

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: P1055656

Luminaire Tested: S123R3DR-S775D830-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055656
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-S775D830-X4F0-XX-UDD-FLL-B
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

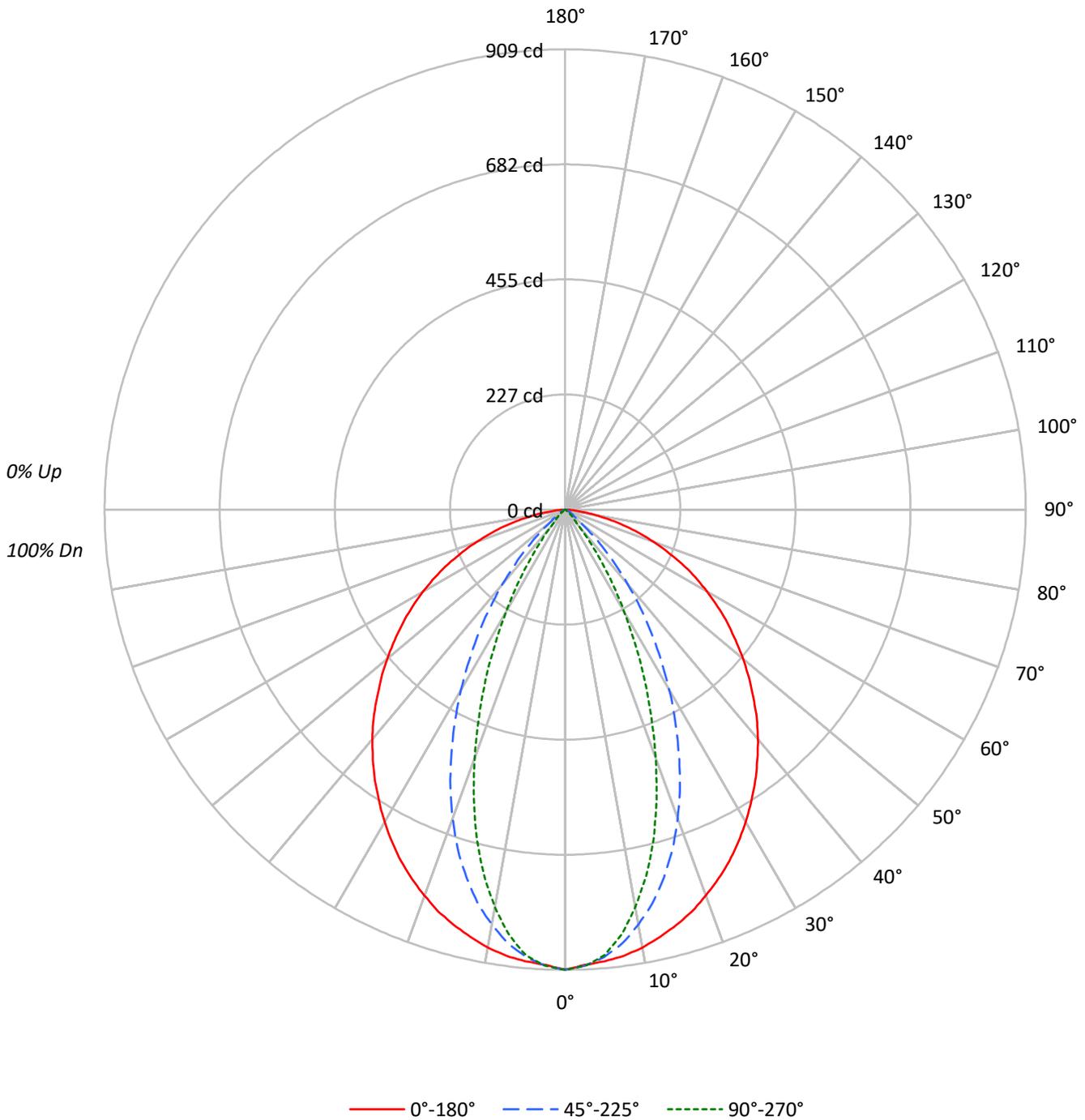
Lumens per Lamp: N/A
Luminaire Lumens: 1063.4 lumens
Efficiency: N/A
Efficacy: 40.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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°	10954	10954	10954
5°	10837	10734	10700
10°	10754	10189	9762
15°	10599	9387	8411
20°	10412	8332	6700
25°	10194	7058	4941
30°	9920	5720	3241
35°	9627	4357	1775
40°	9316	3011	608
45°	8951	1751	353
50°	8592	690	212
55°	8223	435	99
60°	7796	272	46
65°	7260	134	26
70°	6511	67	32
75°	5534	42	42
80°	4124	62	0
85°	1563	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8951 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	7.8
10°-20°	211.4	19.9
20°-30°	252.2	23.7
30°-40°	213.9	20.1
40°-50°	145.4	13.7
50°-60°	90.1	8.5
60°-70°	45.6	4.3
70°-80°	18.6	1.7
80°-90°	2.8	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°	546.9	51.4
0°-40°	760.8	71.5
0°-60°	996.3	93.7
0°-90°	1063.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1063.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	895	904	887	880	884	85
15°	849	828	752	693	674	239
25°	766	695	531	410	371	353
35°	654	525	296	159	121	409
45°	525	344	103	25	21	406
55°	391	173	21	8	5	349
65°	254	42	5	1	1	251
75°	119	8	1	1	1	126
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°	908.6	908.6	908.6	908.6	908.6
2.5°	900.1	912.4	902.0	901.1	902.0
5°	895.4	903.9	886.9	880.3	884.1
7.5°	888.8	892.6	864.3	847.3	847.3
10°	878.4	875.6	832.3	804.0	797.4
12.5°	864.3	853.0	796.4	752.1	739.9
15°	849.2	827.6	752.1	692.8	673.9
17.5°	832.3	799.3	704.1	626.8	599.5
20°	811.5	767.2	649.4	555.2	522.2
22.5°	789.8	732.4	591.9	481.6	444.9
25°	766.3	694.7	530.6	410.0	371.4
27.5°	739.9	655.1	470.3	341.2	298.8
30°	712.6	613.6	410.9	275.2	232.8
32.5°	683.3	570.2	351.6	214.9	175.3
35°	654.1	525.0	296.0	159.3	120.6
37.5°	623.0	479.8	242.2	110.3	76.3
40°	591.9	435.5	191.3	69.7	38.6
42.5°	559.9	389.3	145.2	34.9	26.4
45°	525.0	344.0	102.7	25.4	20.7
47.5°	492.0	300.7	67.9	20.7	16.0
50°	458.1	257.3	36.8	15.1	11.3
52.5°	424.1	215.8	26.4	11.3	7.5
55°	391.2	173.4	20.7	7.5	4.7
57.5°	357.2	136.7	16.0	4.7	2.8
60°	323.3	100.9	11.3	2.8	1.9
62.5°	289.4	69.7	7.5	1.9	0.9
65°	254.5	42.4	4.7	0.9	0.9
67.5°	218.7	29.2	2.8	0.9	0.9
70°	184.7	20.7	1.9	0.9	0.9
72.5°	150.8	13.2	0.9	0.9	0.0
75°	118.8	7.5	0.9	0.9	0.9
77.5°	87.7	2.8	0.9	0.9	0.0
80°	59.4	0.9	0.9	0.9	0.0
82.5°	33.0	0.0	0.9	0.9	0.0
85°	11.3	0.0	0.0	0.9	0.0
87.5°	0.0	0.0	0.0	0.9	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)