

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: P1055258

Luminaire Tested: S122R3DR-S865D840-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055258
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-S865D840-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, 80 CRI LEDS
Ballast/Driver: -

Summary

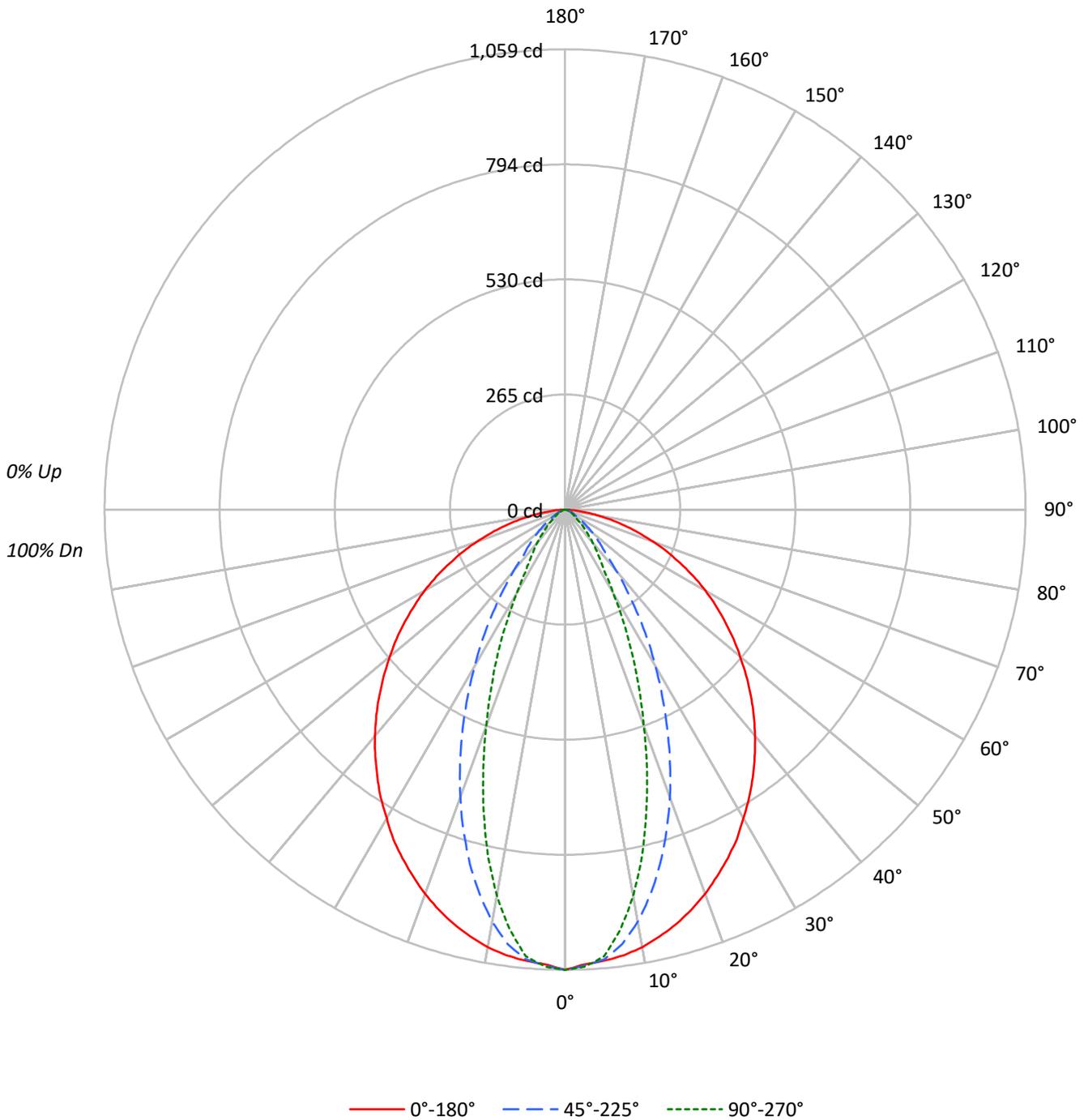
Lumens per Lamp: N/A
Luminaire Lumens: 1213.6 lumens
Efficiency: N/A
Efficacy: 35.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	20064	20064	20064
5°	19819	19745	19621
10°	19673	18524	17351
15°	19371	16570	14152
20°	18970	14208	10676
25°	18503	11637	7624
30°	17943	9085	4854
35°	17409	6663	3243
40°	16818	4494	2439
45°	16170	3164	1739
50°	15492	2411	1223
55°	14831	1671	902
60°	14115	1129	739
65°	13090	816	583
70°	11932	648	504
75°	10358	571	381
80°	8216	426	426
85°	4521	565	283

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16170 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	8.0
10°-20°	237.6	19.6
20°-30°	271.5	22.4
30°-40°	230.2	19.0
40°-50°	171.8	14.2
50°-60°	111.0	9.1
60°-70°	61.9	5.1
70°-80°	27.2	2.2
80°-90°	5.6	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°	605.9	49.9
0°-40°	836.1	68.9
0°-60°	1118.9	92.2
0°-90°	1213.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1213.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1042	1055	1038	1028	1032	99
15°	988	963	845	755	722	278
25°	885	781	557	408	365	407
35°	753	567	288	157	140	471
45°	604	358	118	77	65	466
55°	449	170	51	31	27	402
65°	292	62	18	14	13	290
75°	142	13	8	6	5	151
85°	21	1	3	1	1	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1059.0	1059.0	1059.0	1059.0	1059.0
2.5°	1047.3	1062.9	1049.9	1049.9	1052.5
5°	1042.1	1055.1	1038.2	1027.8	1031.7
7.5°	1034.3	1043.4	1008.3	977.2	974.6
10°	1022.6	1026.5	962.9	914.9	901.9
12.5°	1005.8	996.7	907.1	839.6	817.6
15°	987.6	962.9	844.8	755.3	721.5
17.5°	965.5	921.4	776.0	667.0	625.5
20°	940.9	878.6	704.7	574.9	529.5
22.5°	913.6	830.6	630.7	488.0	442.5
25°	885.1	781.2	556.7	407.5	364.7
27.5°	855.2	729.3	484.1	334.8	288.1
30°	820.2	676.1	415.3	264.7	221.9
32.5°	787.7	620.3	351.7	205.0	168.7
35°	752.7	567.1	288.1	157.0	140.2
37.5°	716.4	513.9	232.3	132.4	118.1
40°	680.0	460.7	181.7	111.6	98.6
42.5°	642.4	408.8	140.2	93.4	80.5
45°	603.5	358.2	118.1	76.6	64.9
47.5°	564.5	307.6	98.6	61.0	51.9
50°	525.6	259.5	81.8	48.0	41.5
52.5°	488.0	214.1	64.9	38.9	33.7
55°	449.0	170.0	50.6	31.1	27.3
57.5°	410.1	132.4	38.9	26.0	23.4
60°	372.5	99.9	29.8	20.8	19.5
62.5°	333.5	80.5	23.4	16.9	15.6
65°	292.0	62.3	18.2	14.3	13.0
67.5°	254.4	45.4	14.3	11.7	10.4
70°	215.4	31.1	11.7	10.4	9.1
72.5°	177.8	19.5	9.1	7.8	7.8
75°	141.5	13.0	7.8	6.5	5.2
77.5°	107.7	7.8	5.2	5.2	3.9
80°	75.3	5.2	3.9	3.9	3.9
82.5°	46.7	3.9	2.6	2.6	2.6
85°	20.8	1.3	2.6	1.3	1.3
87.5°	3.9	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)