

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: P1055147

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055147  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-3)  
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-S  
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

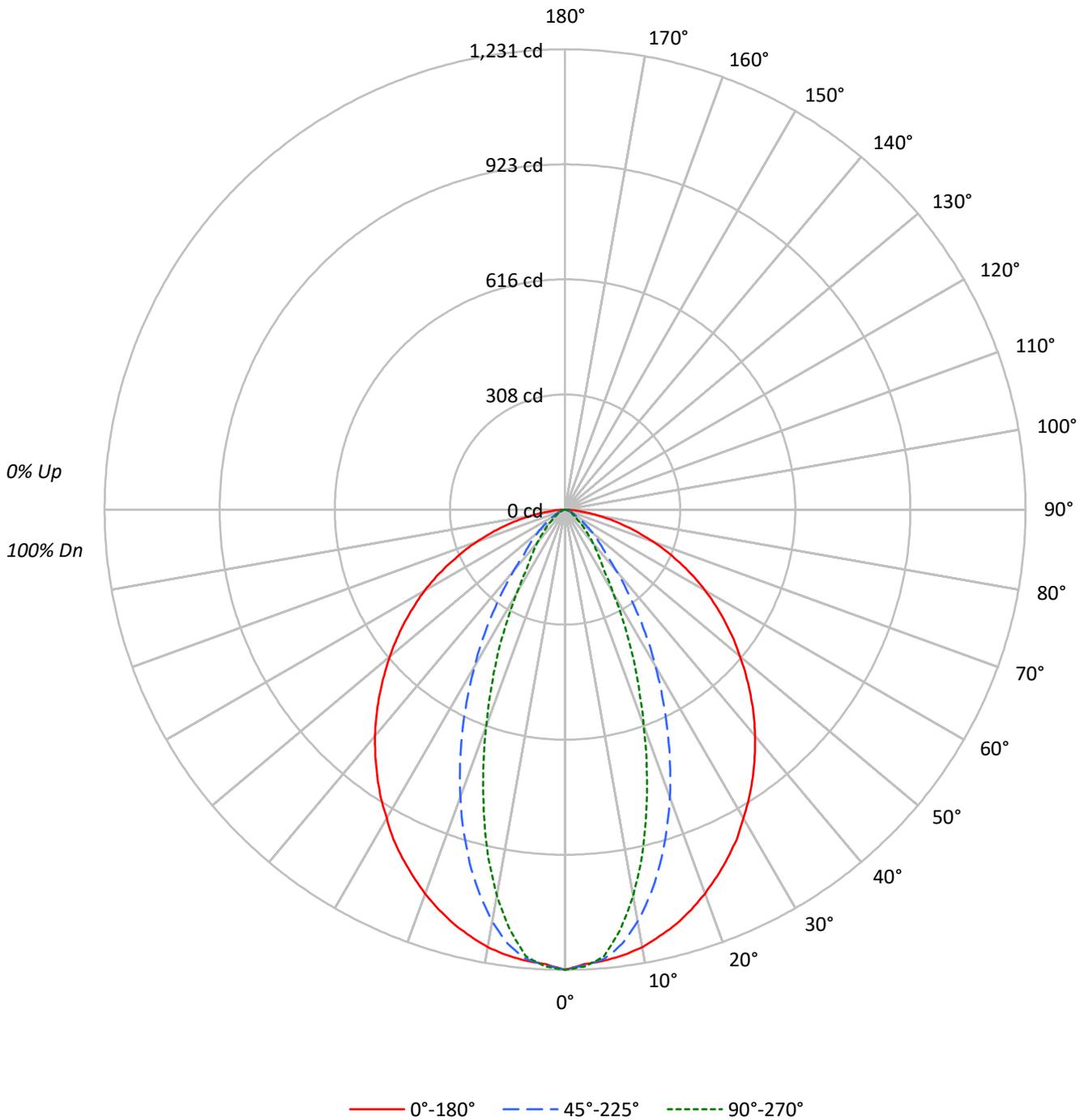
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1410.3 lumens  
Efficiency: N/A  
Efficacy: 33.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81  
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										
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	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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90						90														
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80						80														
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71						71														
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64						64														
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58						58														
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53						53														
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49						49														
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45						45														
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42						42														
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39						39														

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	23317	23317	23317
5°	23031	22945	22803
10°	22863	21527	20165
15°	22511	19257	16446
20°	22045	16510	12406
25°	21502	13525	8859
30°	20853	10558	5642
35°	20231	7743	3768
40°	19546	5221	2834
45°	18790	3676	2020
50°	18003	2800	1424
55°	17236	1942	1047
60°	16400	1315	856
65°	15211	946	677
70°	13871	753	587
75°	12034	659	439
80°	9547	491	491
85°	5239	652	326

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 18790 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.5	8.0
10°-20°	276.2	19.6
20°-30°	315.5	22.4
30°-40°	267.5	19.0
40°-50°	199.6	14.2
50°-60°	129.0	9.1
60°-70°	71.9	5.1
70°-80°	31.6	2.2
80°-90°	6.5	0.5
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°	704.2	49.9
0°-40°	971.7	68.9
0°-60°	1300.3	92.2
0°-90°	1410.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1410.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1211	1226	1206	1194	1199	115
15°	1148	1119	982	878	838	323
25°	1029	908	647	474	424	473
35°	875	659	335	182	163	547
45°	701	416	137	89	75	541
55°	522	198	59	36	32	467
65°	339	72	21	17	15	337
75°	164	15	9	8	6	175
85°	24	2	3	2	2	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1230.7	1230.7	1230.7	1230.7	1230.7
2.5°	1217.1	1235.2	1220.1	1220.1	1223.1
5°	1211.0	1226.1	1206.5	1194.5	1199.0
7.5°	1202.0	1212.6	1171.8	1135.6	1132.6
10°	1188.4	1192.9	1119.0	1063.2	1048.2
12.5°	1168.8	1158.3	1054.2	975.8	950.1
15°	1147.7	1119.0	981.8	877.7	838.5
17.5°	1122.1	1070.8	901.9	775.2	726.9
20°	1093.4	1021.0	818.9	668.1	615.3
22.5°	1061.7	965.2	733.0	567.1	514.3
25°	1028.6	907.9	647.0	473.6	423.8
27.5°	993.9	847.6	562.5	389.1	334.8
30°	953.2	785.7	482.6	307.7	257.9
32.5°	915.4	720.9	408.7	238.3	196.1
35°	874.7	659.1	334.8	182.5	162.9
37.5°	832.5	597.2	270.0	153.8	137.2
40°	790.3	535.4	211.1	129.7	114.6
42.5°	746.5	475.1	162.9	108.6	93.5
45°	701.3	416.3	137.2	89.0	75.4
47.5°	656.0	357.4	114.6	70.9	60.3
50°	610.8	301.6	95.0	55.8	48.3
52.5°	567.1	248.8	75.4	45.2	39.2
55°	521.8	197.6	58.8	36.2	31.7
57.5°	476.6	153.8	45.2	30.2	27.1
60°	432.8	116.1	34.7	24.1	22.6
62.5°	387.6	93.5	27.1	19.6	18.1
65°	339.3	72.4	21.1	16.6	15.1
67.5°	295.6	52.8	16.6	13.6	12.1
70°	250.4	36.2	13.6	12.1	10.6
72.5°	206.6	22.6	10.6	9.0	9.0
75°	164.4	15.1	9.0	7.5	6.0
77.5°	125.2	9.0	6.0	6.0	4.5
80°	87.5	6.0	4.5	4.5	4.5
82.5°	54.3	4.5	3.0	3.0	3.0
85°	24.1	1.5	3.0	1.5	1.5
87.5°	4.5	1.5	1.5	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)