

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: P1055274

Luminaire Tested: S122R3DR-S865D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055274
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S865D940-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

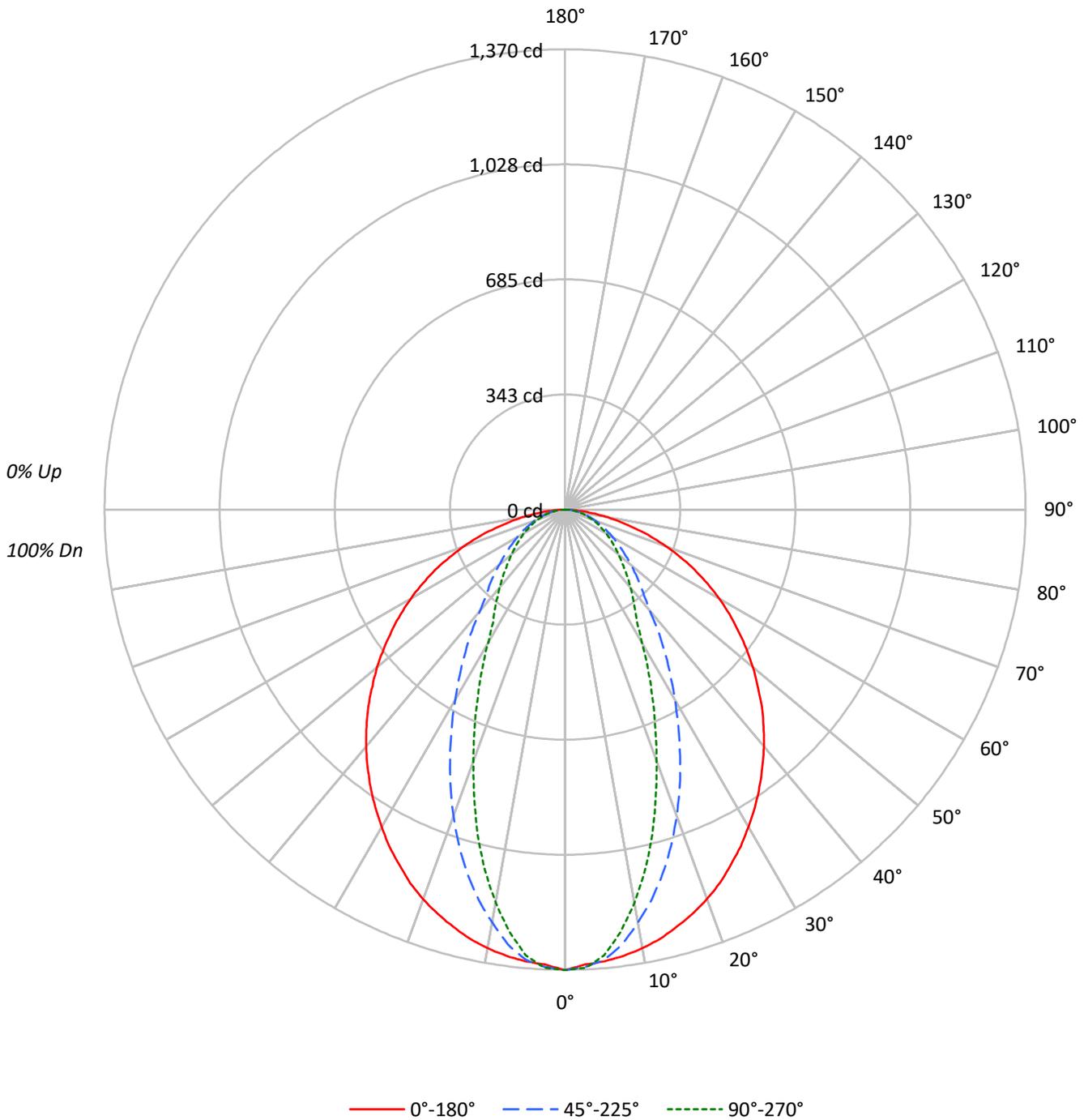
Lumens per Lamp: N/A
Luminaire Lumens: 2073.0 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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: P105274

CATALOG NUMBER: S122R3DR-S865D940-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1055274

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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	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	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25965	25965	25965
5°	25673	25585	25346
10°	25506	24007	22861
15°	25218	22003	19667
20°	24882	19569	16057
25°	24385	16912	12817
30°	23865	14290	10002
35°	23323	11953	8403
40°	22758	9692	7481
45°	22166	8475	6693
50°	21513	7498	6113
55°	20780	6775	5678
60°	20060	6165	5297
65°	19111	5649	4985
70°	17709	5268	4697
75°	15687	4780	4443
80°	13376	4506	4124
85°	9217	3978	3739

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22166 cd/sqm



TEST NUMBER: P1055274

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.6	6.1
10°-20°	317.1	15.3
20°-30°	390.7	18.8
30°-40°	374.9	18.1
40°-50°	323.3	15.6
50°-60°	250.8	12.1
60°-70°	171.7	8.3
70°-80°	93.3	4.5
80°-90°	25.6	1.2
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°	833.4	40.2
0°-40°	1208.2	58.3
0°-60°	1782.4	86.0
0°-90°	2073.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2073.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1350	1369	1345	1328	1333	128
15°	1286	1247	1122	1030	1003	363
25°	1166	1042	809	660	613	538
35°	1008	800	517	385	363	631
45°	827	557	316	261	250	638
55°	629	335	205	178	172	563
65°	426	182	126	115	111	421
75°	214	84	65	62	61	230
85°	42	21	18	18	17	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1370.5	1370.5	1370.5	1370.5	1370.5
2.5°	1355.6	1378.5	1362.5	1362.5	1365.9
5°	1349.9	1369.4	1345.3	1328.1	1332.7
7.5°	1339.6	1353.3	1305.2	1268.5	1267.4
10°	1325.8	1327.0	1247.9	1199.8	1188.3
12.5°	1308.6	1290.3	1189.5	1117.3	1100.1
15°	1285.7	1246.7	1121.8	1030.2	1002.7
17.5°	1261.6	1202.1	1049.6	935.1	897.2
20°	1234.1	1148.2	970.6	839.9	796.4
22.5°	1203.2	1096.6	891.5	748.3	702.4
25°	1166.5	1041.6	809.0	660.0	613.1
27.5°	1131.0	985.5	729.9	582.1	534.0
30°	1090.9	924.7	653.2	507.6	457.2
32.5°	1050.8	862.9	582.1	436.6	398.8
35°	1008.4	799.8	516.8	385.0	363.3
37.5°	964.9	738.0	454.9	350.6	331.2
40°	920.2	676.1	391.9	317.4	302.5
42.5°	874.3	615.4	348.4	289.9	276.2
45°	827.3	556.9	316.3	261.3	249.8
47.5°	776.9	498.5	285.3	237.2	226.9
50°	729.9	442.3	254.4	215.4	207.4
52.5°	679.5	387.3	229.2	195.9	189.1
55°	629.1	334.6	205.1	177.6	171.9
57.5°	579.8	284.2	182.2	160.4	155.8
60°	529.4	244.1	162.7	144.4	139.8
62.5°	477.8	212.0	144.4	129.5	124.9
65°	426.3	182.2	126.0	114.6	111.2
67.5°	372.4	153.6	110.0	100.8	98.5
70°	319.7	128.3	95.1	87.1	84.8
72.5°	268.1	104.3	80.2	74.5	72.2
75°	214.3	83.7	65.3	61.9	60.7
77.5°	167.3	65.3	52.7	50.4	49.3
80°	122.6	48.1	41.3	39.0	37.8
82.5°	81.4	33.2	29.8	28.6	27.5
85°	42.4	20.6	18.3	18.3	17.2
87.5°	13.8	9.2	9.2	9.2	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)