

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: P1055148

Luminaire Tested: S122R3DR-S1005D835-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055148  
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-S1005D835-X4F0-XX-UDD-FLL-W  
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

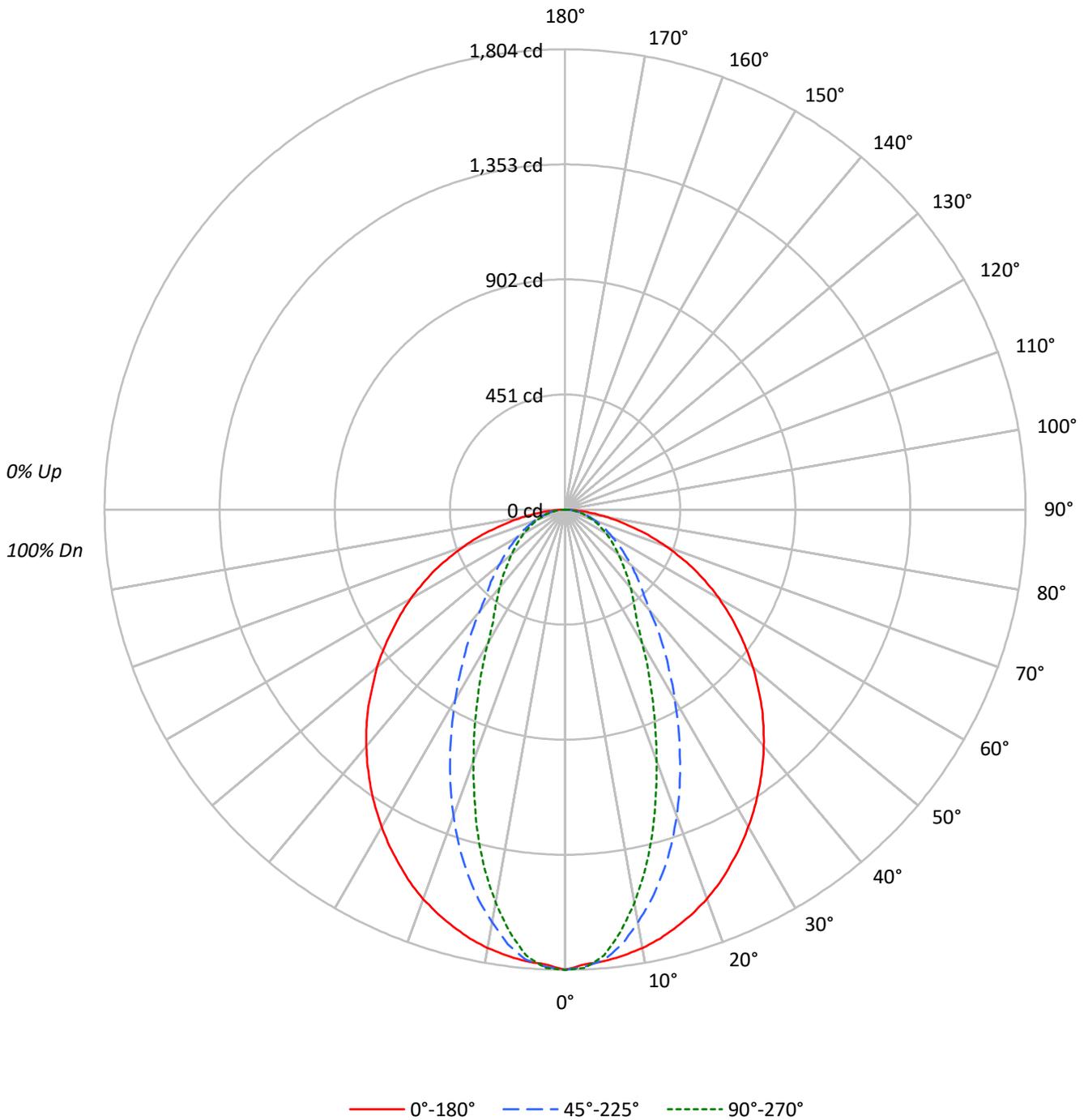
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2728.3 lumens  
Efficiency: N/A  
Efficacy: 65.1 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	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°	34175	34175	34175
5°	33788	33674	33358
10°	33569	31597	30088
15°	33189	28960	25883
20°	32749	25755	21134
25°	32095	22259	16868
30°	31411	18805	13165
35°	30696	15732	11058
40°	29951	12757	9848
45°	29175	11154	8810
50°	28316	9868	8047
55°	27350	8918	7472
60°	26403	8116	6972
65°	25149	7437	6559
70°	23310	6935	6182
75°	20643	6295	5849
80°	17610	5924	5433
85°	12130	5239	4913

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 29175 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.3	6.1
10°-20°	417.3	15.3
20°-30°	514.2	18.8
30°-40°	493.4	18.1
40°-50°	425.6	15.6
50°-60°	330.1	12.1
60°-70°	226.0	8.3
70°-80°	122.7	4.5
80°-90°	33.6	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°	1096.8	40.2
0°-40°	1590.2	58.3
0°-60°	2345.9	86.0
0°-90°	2728.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2728.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1804	1804	1804	1804	1804	
5°	1777	1802	1771	1748	1754	169
15°	1692	1641	1476	1356	1320	477
25°	1535	1371	1065	869	807	708
35°	1327	1053	680	507	478	830
45°	1089	733	416	344	329	839
55°	828	440	270	234	226	741
65°	561	240	166	151	146	554
75°	282	110	86	81	80	302
85°	56	27	24	24	23	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1803.8	1803.8	1803.8	1803.8	1803.8
2.5°	1784.1	1814.3	1793.2	1793.2	1797.7
5°	1776.6	1802.2	1770.6	1747.9	1754.0
7.5°	1763.0	1781.1	1717.8	1669.5	1668.0
10°	1744.9	1746.4	1642.4	1579.0	1564.0
12.5°	1722.3	1698.2	1565.5	1470.4	1447.8
15°	1692.1	1640.9	1476.5	1355.8	1319.6
17.5°	1660.5	1582.1	1381.5	1230.7	1180.9
20°	1624.3	1511.2	1277.4	1105.5	1048.2
22.5°	1583.6	1443.3	1173.3	984.8	924.5
25°	1535.3	1370.9	1064.8	868.7	806.9
27.5°	1488.5	1297.0	960.7	766.1	702.8
30°	1435.8	1217.1	859.6	668.1	601.8
32.5°	1383.0	1135.6	766.1	574.6	524.8
35°	1327.2	1052.7	680.2	506.7	478.1
37.5°	1269.9	971.3	598.7	461.5	435.9
40°	1211.0	889.8	515.8	417.8	398.2
42.5°	1150.7	809.9	458.5	381.6	363.5
45°	1088.9	733.0	416.3	343.9	328.8
47.5°	1022.5	656.0	375.5	312.2	298.6
50°	960.7	582.1	334.8	283.5	273.0
52.5°	894.3	509.8	301.6	257.9	248.8
55°	828.0	440.4	270.0	233.8	226.2
57.5°	763.1	374.0	239.8	211.1	205.1
60°	696.8	321.2	214.2	190.0	184.0
62.5°	628.9	279.0	190.0	170.4	164.4
65°	561.0	239.8	165.9	150.8	146.3
67.5°	490.1	202.1	144.8	132.7	129.7
70°	420.8	168.9	125.2	114.6	111.6
72.5°	352.9	137.2	105.6	98.0	95.0
75°	282.0	110.1	86.0	81.4	79.9
77.5°	220.2	86.0	69.4	66.4	64.9
80°	161.4	63.3	54.3	51.3	49.8
82.5°	107.1	43.7	39.2	37.7	36.2
85°	55.8	27.1	24.1	24.1	22.6
87.5°	18.1	12.1	12.1	12.1	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)