

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: P1055145

Luminaire Tested: S122R3DR-S1005D830-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055145
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-S1005D830-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

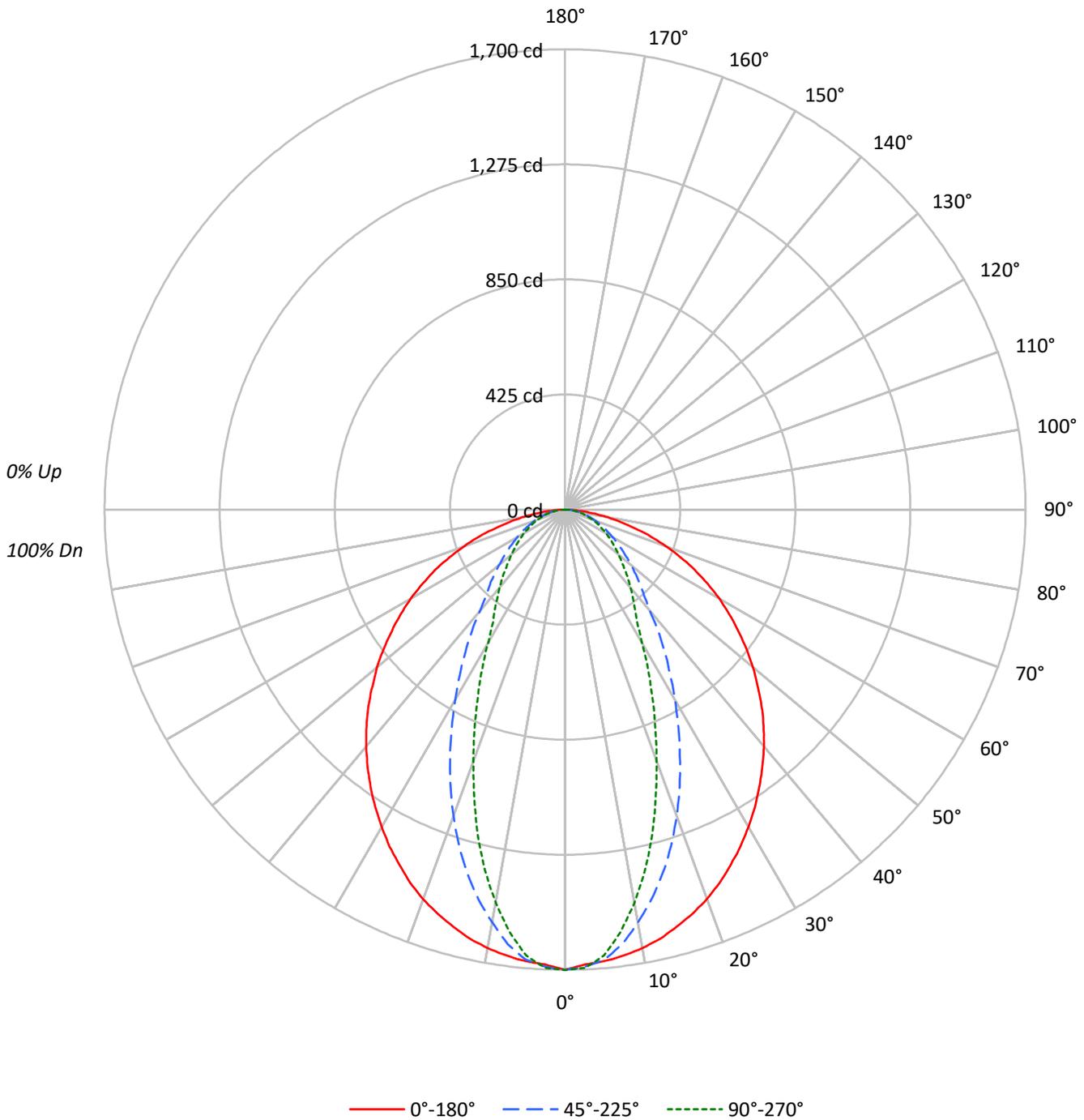
Lumens per Lamp: N/A
Luminaire Lumens: 2571.5 lumens
Efficiency: N/A
Efficacy: 61.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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				
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°	32210	32210	32210
5°	31846	31738	31441
10°	31641	29781	28359
15°	31283	27295	24396
20°	30868	24275	19918
25°	30251	20980	15898
30°	29606	17727	12409
35°	28932	14828	10422
40°	28232	12025	9282
45°	27498	10511	8303
50°	26689	9302	7584
55°	25777	8403	7042
60°	24883	7650	6570
65°	23706	7011	6182
70°	21969	6536	5827
75°	19457	5929	5512
80°	16595	5586	5117
85°	11434	4935	4630

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 27498 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.8	6.1
10°-20°	393.3	15.3
20°-30°	484.7	18.8
30°-40°	465.0	18.1
40°-50°	401.1	15.6
50°-60°	311.2	12.1
60°-70°	213.1	8.3
70°-80°	115.7	4.5
80°-90°	31.7	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°	1033.8	40.2
0°-40°	1498.8	58.3
0°-60°	2211.1	86.0
0°-90°	2571.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2571.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1674	1699	1669	1648	1653	159
15°	1595	1547	1392	1278	1244	450
25°	1447	1292	1004	819	760	667
35°	1251	992	641	478	451	782
45°	1026	691	392	324	310	791
55°	780	415	254	220	213	698
65°	529	226	156	142	138	522
75°	266	104	81	77	75	285
85°	53	26	23	23	21	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.1	1700.1	1700.1	1700.1	1700.1
2.5°	1681.6	1710.1	1690.2	1690.2	1694.4
5°	1674.5	1698.7	1668.8	1647.5	1653.2
7.5°	1661.7	1678.8	1619.1	1573.6	1572.2
10°	1644.7	1646.1	1548.0	1488.3	1474.1
12.5°	1623.4	1600.6	1475.5	1386.0	1364.6
15°	1594.9	1546.6	1391.6	1277.9	1243.8
17.5°	1565.1	1491.2	1302.1	1159.9	1113.0
20°	1531.0	1424.3	1204.0	1042.0	987.9
22.5°	1492.6	1360.4	1105.9	928.2	871.4
25°	1447.1	1292.1	1003.6	818.8	760.5
27.5°	1403.0	1222.5	905.5	722.1	662.4
30°	1353.3	1147.1	810.3	629.7	567.2
32.5°	1303.5	1070.4	722.1	541.6	494.7
35°	1250.9	992.2	641.1	477.6	450.6
37.5°	1196.9	915.4	564.3	435.0	410.8
40°	1141.5	838.7	486.2	393.8	375.3
42.5°	1084.6	763.3	432.1	359.6	342.6
45°	1026.3	690.8	392.3	324.1	309.9
47.5°	963.8	618.4	354.0	294.3	281.5
50°	905.5	548.7	315.6	267.2	257.3
52.5°	842.9	480.5	284.3	243.1	234.5
55°	780.4	415.1	254.4	220.3	213.2
57.5°	719.3	352.5	226.0	199.0	193.3
60°	656.7	302.8	201.9	179.1	173.4
62.5°	592.8	263.0	179.1	160.6	154.9
65°	528.8	226.0	156.4	142.1	137.9
67.5°	462.0	190.5	136.5	125.1	122.2
70°	396.6	159.2	118.0	108.0	105.2
72.5°	332.6	129.4	99.5	92.4	89.6
75°	265.8	103.8	81.0	76.8	75.3
77.5°	207.5	81.0	65.4	62.5	61.1
80°	152.1	59.7	51.2	48.3	46.9
82.5°	100.9	41.2	37.0	35.5	34.1
85°	52.6	25.6	22.7	22.7	21.3
87.5°	17.1	11.4	11.4	11.4	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)