

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: P992334

Luminaire Tested: S123DR-B1000DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P992334
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DR-B1000DB2750-4F0-XX-W2A-F_3500K
Description: Define 3 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

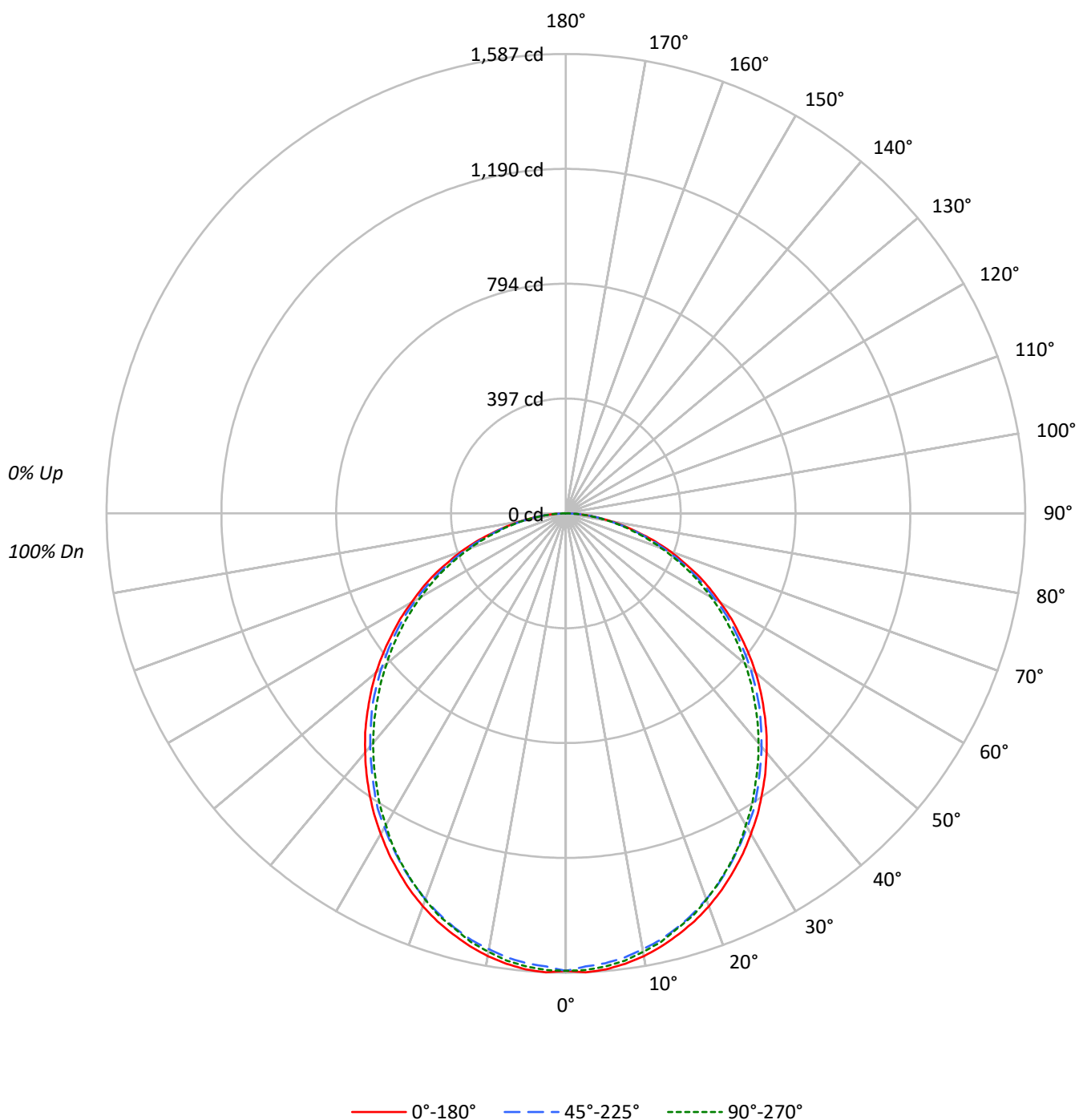
Lumens per Lamp: N/A
Luminaire Lumens: 4113.0 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
Input Voltage (V):
Input Current (A_{in}): 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: P992334

CATALOG NUMBER: S123DR-B1000DB2750-4F0-XX-W2A-F_3500K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	72	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	62	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	53	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	46	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	41	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	33	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	30	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17011	17011	17011
5°	17090	16856	16974
10°	16976	16709	16812
15°	16778	16520	16551
20°	16546	16251	16266
25°	16235	15929	15897
30°	15893	15572	15454
35°	15534	15195	15000
40°	15160	14779	14550
45°	14749	14397	14046
50°	14336	13926	13539
55°	13797	13439	13031
60°	13253	12871	12462
65°	12770	12251	11871
70°	12060	11547	11034
75°	11021	10626	10173
80°	9937	9521	9434
85°	8732	8386	8052

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14749 cd/sqm

TEST NUMBER: P992334

CATALOG NUMBER: S123DR-B1000DB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.0	3.6
10°-20°	420.7	10.2
20°-30°	621.3	15.1
30°-40°	725.6	17.6
40°-50°	729.5	17.7
50°-60°	640.8	15.6
60°-70°	477.3	11.6
70°-80°	271.6	6.6
80°-90°	77.2	1.9
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°	1191.0	29.0
0°-40°	1916.6	46.6
0°-60°	3286.9	79.9
0°-90°	4113.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4113.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1580	1580	1580	1580	1580	
5°	1582	1575	1560	1574	1571	150
15°	1506	1500	1482	1493	1485	425
25°	1367	1359	1341	1343	1338	630
35°	1182	1174	1156	1148	1142	740
45°	969	963	946	930	923	748
55°	735	734	716	701	694	659
65°	501	495	481	470	466	495
75°	265	260	256	249	245	283
85°	71	68	68	65	65	81
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1580.4	1580.4	1580.4	1580.4	1580.4
2.5°	1587.2	1581.7	1566.8	1580.4	1579.0
5°	1581.7	1574.9	1560.0	1573.6	1570.9
7.5°	1569.5	1562.7	1547.8	1560.0	1558.6
10°	1553.2	1546.4	1528.7	1541.0	1538.2
12.5°	1531.4	1526.0	1509.7	1517.9	1516.5
15°	1505.6	1500.2	1482.5	1493.4	1485.2
17.5°	1477.1	1470.3	1452.6	1460.8	1458.1
20°	1444.5	1436.3	1418.7	1424.1	1420.0
22.5°	1407.8	1399.6	1382.0	1386.1	1380.6
25°	1367.0	1358.9	1341.2	1342.6	1338.5
27.5°	1324.9	1316.7	1297.7	1299.1	1295.0
30°	1278.7	1271.9	1252.9	1252.9	1243.4
32.5°	1232.5	1223.0	1209.4	1199.9	1195.8
35°	1182.2	1174.1	1156.4	1148.2	1141.5
37.5°	1131.9	1121.1	1103.4	1093.9	1089.8
40°	1078.9	1070.8	1051.8	1040.9	1035.5
42.5°	1025.9	1016.4	997.4	986.5	981.1
45°	968.9	963.4	945.8	929.5	922.7
47.5°	913.2	905.0	888.7	872.4	867.0
50°	856.1	849.3	831.6	816.7	808.5
52.5°	796.3	792.2	773.2	761.0	752.8
55°	735.2	733.8	716.1	701.2	694.4
57.5°	678.1	672.6	659.1	645.5	637.3
60°	615.6	614.2	597.9	585.7	578.9
62.5°	559.9	555.8	539.5	527.2	523.2
65°	501.4	494.6	481.0	470.2	466.1
67.5°	438.9	433.5	422.6	413.1	407.7
70°	383.2	375.0	366.9	357.4	350.6
72.5°	324.8	319.3	309.8	301.7	299.0
75°	265.0	259.5	255.5	248.7	244.6
77.5°	212.0	209.3	203.8	198.4	198.4
80°	160.3	156.3	153.6	152.2	152.2
82.5°	110.1	110.1	110.1	107.4	106.0
85°	70.7	67.9	67.9	65.2	65.2
87.5°	35.3	31.3	29.9	28.5	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)