

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: P1055552

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055552
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-S1000D835-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

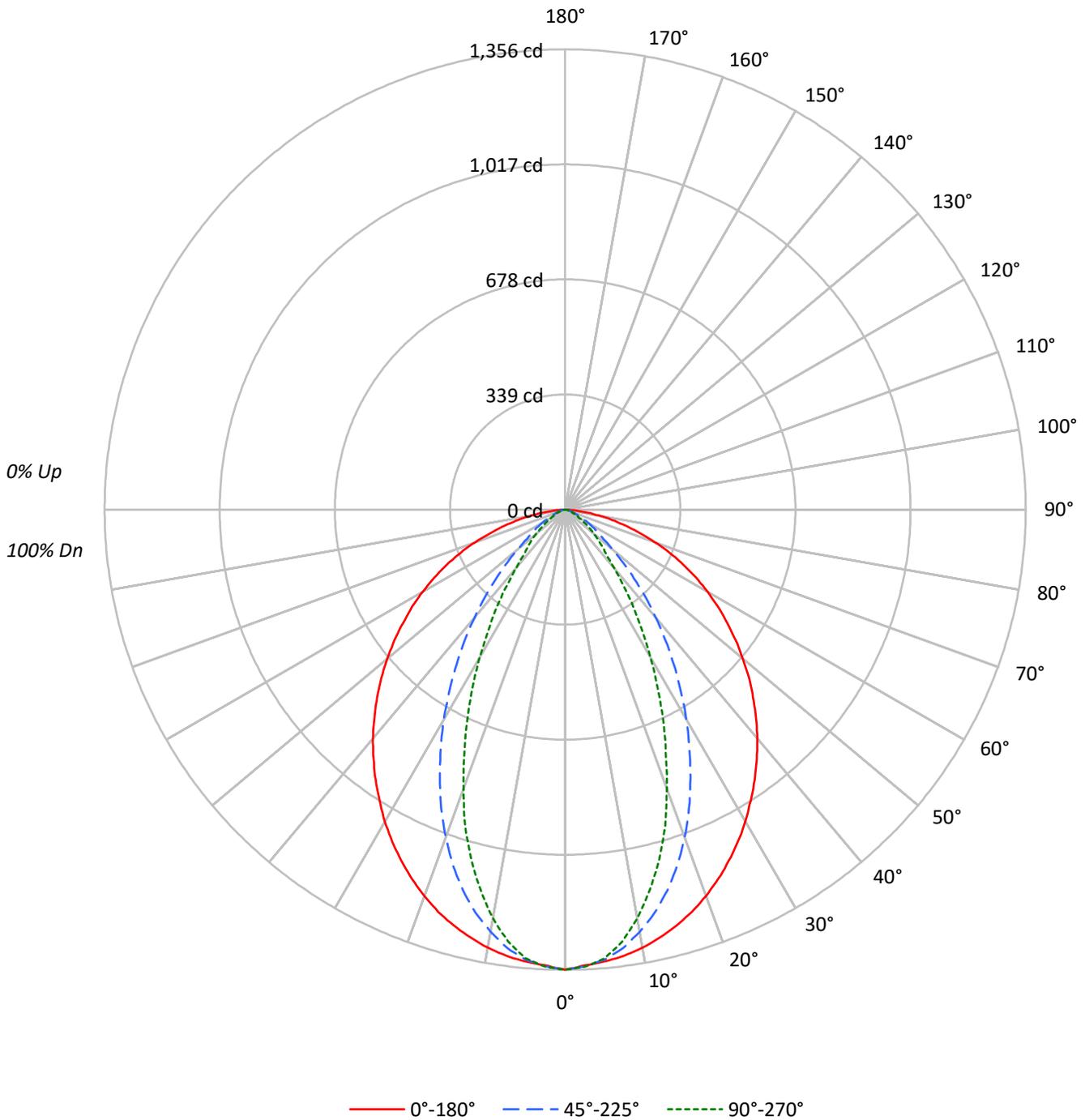
Lumens per Lamp: N/A
Luminaire Lumens: 1885.4 lumens
Efficiency: N/A
Efficacy: 54.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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Luminous Intensity Polar Plot





TEST NUMBER: P105552

CATALOG NUMBER: S123R3DR-S1000D835-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				100
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16345	16345	16345
5°	16175	16112	16066
10°	16047	15465	14977
15°	15832	14500	13329
20°	15548	13189	11228
25°	15180	11608	9061
30°	14778	9947	6977
35°	14318	8208	5163
40°	13855	6533	3519
45°	13344	4887	2651
50°	12799	3399	2073
55°	12236	2485	1513
60°	11651	1859	1085
65°	10960	1247	844
70°	9920	906	680
75°	8562	657	540
80°	6867	535	444
85°	3555	539	360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13344 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.3	6.6
10°-20°	326.2	17.3
20°-30°	409.9	21.7
30°-40°	381.7	20.2
40°-50°	292.2	15.5
50°-60°	194.2	10.3
60°-70°	104.7	5.6
70°-80°	42.9	2.3
80°-90°	8.2	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°	861.4	45.7
0°-40°	1243.1	65.9
0°-60°	1729.6	91.7
0°-90°	1885.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1885.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1356	1356	1356	1356	1356	
5°	1336	1351	1331	1326	1328	127
15°	1268	1248	1162	1094	1068	357
25°	1141	1064	873	727	681	525
35°	973	829	558	394	351	608
45°	783	578	287	168	156	604
55°	582	337	118	82	72	522
65°	384	130	44	32	30	380
75°	184	31	14	13	12	197
85°	26	4	4	4	3	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1355.7	1355.7	1355.7	1355.7	1355.7
2.5°	1344.2	1360.9	1346.7	1348.0	1348.0
5°	1336.5	1350.6	1331.3	1326.2	1327.5
7.5°	1326.2	1335.2	1303.1	1286.3	1283.8
10°	1310.8	1313.3	1263.2	1233.7	1223.4
12.5°	1291.5	1282.5	1217.0	1168.1	1148.8
15°	1268.4	1247.8	1161.7	1093.6	1067.9
17.5°	1242.7	1208.0	1098.7	1010.1	979.2
20°	1211.8	1163.0	1028.0	917.5	875.1
22.5°	1178.4	1115.4	953.5	822.4	774.9
25°	1141.1	1064.0	872.6	727.3	681.1
27.5°	1102.6	1008.8	792.9	637.4	589.8
30°	1061.5	952.2	714.5	550.0	501.2
32.5°	1016.5	890.5	633.5	469.0	420.2
35°	972.8	828.9	557.7	394.5	350.8
37.5°	926.5	767.2	484.5	329.0	280.1
40°	880.3	704.2	415.1	264.7	223.6
42.5°	831.4	641.2	349.5	210.8	178.6
45°	782.6	578.3	286.6	168.3	155.5
47.5°	733.8	515.3	231.3	145.2	132.4
50°	682.4	454.9	181.2	123.4	110.5
52.5°	633.5	394.5	141.4	101.5	90.0
55°	582.1	336.7	118.2	82.2	72.0
57.5°	534.6	277.6	97.7	64.3	56.5
60°	483.2	224.9	77.1	50.1	45.0
62.5°	434.4	176.1	59.1	39.8	36.0
65°	384.2	129.8	43.7	32.1	29.6
67.5°	334.1	93.8	33.4	25.7	24.4
70°	281.4	70.7	25.7	20.6	19.3
72.5°	231.3	50.1	19.3	16.7	15.4
75°	183.8	30.8	14.1	12.9	11.6
77.5°	141.4	18.0	10.3	10.3	9.0
80°	98.9	10.3	7.7	7.7	6.4
82.5°	60.4	6.4	5.1	5.1	5.1
85°	25.7	3.9	3.9	3.9	2.6
87.5°	3.9	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)