	225	151	134	134	310
75°	162	98	79	72	73	173
85°	36	25	23	21	21	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	991.1	991.1	991.1	991.1	991.1
2.5°	983.8	995.5	986.7	988.2	989.6
5°	979.4	990.3	977.2	972.1	976.5
7.5°	972.1	979.4	959.0	949.5	953.9
10°	962.6	964.1	937.1	923.3	925.4
12.5°	949.5	945.9	913.0	893.4	894.8
15°	934.2	924.0	884.6	860.5	857.6
17.5°	916.7	899.9	853.2	822.6	816.8
20°	897.0	874.4	819.7	780.3	773.8
22.5°	875.1	846.0	783.2	736.6	727.1
25°	851.1	816.1	745.3	691.3	678.2
27.5°	824.8	784.0	704.5	645.4	628.6
30°	797.1	750.4	662.9	599.5	582.0
32.5°	768.6	716.1	620.6	553.5	535.3
35°	738.0	680.4	578.3	508.3	490.1
37.5°	706.7	643.2	535.3	464.5	445.6
40°	674.6	606.0	493.7	420.8	405.5
42.5°	641.8	568.1	452.9	379.9	366.1
45°	607.5	530.2	413.5	342.0	328.9
47.5°	572.5	491.5	373.4	306.3	293.9
50°	535.3	452.9	335.5	271.3	258.2
52.5°	499.5	413.5	299.0	237.0	230.4
55°	463.1	374.8	263.3	212.2	209.3
57.5°	426.6	336.2	230.4	192.5	189.6
60°	389.4	298.3	196.9	172.1	169.2
62.5°	352.2	261.1	172.1	152.4	151.0
65°	314.3	224.6	151.0	134.2	133.5
67.5°	274.2	189.6	132.0	118.1	117.4
70°	236.3	154.6	113.0	102.1	102.1
72.5°	200.5	122.5	95.5	86.8	86.8
75°	161.9	98.5	78.8	72.2	72.9
77.5°	127.6	77.3	63.4	59.1	59.1
80°	94.8	57.6	48.9	45.2	45.9
82.5°	64.2	40.1	35.0	32.8	32.8
85°	36.5	24.8	22.6	21.1	21.1
87.5°	13.1	11.7	10.9	9.5	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)