

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: P1056057

Luminaire Tested: S124R3DR-S575D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056057
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-S575D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

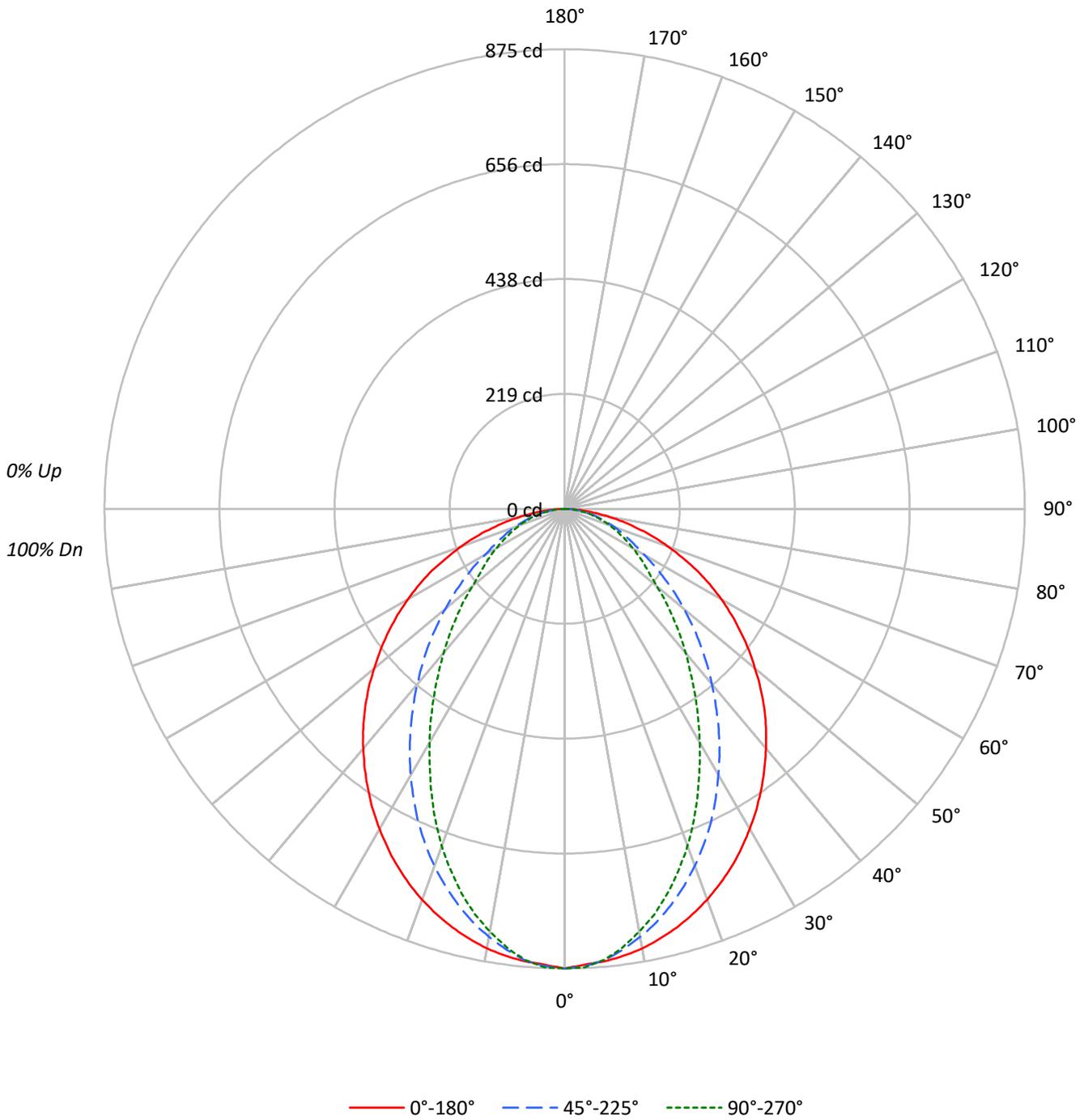
Lumens per Lamp: N/A
Luminaire Lumens: 1743.0 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1056057

CATALOG NUMBER: S124R3DR-S575D940-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1056057

CATALOG NUMBER: S124R3DR-S575D940-X4F0-XX-UDD-FLL-W

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	75	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°	7737	7737	7737
5°	7675	7658	7652
10°	7631	7429	7337
15°	7551	7150	6932
20°	7453	6810	6428
25°	7331	6420	5842
30°	7185	5975	5246
35°	7034	5511	4670
40°	6874	5031	4132
45°	6707	4565	3631
50°	6502	4074	3136
55°	6303	3584	2849
60°	6081	3075	2642
65°	5805	2789	2464
70°	5392	2580	2332
75°	4885	2374	2200
80°	4262	2194	2067
85°	3266	2029	1897

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6707 cd/sqm



TEST NUMBER: P1056057

CATALOG NUMBER: S124R3DR-S575D940-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.5	4.7
10°-20°	221.0	12.7
20°-30°	306.0	17.6
30°-40°	328.4	18.8
40°-50°	298.7	17.1
50°-60°	235.2	13.5
60°-70°	161.0	9.2
70°-80°	86.7	5.0
80°-90°	24.5	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°	608.5	34.9
0°-40°	936.9	53.8
0°-60°	1470.8	84.4
0°-90°	1743.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1743.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	875	875	875	875	875	
5°	865	874	863	858	862	82
15°	825	816	781	760	757	233
25°	752	721	658	610	599	346
35°	652	601	511	449	433	408
45°	536	468	365	302	290	414
55°	409	331	232	187	185	366
65°	278	198	133	118	118	274
75°	143	87	70	64	64	153
85°	32	22	20	19	19	39
90°	0	0	0	0	0	



TEST NUMBER: P1056057

CATALOG NUMBER: S124R3DR-S575D940-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	875.1	875.1	875.1	875.1	875.1
2.5°	868.7	879.0	871.3	872.5	873.8
5°	864.8	874.5	862.9	858.4	862.2
7.5°	858.4	864.8	846.8	838.4	842.3
10°	850.0	851.3	827.5	815.2	817.2
12.5°	838.4	835.2	806.2	788.8	790.1
15°	824.9	815.9	781.1	759.9	757.3
17.5°	809.4	794.6	753.4	726.4	721.2
20°	792.1	772.1	723.8	689.0	683.2
22.5°	772.7	747.0	691.6	650.4	642.0
25°	751.5	720.6	658.1	610.5	598.9
27.5°	728.3	692.2	622.0	569.9	555.1
30°	703.8	662.6	585.3	529.3	513.9
32.5°	678.7	632.4	548.0	488.8	472.7
35°	651.7	600.8	510.6	448.8	432.7
37.5°	624.0	568.0	472.7	410.2	393.4
40°	595.6	535.1	435.9	371.6	358.0
42.5°	566.7	501.6	399.9	335.5	323.3
45°	536.4	468.1	365.1	302.0	290.4
47.5°	505.5	434.0	329.7	270.5	259.5
50°	472.7	399.9	296.2	239.5	228.0
52.5°	441.1	365.1	264.0	209.3	203.5
55°	408.9	331.0	232.5	187.4	184.8
57.5°	376.7	296.9	203.5	170.0	167.4
60°	343.9	263.4	173.9	152.0	149.4
62.5°	311.0	230.5	152.0	134.6	133.3
65°	277.5	198.3	133.3	118.5	117.8
67.5°	242.1	167.4	116.6	104.3	103.7
70°	208.6	136.5	99.8	90.2	90.2
72.5°	177.1	108.2	84.4	76.6	76.6
75°	143.0	86.9	69.5	63.8	64.4
77.5°	112.7	68.3	56.0	52.2	52.2
80°	83.7	50.9	43.1	39.9	40.6
82.5°	56.7	35.4	30.9	29.0	29.0
85°	32.2	21.9	20.0	18.7	18.7
87.5°	11.6	10.3	9.7	8.4	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)