

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: P1055163

Luminaire Tested: S122R3DR-S1005D935-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055163  
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-S1005D935-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, 90 CRI LEDS  
Ballast/Driver: -

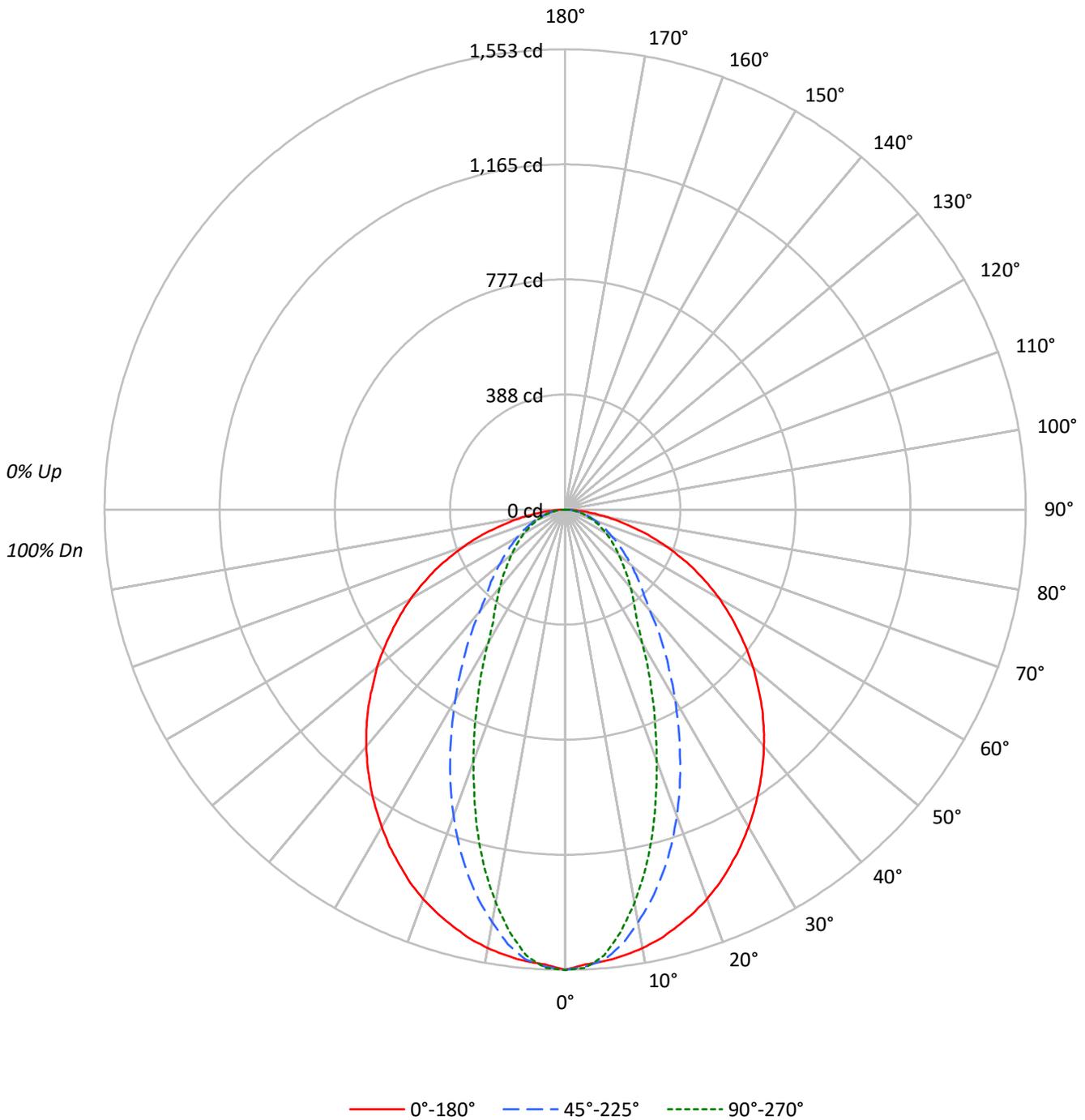
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2349.0 lumens  
Efficiency: N/A  
Efficacy: 56.1 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	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°	29423	29423	29423
5°	29092	28993	28721
10°	28903	27205	25906
15°	28576	24934	22286
20°	28196	22174	18196
25°	27634	19165	14522
30°	27044	16193	11334
35°	26429	13544	9520
40°	25788	10984	8478
45°	25119	9603	7585
50°	24381	8498	6927
55°	23548	7676	6434
60°	22731	6987	6002
65°	21653	6402	5649
70°	20069	5971	5323
75°	17773	5417	5036
80°	15155	5095	4681
85°	10434	4521	4239

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 25119 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.3	6.1
10°-20°	359.3	15.3
20°-30°	442.7	18.8
30°-40°	424.8	18.1
40°-50°	366.4	15.6
50°-60°	284.2	12.1
60°-70°	194.6	8.3
70°-80°	105.7	4.5
80°-90°	29.0	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°	944.4	40.2
0°-40°	1369.1	58.3
0°-60°	2019.8	86.0
0°-90°	2349.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2349.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1553	1553	1553	1553	1553	
5°	1530	1552	1524	1505	1510	145
15°	1457	1413	1271	1167	1136	411
25°	1322	1180	917	748	695	609
35°	1143	906	586	436	412	715
45°	938	631	358	296	283	723
55°	713	379	232	201	195	638
65°	483	206	143	130	126	477
75°	243	95	74	70	69	260
85°	48	23	21	21	20	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1553.0	1553.0	1553.0	1553.0	1553.0
2.5°	1536.1	1562.1	1543.9	1543.9	1547.8
5°	1529.7	1551.7	1524.5	1505.0	1510.2
7.5°	1518.0	1533.5	1479.0	1437.5	1436.2
10°	1502.4	1503.7	1414.1	1359.5	1346.6
12.5°	1482.9	1462.1	1347.9	1266.1	1246.6
15°	1456.9	1412.8	1271.2	1167.4	1136.2
17.5°	1429.7	1362.1	1189.4	1059.6	1016.7
20°	1398.5	1301.1	1099.8	951.8	902.5
22.5°	1363.4	1242.7	1010.2	847.9	796.0
25°	1321.9	1180.4	916.8	747.9	694.7
27.5°	1281.6	1116.7	827.2	659.6	605.1
30°	1236.2	1047.9	740.2	575.2	518.1
32.5°	1190.7	977.8	659.6	494.7	451.9
35°	1142.7	906.4	585.6	436.3	411.6
37.5°	1093.4	836.2	515.5	397.3	375.3
40°	1042.7	766.1	444.1	359.7	342.8
42.5°	990.8	697.3	394.7	328.5	312.9
45°	937.5	631.1	358.4	296.1	283.1
47.5°	880.4	564.9	323.3	268.8	257.1
50°	827.2	501.2	288.3	244.1	235.0
52.5°	770.0	438.9	259.7	222.0	214.3
55°	712.9	379.2	232.4	201.3	194.8
57.5°	657.0	322.0	206.5	181.8	176.6
60°	599.9	276.6	184.4	163.6	158.4
62.5°	541.5	240.2	163.6	146.7	141.5
65°	483.0	206.5	142.8	129.9	126.0
67.5°	422.0	174.0	124.7	114.3	111.7
70°	362.3	145.4	107.8	98.7	96.1
72.5°	303.9	118.2	90.9	84.4	81.8
75°	242.8	94.8	74.0	70.1	68.8
77.5°	189.6	74.0	59.7	57.1	55.8
80°	138.9	54.5	46.7	44.1	42.9
82.5°	92.2	37.7	33.8	32.5	31.2
85°	48.0	23.4	20.8	20.8	19.5
87.5°	15.6	10.4	10.4	10.4	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)