

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: P1055681

Luminaire Tested: S123R3DR-S775D950-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S775D950-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

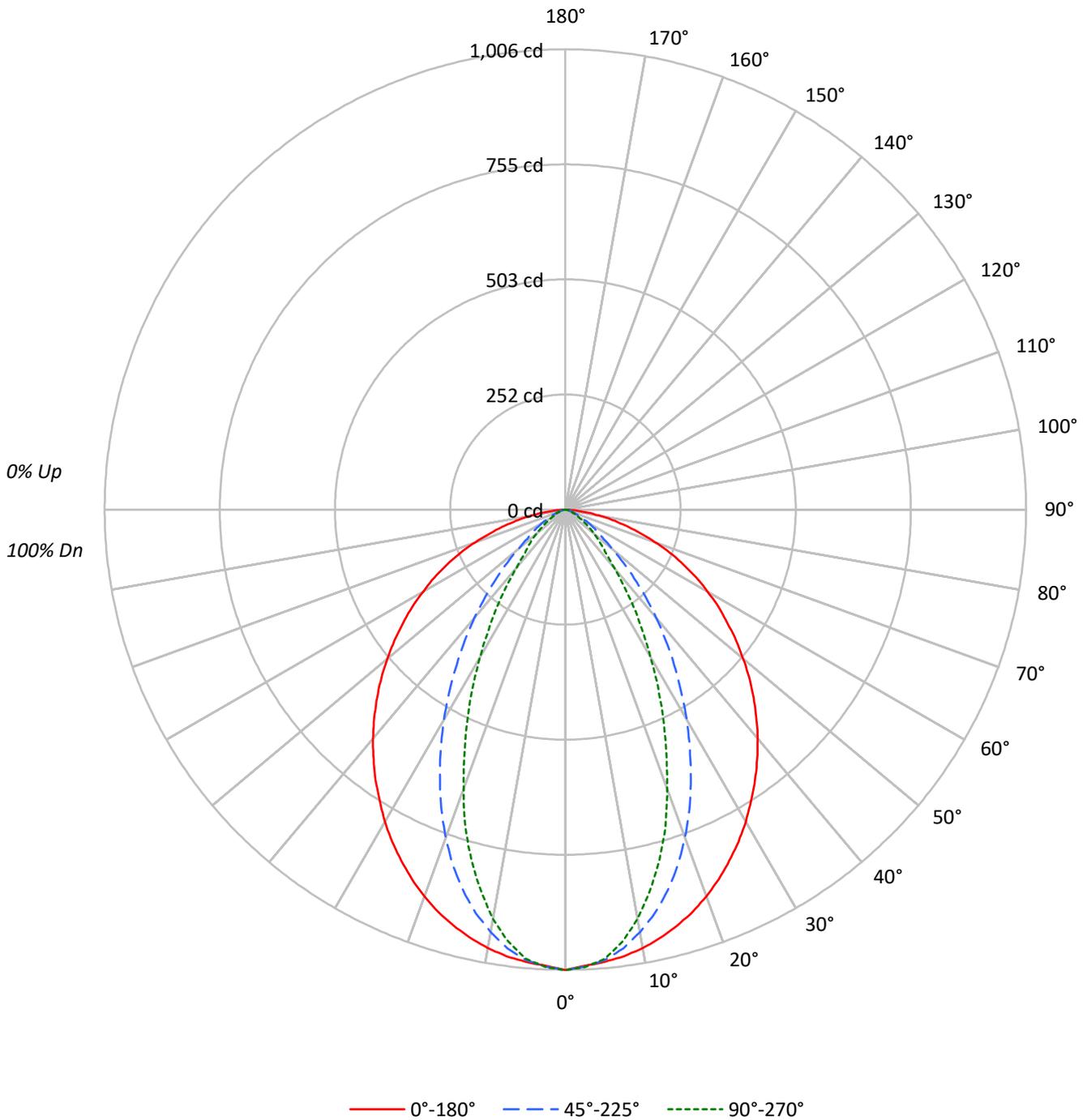
Lumens per Lamp: N/A
Luminaire Lumens: 1399.7 lumens
Efficiency: N/A
Efficacy: 53.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1055681

CATALOG NUMBER: S123R3DR-S775D950-X4F0-XX-UDD-FLL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1055681

CATALOG NUMBER: S123R3DR-S775D950-X4F0-XX-UDD-FLL-S

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				
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70				
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42				
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39				
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12135	12135	12135
5°	12008	11961	11927
10°	11913	11481	11119
15°	11753	10764	9895
20°	11542	9792	8336
25°	11270	8618	6726
30°	10970	7384	5180
35°	10629	6093	3833
40°	10285	4849	2613
45°	9906	3627	1968
50°	9502	2523	1538
55°	9085	1846	1122
60°	8649	1379	805
65°	8136	924	625
70°	7364	673	504
75°	6354	489	401
80°	5103	396	333
85°	2642	401	263

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9906 cd/sqm



TEST NUMBER: P1055681

CATALOG NUMBER: S123R3DR-S775D950-X4F0-XX-UDD-FLL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	6.6
10°-20°	242.2	17.3
20°-30°	304.3	21.7
30°-40°	283.4	20.2
40°-50°	216.9	15.5
50°-60°	144.2	10.3
60°-70°	77.7	5.6
70°-80°	31.8	2.3
80°-90°	6.1	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°	639.5	45.7
0°-40°	922.9	65.9
0°-60°	1284.0	91.7
0°-90°	1399.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1399.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	992	1003	988	984	986	94
15°	942	926	862	812	793	265
25°	847	790	648	540	506	390
35°	722	615	414	293	260	452
45°	581	429	213	125	115	448
55°	432	250	88	61	53	387
65°	285	96	32	24	22	282
75°	136	23	10	10	9	146
85°	19	3	3	3	2	28
90°	0	0	0	0	0	



TEST NUMBER: P1055681

CATALOG NUMBER: S123R3DR-S775D950-X4F0-XX-UDD-FLL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1006.5	1006.5	1006.5	1006.5	1006.5
2.5°	997.9	1010.3	999.8	1000.7	1000.7
5°	992.2	1002.7	988.3	984.5	985.5
7.5°	984.5	991.2	967.4	955.0	953.0
10°	973.1	975.0	937.8	915.8	908.2
12.5°	958.8	952.1	903.4	867.2	852.9
15°	941.6	926.3	862.4	811.9	792.8
17.5°	922.5	896.8	815.7	749.8	726.9
20°	899.6	863.4	763.2	681.2	649.7
22.5°	874.8	828.1	707.9	610.6	575.3
25°	847.2	789.9	647.8	540.0	505.6
27.5°	818.5	748.9	588.6	473.2	437.9
30°	788.0	706.9	530.4	408.3	372.1
32.5°	754.6	661.1	470.3	348.2	312.0
35°	722.2	615.3	414.0	292.9	260.4
37.5°	687.8	569.5	359.7	244.2	208.0
40°	653.5	522.8	308.1	196.5	166.0
42.5°	617.2	476.0	259.5	156.5	132.6
45°	581.0	429.3	212.7	125.0	115.4
47.5°	544.7	382.6	171.7	107.8	98.3
50°	506.6	337.7	134.5	91.6	82.0
52.5°	470.3	292.9	104.9	75.4	66.8
55°	432.2	249.9	87.8	61.1	53.4
57.5°	396.9	206.1	72.5	47.7	42.0
60°	358.7	166.9	57.2	37.2	33.4
62.5°	322.5	130.7	43.9	29.6	26.7
65°	285.2	96.4	32.4	23.8	21.9
67.5°	248.0	69.6	24.8	19.1	18.1
70°	208.9	52.5	19.1	15.3	14.3
72.5°	171.7	37.2	14.3	12.4	11.4
75°	136.4	22.9	10.5	9.5	8.6
77.5°	104.9	13.4	7.6	7.6	6.7
80°	73.5	7.6	5.7	5.7	4.8
82.5°	44.8	4.8	3.8	3.8	3.8
85°	19.1	2.9	2.9	2.9	1.9
87.5°	2.9	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)