

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: P1055551

Luminaire Tested: S123R3DR-S1000D835-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055551
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-S1000D835-X4F0-XX-UDD-FLL-B
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

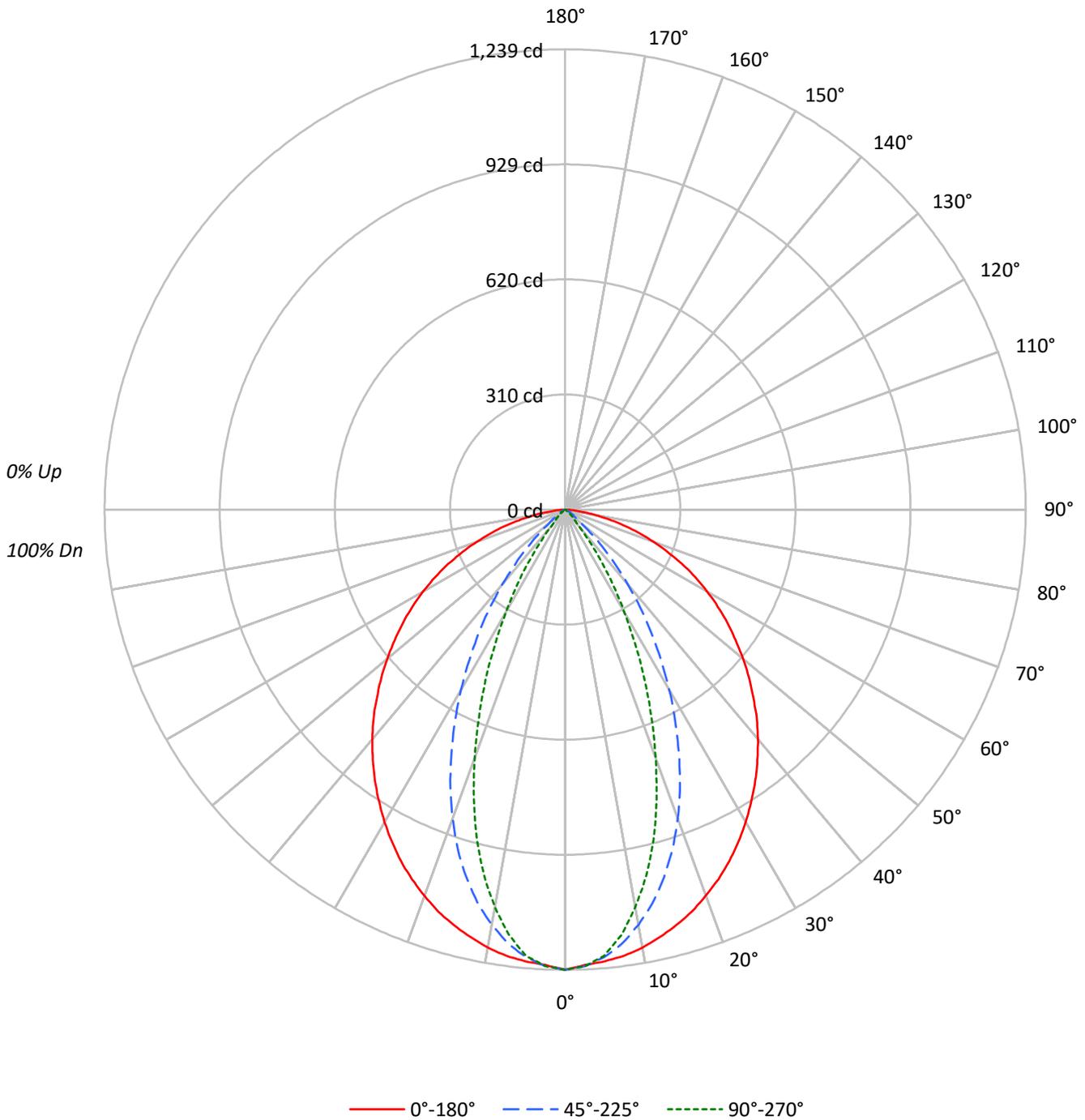
Lumens per Lamp: N/A
Luminaire Lumens: 1449.9 lumens
Efficiency: N/A
Efficacy: 41.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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: P1055551

CATALOG NUMBER: S123R3DR-S1000D835-X4F0-XX-UDD-FLL-B

Luminous Intensity Polar Plot





TEST NUMBER: P105551

CATALOG NUMBER: S123R3DR-S1000D835-X4F0-XX-UDD-FLL-B

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	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	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°	14935	14935	14935
5°	14775	14634	14588
10°	14663	13891	13310
15°	14451	12800	11468
20°	14195	11360	9134
25°	13899	9625	6735
30°	13525	7800	4419
35°	13126	5939	2421
40°	12701	4106	829
45°	12205	2389	483
50°	11713	940	289
55°	11210	595	135
60°	10629	371	63
65°	9899	183	37
70°	8880	92	46
75°	7542	61	61
80°	5624	90	0
85°	2130	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12205 cd/sqm



TEST NUMBER: P1055551

CATALOG NUMBER: S123R3DR-S1000D835-X4F0-XX-UDD-FLL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.6	7.8
10°-20°	288.2	19.9
20°-30°	343.8	23.7
30°-40°	291.7	20.1
40°-50°	198.2	13.7
50°-60°	122.9	8.5
60°-70°	62.2	4.3
70°-80°	25.4	1.8
80°-90°	3.9	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°	745.6	51.4
0°-40°	1037.3	71.5
0°-60°	1358.4	93.7
0°-90°	1449.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1449.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1239	1239	1239	1239	1239	
5°	1221	1232	1209	1200	1205	116
15°	1158	1128	1026	944	919	326
25°	1045	947	724	559	506	481
35°	892	716	404	217	164	557
45°	716	469	140	35	28	553
55°	533	236	28	10	6	476
65°	347	58	6	1	1	343
75°	162	10	1	1	1	172
85°	15	0	0	1	0	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1238.8	1238.8	1238.8	1238.8	1238.8
2.5°	1227.2	1243.9	1229.8	1228.5	1229.8
5°	1220.8	1232.4	1209.2	1200.2	1205.4
7.5°	1211.8	1217.0	1178.4	1155.3	1155.3
10°	1197.7	1193.8	1134.7	1096.2	1087.2
12.5°	1178.4	1163.0	1085.9	1025.5	1008.8
15°	1157.8	1128.3	1025.5	944.5	918.8
17.5°	1134.7	1089.7	959.9	854.6	817.3
20°	1106.4	1046.0	885.4	756.9	711.9
22.5°	1076.9	998.5	807.0	656.7	606.5
25°	1044.8	947.1	723.5	559.0	506.3
27.5°	1008.8	893.1	641.2	465.2	407.4
30°	971.5	836.6	560.3	375.2	317.4
32.5°	931.7	777.5	479.3	293.0	239.0
35°	891.8	715.8	403.5	217.2	164.5
37.5°	849.4	654.1	330.3	150.4	104.1
40°	807.0	593.7	260.9	95.1	52.7
42.5°	763.3	530.7	197.9	47.5	36.0
45°	715.8	469.0	140.1	34.7	28.3
47.5°	670.8	409.9	92.5	28.3	21.8
50°	624.5	350.8	50.1	20.6	15.4
52.5°	578.3	294.3	36.0	15.4	10.3
55°	533.3	236.5	28.3	10.3	6.4
57.5°	487.0	186.3	21.8	6.4	3.9
60°	440.8	137.5	15.4	3.9	2.6
62.5°	394.5	95.1	10.3	2.6	1.3
65°	347.0	57.8	6.4	1.3	1.3
67.5°	298.1	39.8	3.9	1.3	1.3
70°	251.9	28.3	2.6	1.3	1.3
72.5°	205.6	18.0	1.3	1.3	0.0
75°	161.9	10.3	1.3	1.3	1.3
77.5°	119.5	3.9	1.3	1.3	0.0
80°	81.0	1.3	1.3	1.3	0.0
82.5°	45.0	0.0	1.3	1.3	0.0
85°	15.4	0.0	0.0	1.3	0.0
87.5°	0.0	0.0	0.0	1.3	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)