

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: P1055665

Luminaire Tested: S123R3DR-S775D850-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055665
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-S775D850-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, 80 CRI LEDS
Ballast/Driver: -

Summary

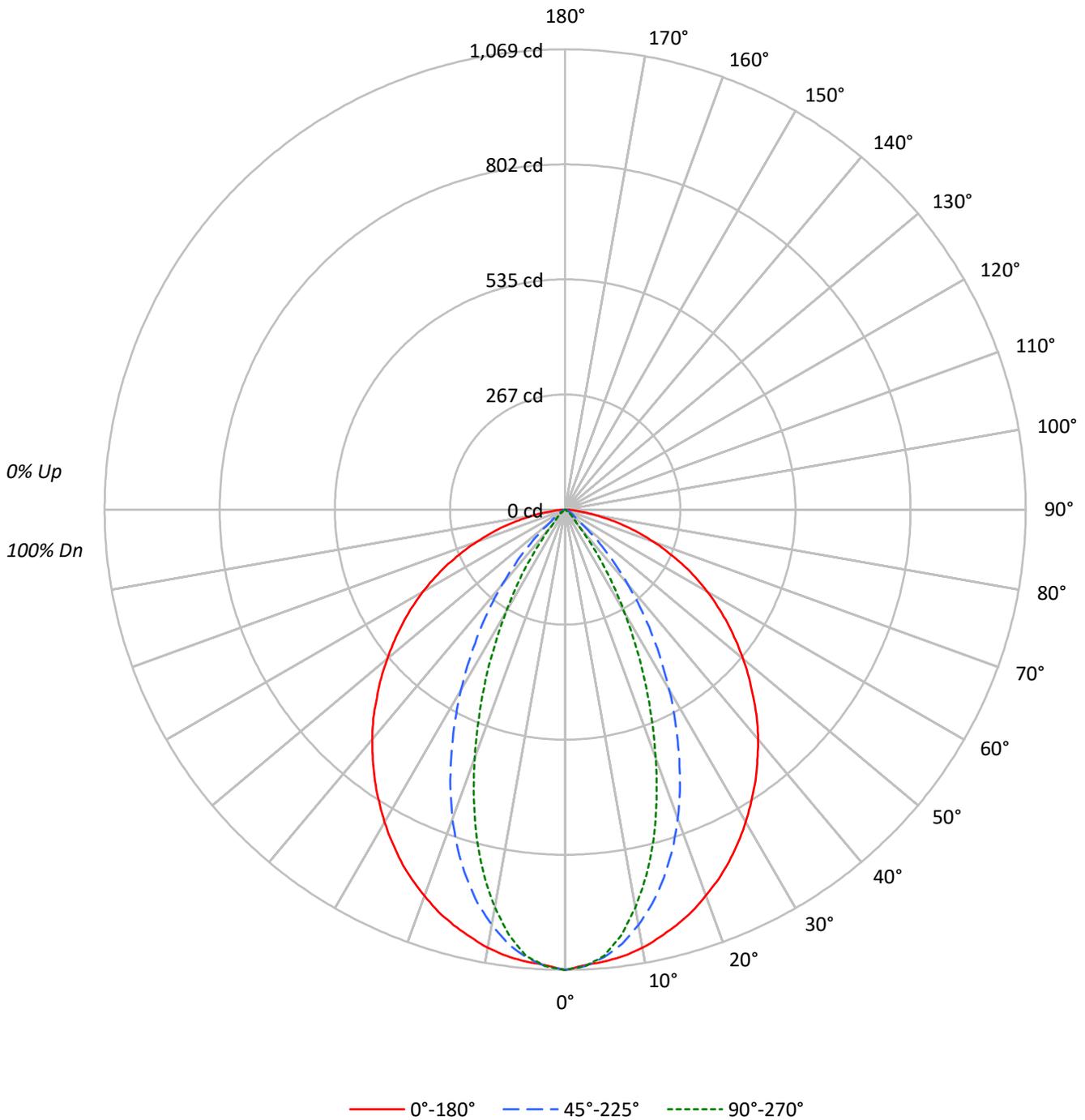
Lumens per Lamp: N/A
Luminaire Lumens: 1251.2 lumens
Efficiency: N/A
Efficacy: 47.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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	58	79	69	62	57	67	61	57	66	61	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°	12890	12890	12890
5°	12750	12630	12589
10°	12654	11988	11486
15°	12472	11046	9897
20°	12250	9804	7883
25°	11994	8306	5812
30°	11672	6731	3813
35°	11327	5125	2090
40°	10962	3543	716
45°	10532	2061	416
50°	10110	812	249
55°	9673	513	116
60°	9173	321	53
65°	8541	157	31
70°	7663	78	39
75°	6508	51	51
80°	4853	76	0
85°	1840	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10532 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.0	7.8
10°-20°	248.7	19.9
20°-30°	296.7	23.7
30°-40°	251.7	20.1
40°-50°	171.1	13.7
50°-60°	106.0	8.5
60°-70°	53.7	4.3
70°-80°	21.9	1.7
80°-90°	3.4	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°	643.5	51.4
0°-40°	895.2	71.5
0°-60°	1172.3	93.7
0°-90°	1251.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1251.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1069	1069	1069	1069	1069	
5°	1054	1064	1044	1036	1040	100
15°	999	974	885	815	793	282
25°	902	817	624	482	437	415
35°	770	618	348	187	142	481
45°	618	405	121	30	24	477
55°	460	204	24	9	6	411
65°	299	50	6	1	1	296
75°	140	9	1	1	1	149
85°	13	0	0	1	0	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1069.1	1069.1	1069.1	1069.1	1069.1
2.5°	1059.1	1073.5	1061.3	1060.2	1061.3
5°	1053.5	1063.5	1043.6	1035.8	1040.2
7.5°	1045.8	1050.2	1017.0	997.0	997.0
10°	1033.6	1030.3	979.2	946.0	938.2
12.5°	1017.0	1003.6	937.1	885.0	870.6
15°	999.2	973.7	885.0	815.1	792.9
17.5°	979.2	940.4	828.4	737.5	705.3
20°	954.8	902.7	764.1	653.2	614.4
22.5°	929.3	861.7	696.5	566.7	523.4
25°	901.6	817.3	624.4	482.4	436.9
27.5°	870.6	770.8	553.4	401.5	351.6
30°	838.4	722.0	483.5	323.8	273.9
32.5°	804.0	670.9	413.7	252.9	206.3
35°	769.6	617.7	348.2	187.4	142.0
37.5°	733.0	564.5	285.0	129.8	89.8
40°	696.5	512.4	225.1	82.1	45.5
42.5°	658.7	458.0	170.8	41.0	31.1
45°	617.7	404.8	120.9	29.9	24.4
47.5°	578.9	353.8	79.8	24.4	18.9
50°	539.0	302.8	43.3	17.7	13.3
52.5°	499.0	254.0	31.1	13.3	8.9
55°	460.2	204.1	24.4	8.9	5.5
57.5°	420.3	160.8	18.9	5.5	3.3
60°	380.4	118.7	13.3	3.3	2.2
62.5°	340.5	82.1	8.9	2.2	1.1
65°	299.4	49.9	5.5	1.1	1.1
67.5°	257.3	34.4	3.3	1.1	1.1
70°	217.4	24.4	2.2	1.1	1.1
72.5°	177.4	15.5	1.1	1.1	0.0
75°	139.7	8.9	1.1	1.1	1.1
77.5°	103.1	3.3	1.1	1.1	0.0
80°	69.9	1.1	1.1	1.1	0.0
82.5°	38.8	0.0	1.1	1.1	0.0
85°	13.3	0.0	0.0	1.1	0.0
87.5°	0.0	0.0	0.0	1.1	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)