

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: P1055231

Luminaire Tested: S122R3DR-S675D840-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055231
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-S675D840-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

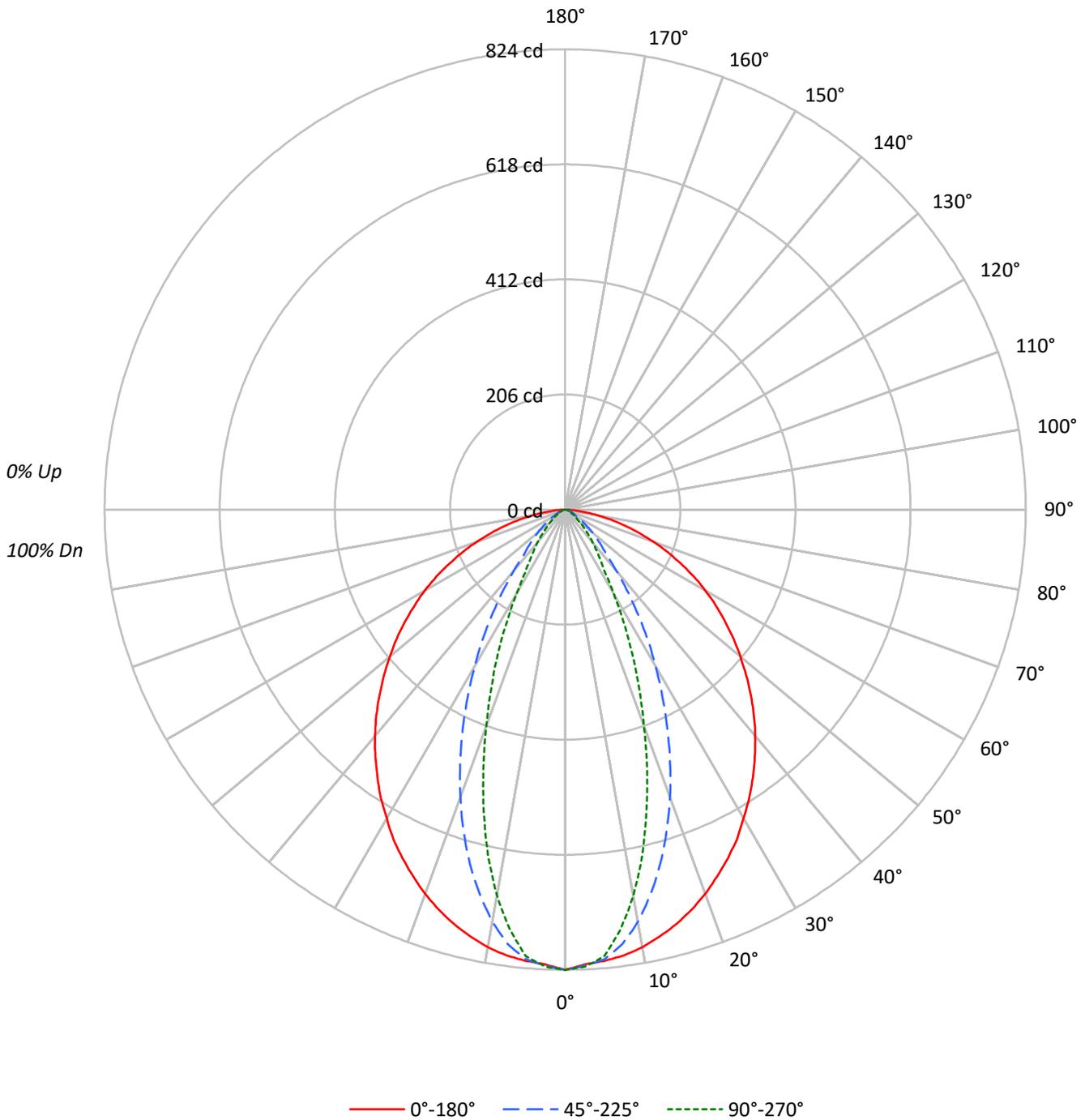
Lumens per Lamp: N/A
Luminaire Lumens: 944.4 lumens
Efficiency: N/A
Efficacy: 35.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15613	15613	15613
5°	15422	15365	15268
10°	15310	14415	13503
15°	15074	12894	11013
20°	14762	11057	8307
25°	14397	9056	5933
30°	13962	7071	3778
35°	13546	5185	2523
40°	13088	3497	1897
45°	12582	2462	1353
50°	12055	1875	952
55°	11541	1301	700
60°	10981	879	572
65°	10185	632	453
70°	9284	504	393
75°	8059	447	293
80°	6394	327	327
85°	3522	435	217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12582 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.3	8.0
10°-20°	184.9	19.6
20°-30°	211.2	22.4
30°-40°	179.1	19.0
40°-50°	133.7	14.2
50°-60°	86.4	9.1
60°-70°	48.2	5.1
70°-80°	21.1	2.2
80°-90°	4.4	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°	471.5	49.9
0°-40°	650.6	68.9
0°-60°	870.7	92.2
0°-90°	944.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	944.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	824	824	824	824	824	
5°	811	821	808	800	803	77
15°	768	749	657	588	562	216
25°	689	608	433	317	284	317
35°	586	441	224	122	109	366
45°	470	279	92	60	50	362
55°	349	132	39	24	21	312
65°	227	48	14	11	10	226
75°	110	10	6	5	4	117
85°	16	1	2	1	1	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	824.1	824.1	824.1	824.1	824.1
2.5°	815.0	827.1	817.0	817.0	819.0
5°	810.9	821.0	807.9	799.8	802.8
7.5°	804.9	811.9	784.7	760.4	758.4
10°	795.8	798.8	749.3	712.0	701.9
12.5°	782.6	775.6	705.9	653.4	636.2
15°	768.5	749.3	657.4	587.7	561.5
17.5°	751.3	717.0	603.9	519.1	486.8
20°	732.2	683.7	548.4	447.4	412.0
22.5°	710.9	646.3	490.8	379.7	344.4
25°	688.7	607.9	433.2	317.1	283.8
27.5°	665.5	567.5	376.7	260.5	224.2
30°	638.2	526.1	323.2	206.0	172.7
32.5°	613.0	482.7	273.7	159.6	131.3
35°	585.7	441.3	224.2	122.2	109.1
37.5°	557.4	399.9	180.8	103.0	91.9
40°	529.2	358.5	141.4	86.8	76.7
42.5°	499.9	318.1	109.1	72.7	62.6
45°	469.6	278.7	91.9	59.6	50.5
47.5°	439.3	239.3	76.7	47.5	40.4
50°	409.0	202.0	63.6	37.4	32.3
52.5°	379.7	166.6	50.5	30.3	26.3
55°	349.4	132.3	39.4	24.2	21.2
57.5°	319.1	103.0	30.3	20.2	18.2
60°	289.8	77.8	23.2	16.2	15.1
62.5°	259.5	62.6	18.2	13.1	12.1
65°	227.2	48.5	14.1	11.1	10.1
67.5°	197.9	35.3	11.1	9.1	8.1
70°	167.6	24.2	9.1	8.1	7.1
72.5°	138.4	15.1	7.1	6.1	6.1
75°	110.1	10.1	6.1	5.0	4.0
77.5°	83.8	6.1	4.0	4.0	3.0
80°	58.6	4.0	3.0	3.0	3.0
82.5°	36.4	3.0	2.0	2.0	2.0
85°	16.2	1.0	2.0	1.0	1.0
87.5°	3.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)