

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: P1055248

Luminaire Tested: S122R3DR-S675D950-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055248
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-S675D950-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

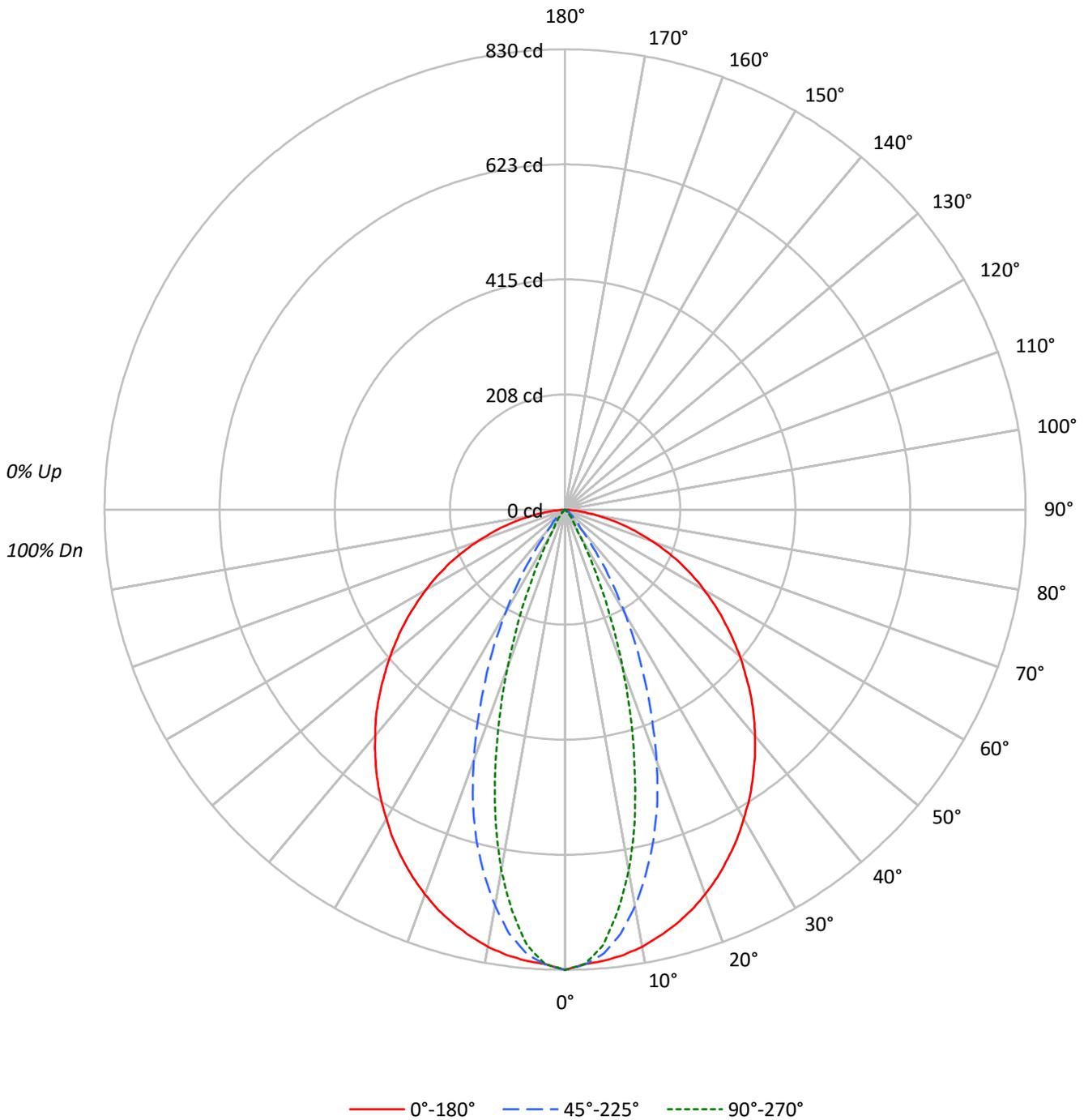
Lumens per Lamp: N/A
Luminaire Lumens: 755.2 lumens
Efficiency: N/A
Efficacy: 28.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	15725	15725	15725
5°	15530	15277	14986
10°	15398	13967	12718
15°	15175	12088	9525
20°	14887	9714	6097
25°	14518	7120	3131
30°	14089	4653	1022
35°	13657	2581	597
40°	13165	1039	331
45°	12679	691	129
50°	12120	395	56
55°	11564	188	33
60°	10954	72	0
65°	10306	45	0
70°	9251	55	0
75°	7964	73	0
80°	6033	0	0
85°	2478	217	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12679 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	9.9
10°-20°	172.9	22.9
20°-30°	175.5	23.2
30°-40°	131.7	17.4
40°-50°	92.2	12.2
50°-60°	56.5	7.5
60°-70°	33.6	4.5
70°-80°	15.5	2.1
80°-90°	2.8	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°	422.8	56.0
0°-40°	554.5	73.4
0°-60°	703.2	93.1
0°-90°	755.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	755.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	830	830	830	830	830	
5°	817	824	803	788	788	77
15°	774	732	616	522	486	218
25°	694	572	341	195	150	320
35°	590	384	112	33	26	369
45°	473	203	26	8	5	365
55°	350	62	6	2	1	313
65°	230	18	1	1	0	226
75°	109	2	1	1	0	116
85°	11	0	1	1	0	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	830.0	830.0	830.0	830.0	830.0
2.5°	820.4	832.8	821.4	819.5	820.4
5°	816.6	824.3	803.3	788.0	788.0
7.5°	810.0	810.0	770.8	739.4	729.8
10°	800.4	789.9	726.0	675.4	661.1
12.5°	788.0	763.2	673.5	602.0	579.1
15°	773.7	731.7	616.3	521.8	485.6
17.5°	757.5	696.4	552.4	435.0	393.1
20°	738.4	658.3	481.8	346.3	302.4
22.5°	717.4	616.3	410.2	267.1	220.4
25°	694.5	572.4	340.6	194.6	149.8
27.5°	670.7	526.6	276.7	133.6	91.6
30°	644.0	478.9	212.7	79.2	46.7
32.5°	618.2	433.1	159.3	42.9	34.3
35°	590.5	384.5	111.6	33.4	25.8
37.5°	561.9	338.7	68.7	24.8	19.1
40°	532.3	291.9	42.0	18.1	13.4
42.5°	503.7	248.0	33.4	12.4	8.6
45°	473.2	203.2	25.8	7.6	4.8
47.5°	441.7	162.2	19.1	4.8	2.9
50°	411.2	125.9	13.4	2.9	1.9
52.5°	380.6	92.5	8.6	1.9	1.0
55°	350.1	62.0	5.7	1.9	1.0
57.5°	319.6	43.9	3.8	1.0	1.0
60°	289.1	34.3	1.9	1.0	0.0
62.5°	260.4	26.7	1.9	1.0	1.0
65°	229.9	18.1	1.0	1.0	0.0
67.5°	197.5	11.4	1.0	1.0	0.0
70°	167.0	6.7	1.0	1.0	0.0
72.5°	137.4	3.8	1.0	1.0	0.0
75°	108.8	1.9	1.0	1.0	0.0
77.5°	81.1	1.0	0.0	1.0	0.0
80°	55.3	0.0	0.0	1.0	0.0
82.5°	32.4	0.0	0.0	1.0	0.0
85°	11.4	0.0	1.0	1.0	0.0
87.5°	0.0	0.0	1.0	1.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)