

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: P1055680

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055680
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-5)
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-B
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

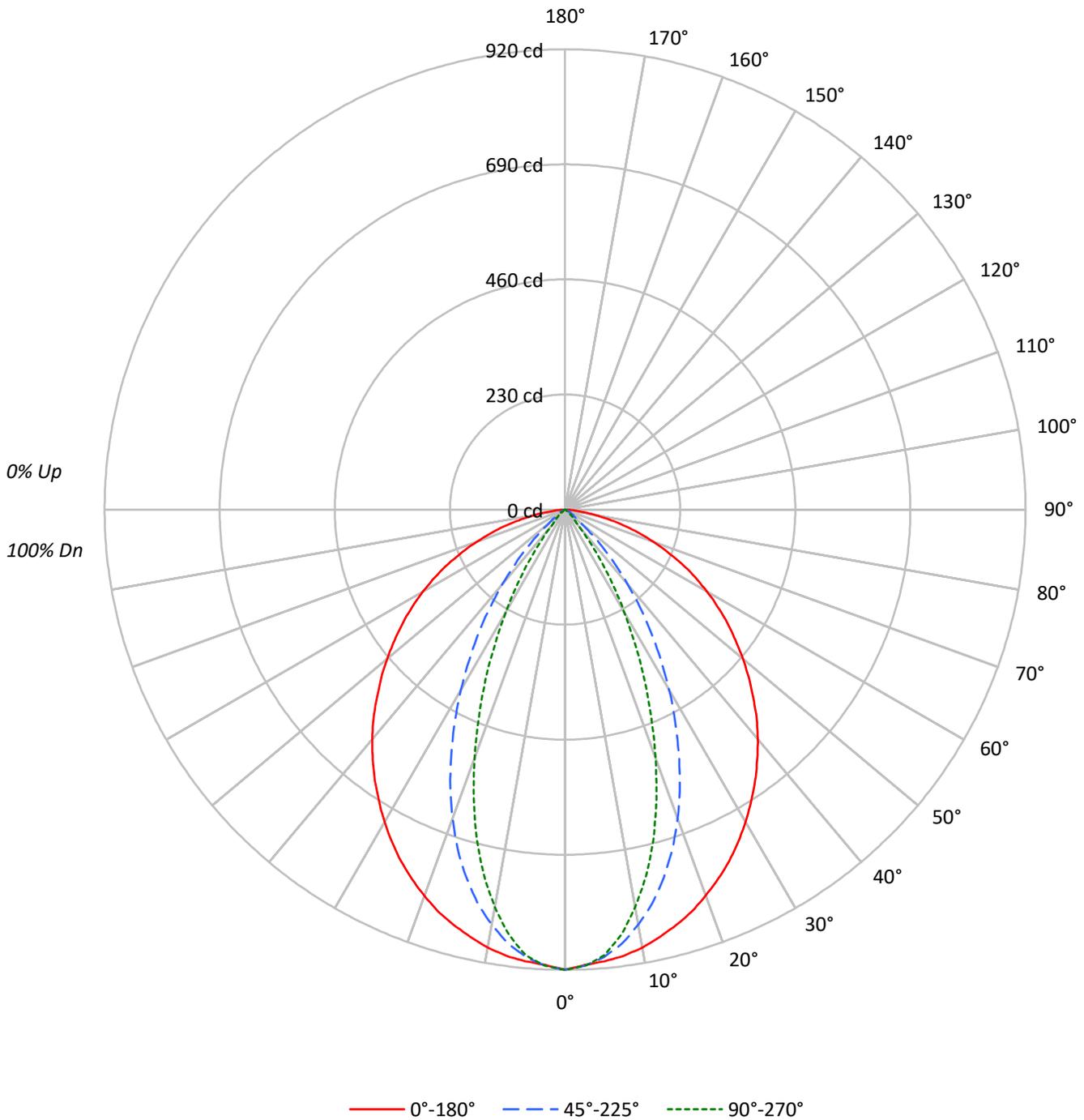
Lumens per Lamp: N/A
Luminaire Lumens: 1076.4 lumens
Efficiency: N/A
Efficacy: 40.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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

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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				
1	112	108	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	81	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54				
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46				
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43				
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11088	11088	11088
5°	10968	10864	10829
10°	10885	10313	9881
15°	10729	9502	8514
20°	10539	8433	6781
25°	10318	7145	5001
30°	10040	5790	3280
35°	9745	4410	1797
40°	9429	3049	615
45°	9061	1773	358
50°	8695	698	214
55°	8322	441	101
60°	7890	275	46
65°	7349	137	29
70°	6592	67	35
75°	5599	47	47
80°	4173	69	0
85°	1577	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9061 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.3	7.8
10°-20°	214.0	19.9
20°-30°	255.2	23.7
30°-40°	216.5	20.1
40°-50°	147.2	13.7
50°-60°	91.2	8.5
60°-70°	46.2	4.3
70°-80°	18.9	1.8
80°-90°	2.9	0.3
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°	553.5	51.4
0°-40°	770.0	71.5
0°-60°	1008.4	93.7
0°-90°	1076.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1076.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	920	920	920	920	920	
5°	906	915	898	891	895	86
15°	860	838	761	701	682	242
25°	776	703	537	415	376	357
35°	662	531	300	161	122	414
45°	531	348	104	26	21	410
55°	396	176	21	8	5	354
65°	258	43	5	1	1	254
75°	120	8	1	1	1	128
85°	11	0	0	1	0	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	919.7	919.7	919.7	919.7	919.7
2.5°	911.1	923.5	913.0	912.0	913.0
5°	906.3	914.9	897.7	891.0	894.8
7.5°	899.6	903.4	874.8	857.6	857.6
10°	889.1	886.3	842.4	813.8	807.1
12.5°	874.8	863.4	806.1	761.3	748.9
15°	859.6	837.6	761.3	701.2	682.1
17.5°	842.4	809.0	712.6	634.4	606.7
20°	821.4	776.6	657.3	561.9	528.5
22.5°	799.4	741.3	599.1	487.5	450.3
25°	775.6	703.1	537.1	415.0	375.9
27.5°	748.9	663.0	476.0	345.3	302.4
30°	721.2	621.1	415.9	278.6	235.6
32.5°	691.6	577.2	355.8	217.5	177.4
35°	662.1	531.4	299.6	161.2	122.1
37.5°	630.6	485.6	245.2	111.6	77.3
40°	599.1	440.7	193.7	70.6	39.1
42.5°	566.7	394.0	146.9	35.3	26.7
45°	531.4	348.2	104.0	25.8	21.0
47.5°	498.0	304.3	68.7	21.0	16.2
50°	463.6	260.4	37.2	15.3	11.4
52.5°	429.3	218.5	26.7	11.4	7.6
55°	395.9	175.5	21.0	7.6	4.8
57.5°	361.6	138.3	16.2	4.8	2.9
60°	327.2	102.1	11.4	2.9	1.9
62.5°	292.9	70.6	7.6	1.9	1.0
65°	257.6	42.9	4.8	1.0	1.0
67.5°	221.3	29.6	2.9	1.0	1.0
70°	187.0	21.0	1.9	1.0	1.0
72.5°	152.6	13.4	1.0	1.0	0.0
75°	120.2	7.6	1.0	1.0	1.0
77.5°	88.7	2.9	1.0	1.0	0.0
80°	60.1	1.0	1.0	1.0	0.0
82.5°	33.4	0.0	1.0	1.0	0.0
85°	11.4	0.0	0.0	1.0	0.0
87.5°	0.0	0.0	0.0	1.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)