

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: P1055245

Luminaire Tested: S122R3DR-S675D940-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055245
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S675D940-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

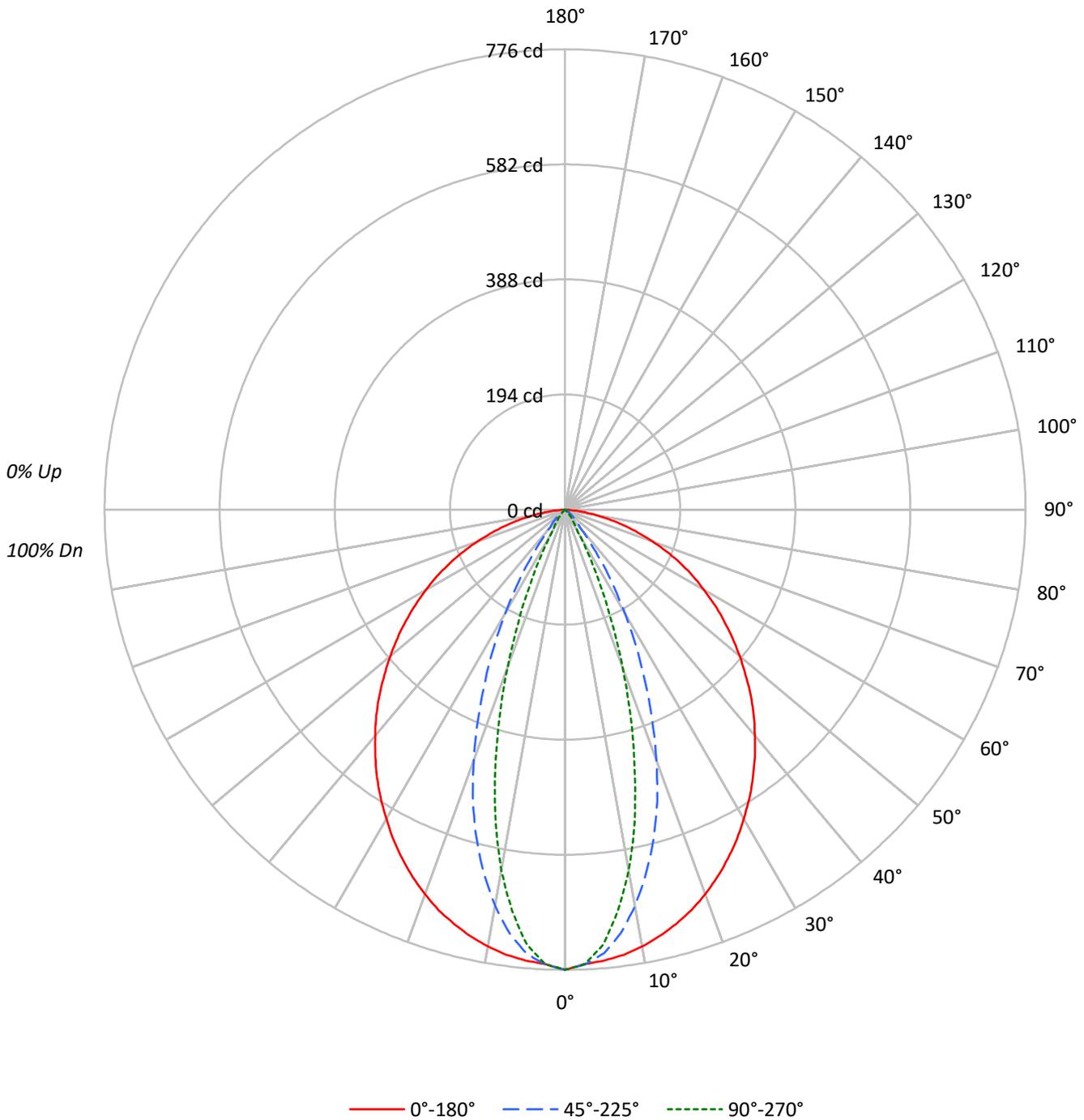
Lumens per Lamp: N/A
Luminaire Lumens: 705.8 lumens
Efficiency: N/A
Efficacy: 26.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	59	66	62	58	56
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	47	44	43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14698	14698	14698
5°	14517	14279	14009
10°	14392	13055	11889
15°	14185	11298	8903
20°	13916	9079	5700
25°	13571	6654	2927
30°	13168	4351	956
35°	12767	2412	557
40°	12307	969	309
45°	11851	646	121
50°	11327	368	53
55°	10811	178	30
60°	10238	68	0
65°	9634	40	0
70°	8647	50	0
75°	7445	66	0
80°	5641	0	0
85°	2326	196	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11851 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.6	9.9
10°-20°	161.6	22.9
20°-30°	164.1	23.2
30°-40°	123.1	17.4
40°-50°	86.2	12.2
50°-60°	52.8	7.5
60°-70°	31.4	4.5
70°-80°	14.5	2.1
80°-90°	2.6	0.4
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°	395.2	56.0
0°-40°	518.3	73.4
0°-60°	657.3	93.1
0°-90°	705.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	705.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	776	776	776	776	776	
5°	763	770	751	737	737	72
15°	723	684	576	488	454	204
25°	649	535	318	182	140	299
35°	552	359	104	31	24	345
45°	442	190	24	7	4	341
55°	327	58	5	2	1	293
65°	215	17	1	1	0	212
75°	102	2	1	1	0	108
85°	11	0	1	1	0	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	775.8	775.8	775.8	775.8	775.8
2.5°	766.9	778.5	767.8	766.0	766.9
5°	763.3	770.4	750.8	736.6	736.6
7.5°	757.1	757.1	720.5	691.1	682.2
10°	748.1	738.3	678.6	631.3	618.0
12.5°	736.6	713.4	629.6	562.7	541.3
15°	723.2	683.9	576.0	487.8	453.9
17.5°	708.0	651.0	516.3	406.6	367.4
20°	690.2	615.3	450.3	323.7	282.7
22.5°	670.6	576.0	383.4	249.7	206.0
25°	649.2	535.0	318.3	181.9	140.0
27.5°	626.9	492.2	258.6	124.8	85.6
30°	601.9	447.6	198.9	74.0	43.7
32.5°	577.8	404.8	148.9	40.1	32.1
35°	552.0	359.4	104.3	31.2	24.1
37.5°	525.2	316.6	64.2	23.2	17.8
40°	497.6	272.9	39.2	16.9	12.5
42.5°	470.8	231.8	31.2	11.6	8.0
45°	442.3	189.9	24.1	7.1	4.5
47.5°	412.9	151.6	17.8	4.5	2.7
50°	384.3	117.7	12.5	2.7	1.8
52.5°	355.8	86.5	8.0	1.8	0.9
55°	327.3	58.0	5.4	1.8	0.9
57.5°	298.7	41.0	3.6	0.9	0.9
60°	270.2	32.1	1.8	0.9	0.0
62.5°	243.4	25.0	1.8	0.9	0.9
65°	214.9	16.9	0.9	0.9	0.0
67.5°	184.6	10.7	0.9	0.9	0.0
70°	156.1	6.2	0.9	0.9	0.0
72.5°	128.4	3.6	0.9	0.9	0.0
75°	101.7	1.8	0.9	0.9	0.0
77.5°	75.8	0.9	0.0	0.9	0.0
80°	51.7	0.0	0.0	0.9	0.0
82.5°	30.3	0.0	0.0	0.9	0.0
85°	10.7	0.0	0.9	0.9	0.0
87.5°	0.0	0.0	0.9	0.9	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)