

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: P1055268

Luminaire Tested: S122R3DR-S865D930-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055268
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-S865D930-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, 90 CRI LEDS
Ballast/Driver: -

Summary

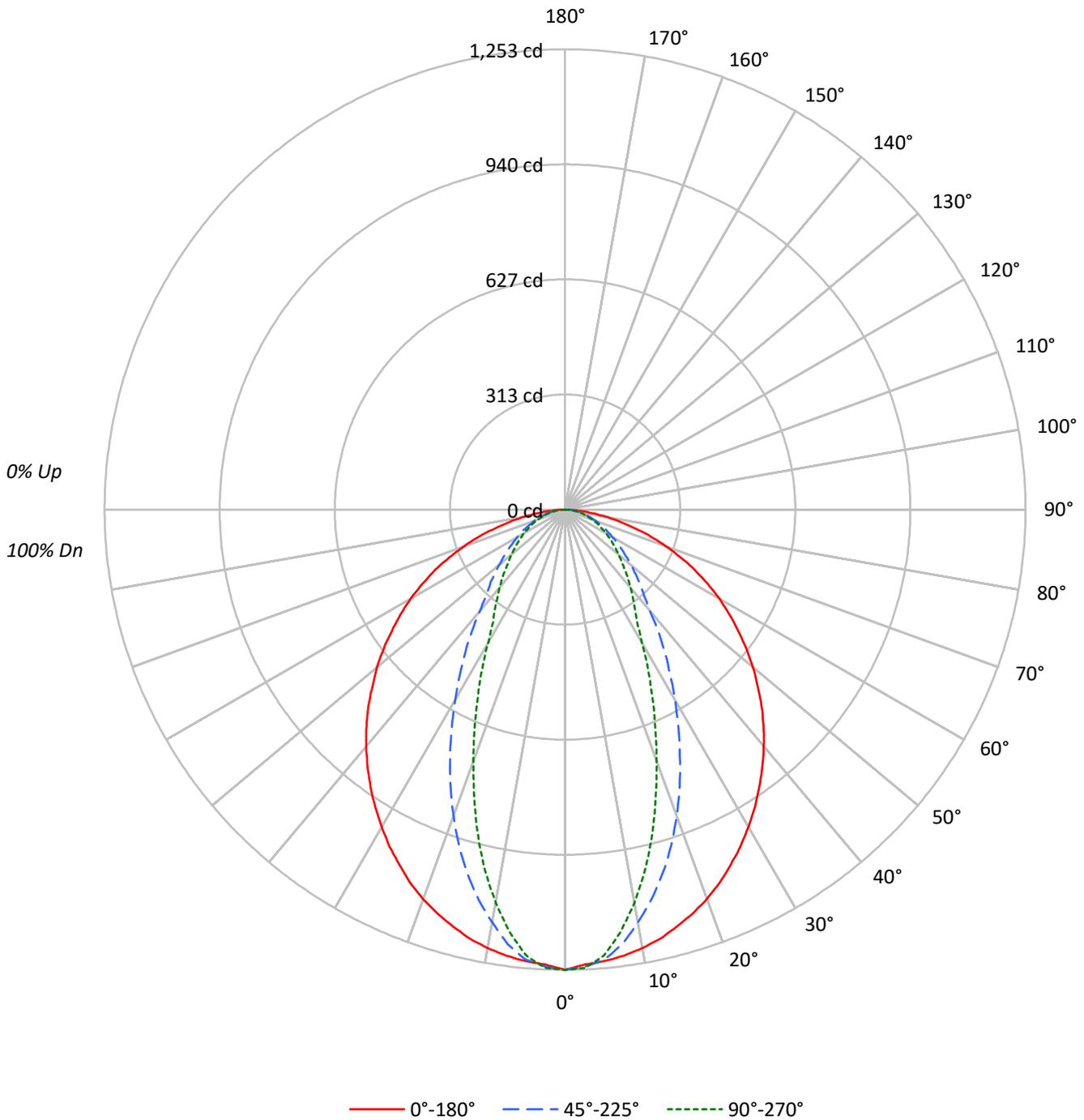
Lumens per Lamp: N/A
Luminaire Lumens: 1895.3 lumens
Efficiency: N/A
Efficacy: 54.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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°	23741	23741	23741
5°	23472	23392	23174
10°	23320	21951	20902
15°	23056	20118	17980
20°	22751	17892	14682
25°	22297	15463	11717
30°	21820	13065	9144
35°	21325	10928	7681
40°	20807	8861	6841
45°	20267	7749	6120
50°	19671	6856	5588
55°	18999	6193	5192
60°	18340	5638	4843
65°	17470	5164	4555
70°	16192	4819	4293
75°	14340	4370	4063
80°	12231	4113	3775
85°	8434	3652	3413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20267 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	6.1
10°-20°	289.9	15.3
20°-30°	357.2	18.8
30°-40°	342.7	18.1
40°-50°	295.6	15.6
50°-60°	229.3	12.1
60°-70°	157.0	8.3
70°-80°	85.3	4.5
80°-90°	23.4	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°	762.0	40.2
0°-40°	1104.7	58.3
0°-60°	1629.6	86.0
0°-90°	1895.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1895.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1253	1253	1253	1253	1253	
5°	1234	1252	1230	1214	1218	117
15°	1176	1140	1026	942	917	332
25°	1067	952	740	604	560	492
35°	922	731	472	352	332	577
45°	756	509	289	239	228	583
55°	575	306	188	162	157	515
65°	390	167	115	105	102	385
75°	196	76	60	57	56	210
85°	39	19	17	17	16	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1253.1	1253.1	1253.1	1253.1	1253.1
2.5°	1239.4	1260.4	1245.7	1245.7	1248.9
5°	1234.2	1252.0	1230.0	1214.3	1218.5
7.5°	1224.8	1237.3	1193.3	1159.8	1158.8
10°	1212.2	1213.2	1141.0	1097.0	1086.5
12.5°	1196.5	1179.7	1087.5	1021.5	1005.8
15°	1175.5	1139.9	1025.7	941.9	916.7
17.5°	1153.5	1099.0	959.7	854.9	820.4
20°	1128.4	1049.8	887.4	768.0	728.2
22.5°	1100.1	1002.7	815.1	684.2	642.2
25°	1066.6	952.4	739.7	603.5	560.5
27.5°	1034.1	901.0	667.4	532.2	488.2
30°	997.4	845.5	597.2	464.1	418.0
32.5°	960.8	788.9	532.2	399.2	364.6
35°	922.0	731.3	472.5	352.0	332.1
37.5°	882.2	674.7	415.9	320.6	302.8
40°	841.3	618.1	358.3	290.2	276.6
42.5°	799.4	562.6	318.5	265.1	252.5
45°	756.4	509.2	289.2	238.9	228.4
47.5°	710.3	455.8	260.9	216.9	207.4
50°	667.4	404.4	232.6	197.0	189.6
52.5°	621.3	354.1	209.5	179.2	172.9
55°	575.2	305.9	187.5	162.4	157.2
57.5°	530.1	259.8	166.6	146.7	142.5
60°	484.0	223.2	148.8	132.0	127.8
62.5°	436.9	193.8	132.0	118.4	114.2
65°	389.7	166.6	115.2	104.8	101.6
67.5°	340.5	140.4	100.6	92.2	90.1
70°	292.3	117.3	87.0	79.6	77.5
72.5°	245.2	95.3	73.3	68.1	66.0
75°	195.9	76.5	59.7	56.6	55.5
77.5°	153.0	59.7	48.2	46.1	45.1
80°	112.1	44.0	37.7	35.6	34.6
82.5°	74.4	30.4	27.2	26.2	25.1
85°	38.8	18.9	16.8	16.8	15.7
87.5°	12.6	8.4	8.4	8.4	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)