

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: P1055151

Luminaire Tested: S122R3DR-S1005D840-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055151
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-S1005D840-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, 80 CRI LEDS
Ballast/Driver: -

Summary

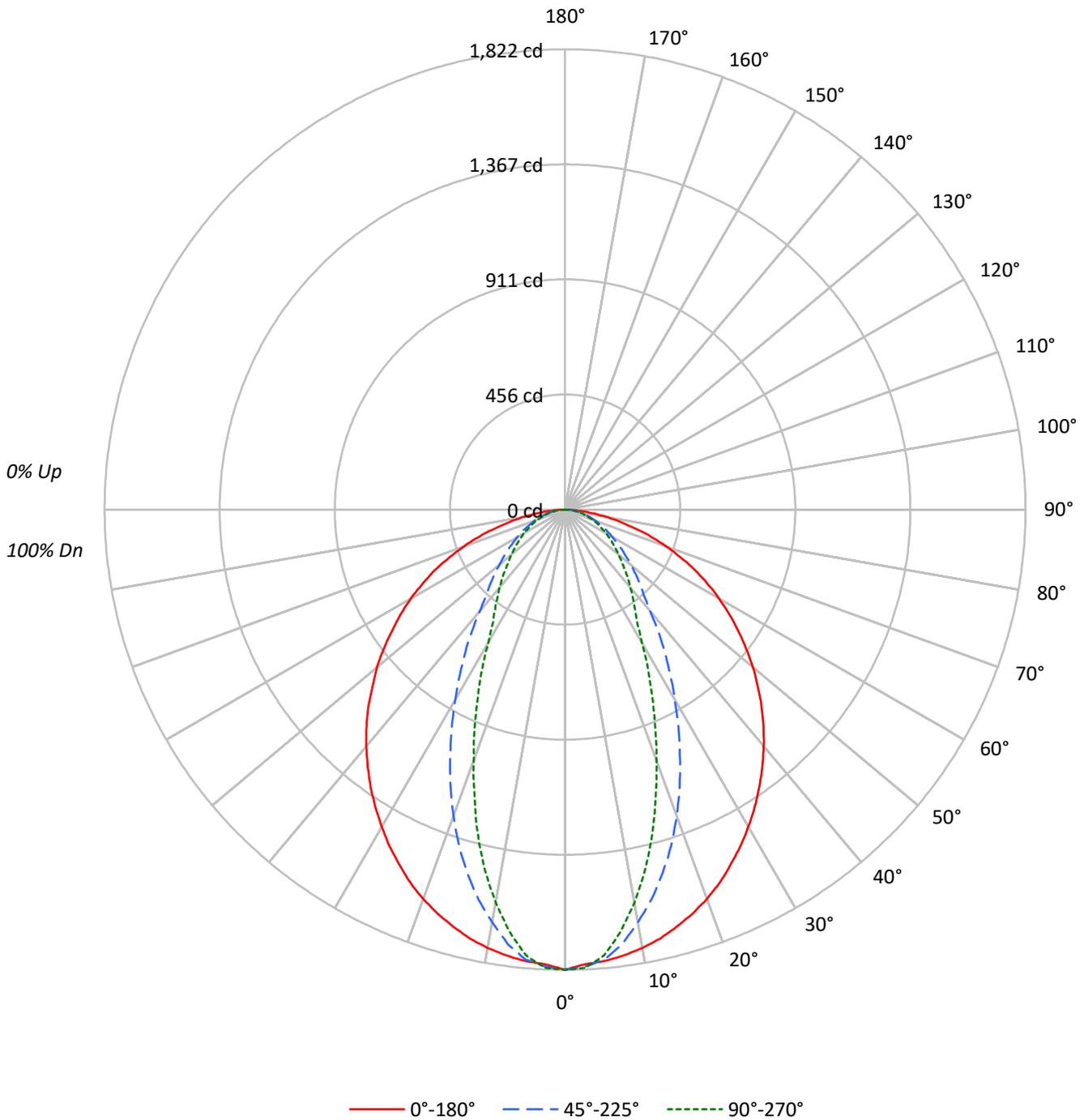
Lumens per Lamp: N/A
Luminaire Lumens: 2755.2 lumens
Efficiency: N/A
Efficacy: 65.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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	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	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87			87	
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75			75	
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66			66	
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58			58	
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52			52	
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46			46	
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42			42	
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38			38	
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35			35	
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32			32	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34510	34510	34510
5°	34121	34005	33687
10°	33899	31908	30385
15°	33517	29245	26140
20°	33071	26009	21341
25°	32410	22479	17033
30°	31719	18991	13295
35°	30999	15887	11166
40°	30247	12883	9945
45°	29462	11264	8895
50°	28596	9965	8126
55°	27617	9004	7548
60°	26661	8196	7040
65°	25401	7509	6621
70°	23537	7002	6243
75°	20848	6354	5907
80°	17784	5979	5488
85°	12260	5304	4956

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 29462 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.9	6.1
10°-20°	421.4	15.3
20°-30°	519.3	18.8
30°-40°	498.2	18.1
40°-50°	429.8	15.6
50°-60°	333.4	12.1
60°-70°	228.3	8.3
70°-80°	124.0	4.5
80°-90°	34.0	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°	1107.6	40.2
0°-40°	1605.9	58.3
0°-60°	2369.0	86.0
0°-90°	2755.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2755.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1822	1822	1822	1822	1822	
5°	1794	1820	1788	1765	1771	170
15°	1709	1657	1491	1369	1333	482
25°	1550	1384	1075	877	815	715
35°	1340	1063	687	512	483	838
45°	1100	740	420	347	332	847
55°	836	445	273	236	228	748
65°	567	242	168	152	148	559
75°	285	111	87	82	81	305
85°	56	27	24	24	23	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1821.5	1821.5	1821.5	1821.5	1821.5
2.5°	1801.7	1832.2	1810.9	1810.9	1815.5
5°	1794.1	1820.0	1788.0	1765.2	1771.3
7.5°	1780.4	1798.7	1734.7	1686.0	1684.5
10°	1762.1	1763.7	1658.6	1594.6	1579.4
12.5°	1739.3	1714.9	1580.9	1485.0	1462.1
15°	1708.8	1657.1	1491.0	1369.2	1332.7
17.5°	1676.9	1597.7	1395.1	1242.8	1192.5
20°	1640.3	1526.1	1290.0	1116.4	1058.5
22.5°	1599.2	1457.5	1184.9	994.5	933.6
25°	1550.4	1384.4	1075.3	877.3	814.8
27.5°	1503.2	1309.8	970.2	773.7	709.7
30°	1449.9	1229.1	868.1	674.7	607.7
32.5°	1396.6	1146.8	773.7	580.3	530.0
35°	1340.3	1063.1	686.9	511.7	482.8
37.5°	1282.4	980.8	604.6	466.0	440.2
40°	1223.0	898.6	520.9	421.9	402.1
42.5°	1162.1	817.9	463.0	385.3	367.1
45°	1099.6	740.2	420.4	347.3	332.0
47.5°	1032.6	662.5	379.2	315.3	301.6
50°	970.2	587.9	338.1	286.3	275.7
52.5°	903.2	514.8	304.6	260.4	251.3
55°	836.1	444.7	272.6	236.1	228.5
57.5°	770.7	377.7	242.2	213.2	207.1
60°	703.6	324.4	216.3	191.9	185.8
62.5°	635.1	281.8	191.9	172.1	166.0
65°	566.6	242.2	167.5	152.3	147.7
67.5°	495.0	204.1	146.2	134.0	131.0
70°	424.9	170.6	126.4	115.8	112.7
72.5°	356.4	138.6	106.6	99.0	96.0
75°	284.8	111.2	86.8	82.2	80.7
77.5°	222.4	86.8	70.1	67.0	65.5
80°	163.0	64.0	54.8	51.8	50.3
82.5°	108.1	44.2	39.6	38.1	36.6
85°	56.4	27.4	24.4	24.4	22.8
87.5°	18.3	12.2	12.2	12.2	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)