

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: P1055273

Luminaire Tested: S122R3DR-S865D940-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055273
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-S865D940-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

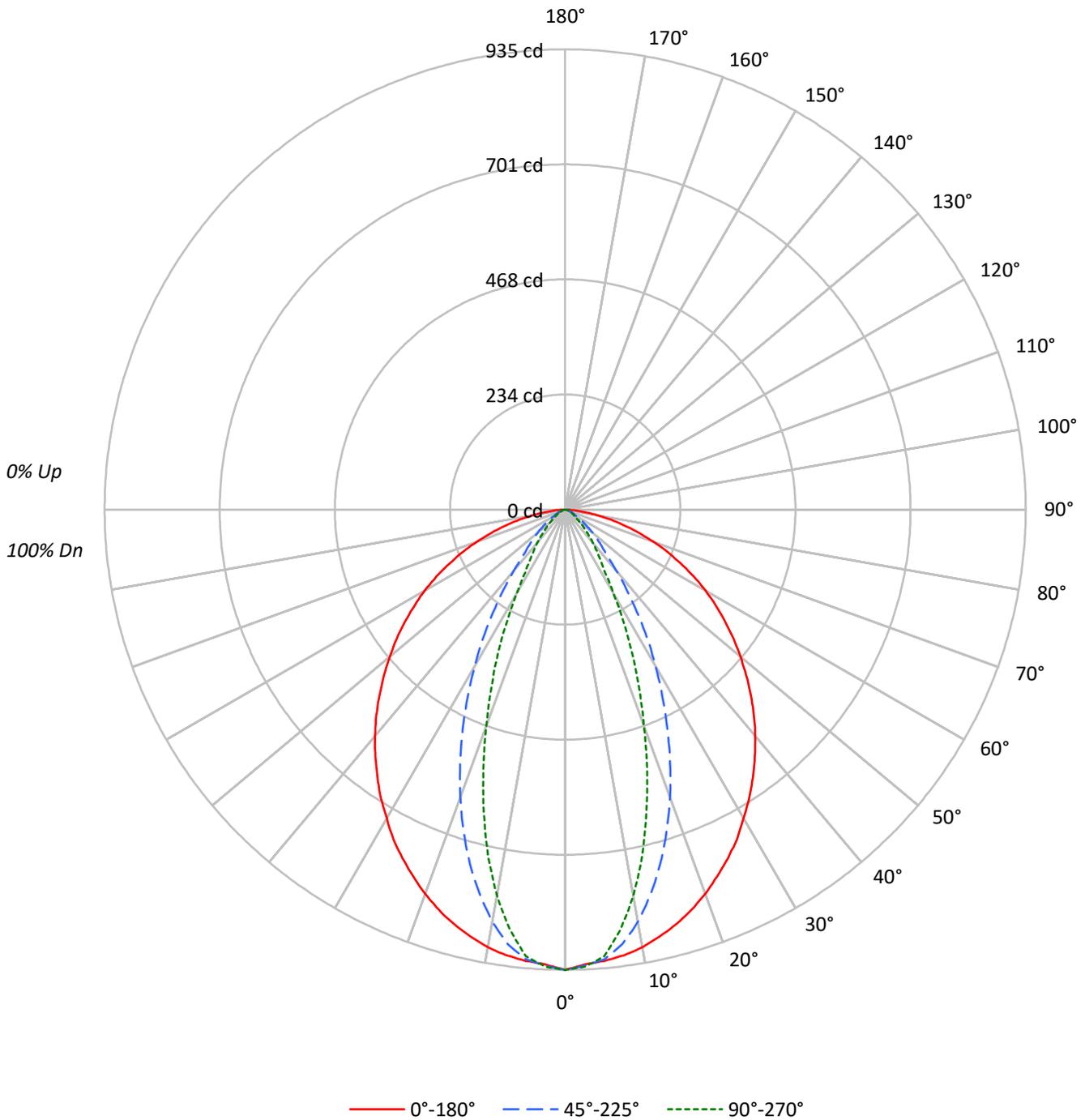
Lumens per Lamp: N/A
Luminaire Lumens: 1071.6 lumens
Efficiency: N/A
Efficacy: 30.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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				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°	17716	17716	17716
5°	17501	17434	17326
10°	17372	16358	15321
15°	17104	14632	12496
20°	16750	12545	9426
25°	16337	10277	6731
30°	15843	8022	4286
35°	15371	5884	2863
40°	14852	3967	2154
45°	14276	2795	1535
50°	13679	2128	1082
55°	13097	1476	796
60°	12463	1000	652
65°	11557	717	516
70°	10536	571	443
75°	9143	505	337
80°	7255	371	371
85°	3978	500	239

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14276 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	8.0
10°-20°	209.8	19.6
20°-30°	239.7	22.4
30°-40°	203.3	19.0
40°-50°	151.7	14.2
50°-60°	98.0	9.1
60°-70°	54.6	5.1
70°-80°	24.0	2.2
80°-90°	4.9	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°	535.0	49.9
0°-40°	738.3	68.9
0°-60°	988.0	92.2
0°-90°	1071.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1071.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	920	932	917	908	911	87
15°	872	850	746	667	637	246
25°	782	690	492	360	322	360
35°	665	501	254	139	124	415
45°	533	316	104	68	57	411
55°	396	150	45	28	24	355
65°	258	55	16	13	12	256
75°	125	12	7	6	5	133
85°	18	1	2	1	1	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	935.1	935.1	935.1	935.1	935.1
2.5°	924.7	938.5	927.0	927.0	929.3
5°	920.2	931.6	916.7	907.6	911.0
7.5°	913.3	921.3	890.4	862.9	860.6
10°	903.0	906.4	850.3	807.9	796.4
12.5°	888.1	880.1	801.0	741.4	721.9
15°	872.0	850.3	746.0	666.9	637.1
17.5°	852.6	813.6	685.3	589.0	552.3
20°	830.8	775.8	622.2	507.6	467.5
22.5°	806.7	733.4	556.9	430.9	390.8
25°	781.5	689.8	491.6	359.8	322.0
27.5°	755.2	644.0	427.4	295.6	254.4
30°	724.2	597.0	366.7	233.8	195.9
32.5°	695.6	547.7	310.5	181.1	149.0
35°	664.6	500.8	254.4	138.7	123.8
37.5°	632.5	453.8	205.1	116.9	104.3
40°	600.5	406.8	160.4	98.5	87.1
42.5°	567.2	361.0	123.8	82.5	71.0
45°	532.8	316.3	104.3	67.6	57.3
47.5°	498.5	271.6	87.1	53.9	45.8
50°	464.1	229.2	72.2	42.4	36.7
52.5°	430.9	189.1	57.3	34.4	29.8
55°	396.5	150.1	44.7	27.5	24.1
57.5°	362.1	116.9	34.4	22.9	20.6
60°	328.9	88.2	26.4	18.3	17.2
62.5°	294.5	71.0	20.6	14.9	13.8
65°	257.8	55.0	16.0	12.6	11.5
67.5°	224.6	40.1	12.6	10.3	9.2
70°	190.2	27.5	10.3	9.2	8.0
72.5°	157.0	17.2	8.0	6.9	6.9
75°	124.9	11.5	6.9	5.7	4.6
77.5°	95.1	6.9	4.6	4.6	3.4
80°	66.5	4.6	3.4	3.4	3.4
82.5°	41.3	3.4	2.3	2.3	2.3
85°	18.3	1.1	2.3	1.1	1.1
87.5°	3.4	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)