

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: P1032101

Luminaire Tested: S123RDIW-B1165D1320UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032101
REPORT IS A COMBINATION OF REPORTS P993987 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D1320UB27-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

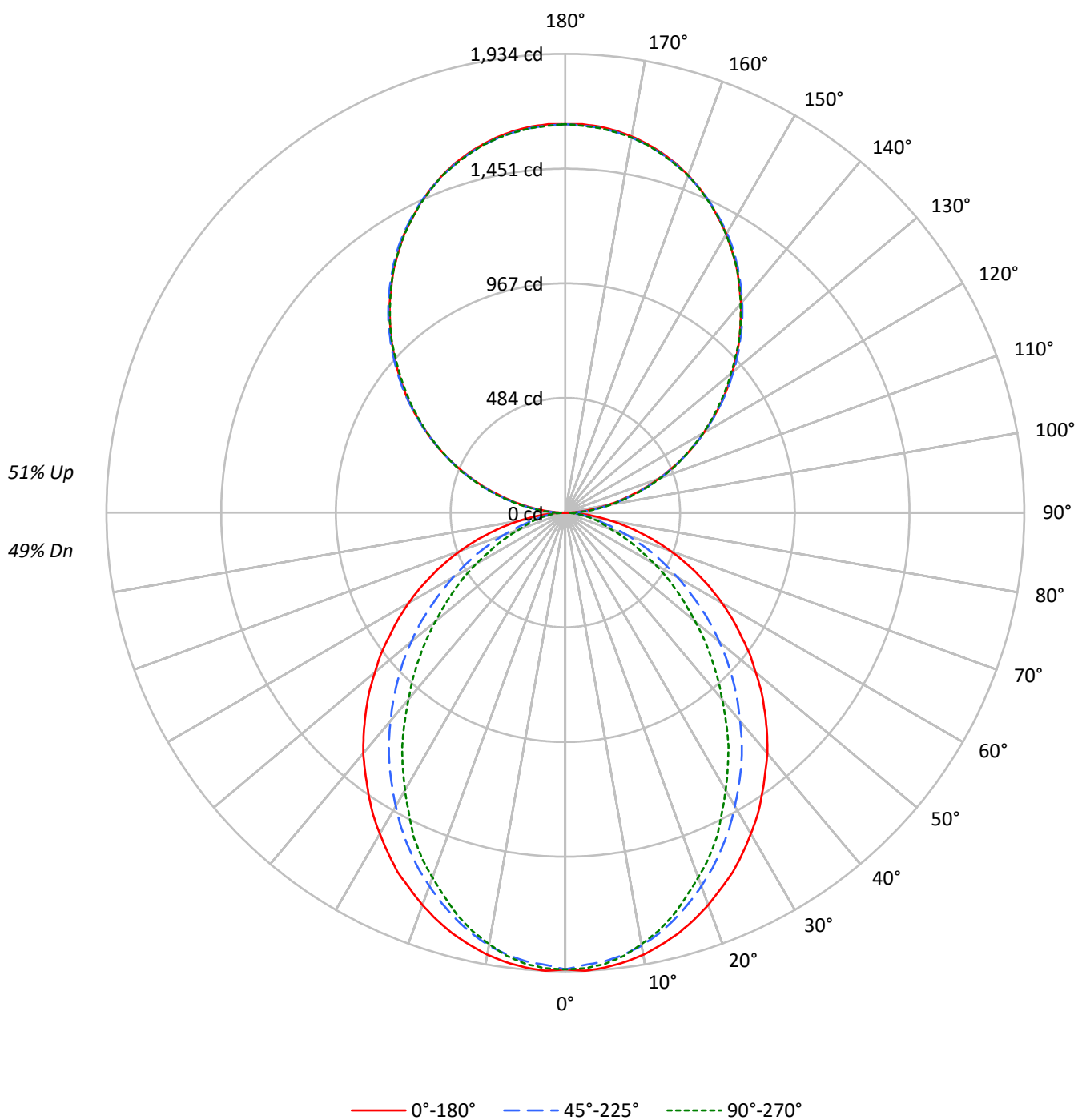
Lumens per Lamp: N/A
Luminaire Lumens: 8892.0 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 103.4
Input Voltage (V):
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: P1032101

CATALOG NUMBER: S123RDIW-B1165D1320UB27-4F0-XX-W2A-F1

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
RCR																	
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	94	90	87	90	86	83	80	73	71	69	61	59	58	49	48	47
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40
3	82	72	65	60	75	67	61	56	57	52	49	48	44	41	39	37	35
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	35	32	30
5	69	57	49	44	63	53	46	41	46	40	36	38	34	31	32	29	26
6	63	52	44	38	58	48	41	36	41	36	32	35	31	27	29	26	23
7	59	47	39	33	54	43	36	32	37	32	28	32	28	24	26	23	21
8	55	42	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19
9	51	39	31	26	47	36	30	25	31	26	22	27	23	20	22	19	17
10	48	36	28	24	44	33	27	23	29	24	20	25	21	18	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20730	20730	20730
5°	20764	19997	19943
10°	20601	19245	18866
15°	20334	18316	17686
20°	19983	17305	16368
25°	19621	16255	15119
30°	19156	15137	13642
35°	18679	14040	12298
40°	18230	12848	10813
45°	17654	11683	9477
50°	17017	10438	8094
55°	16358	9106	6828
60°	15727	7740	5542
65°	14915	6338	4325
70°	13891	4792	3092
75°	12420	3246	2449
80°	10597	2255	1718
85°	7953	1217	900

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17654 cd/sqm

TEST NUMBER: P1032101

CATALOG NUMBER: S123RDIW-B1165D1320UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	2.0
10°-20°	503.7	5.7
20°-30°	725.2	8.2
30°-40°	816.6	9.2
40°-50°	781.2	8.8
50°-60°	639.4	7.2
60°-70°	431.1	4.8
70°-80°	216.2	2.4
80°-90°	60.0	0.7
90°-100°	105.4	1.2
100°-110°	319.1	3.6
110°-120°	543.2	6.1
120°-130°	714.6	8.0
130°-140°	803.2	9.0
140°-150°	789.7	8.9
150°-160°	664.8	7.5
160°-170°	442.6	5.0
170°-180°	155.0	1.7
0°-30°	1409.9	15.9
0°-40°	2226.5	25.0
0°-60°	3647.1	41.0
0°-90°	4354.5	49.0
90°-120°	967.7	10.9
90°-150°	3275.2	36.8
90°-180°	4538.0	51.0
0°-180°	8892.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1926	1926	1926	1926	1926	
5°	1926	1918	1899	1913	1910	183
15°	1837	1820	1776	1768	1757	518
25°	1671	1632	1560	1528	1510	769
35°	1446	1390	1293	1226	1198	905
45°	1189	1118	998	909	872	917
55°	903	826	694	603	572	810
65°	617	531	409	333	316	611
75°	326	252	166	150	147	348
85°	83	48	44	41	41	91
90°	1	14	31	36	39	11
95°	76	85	95	100	100	84
105°	289	292	304	304	306	310
115°	547	551	548	549	548	541
125°	800	804	801	796	791	714
135°	1038	1046	1045	1039	1037	800
145°	1259	1262	1266	1265	1259	787
155°	1442	1442	1443	1448	1440	664
165°	1571	1567	1567	1575	1566	443
175°	1634	1629	1629	1636	1627	155
180°	1638	1638	1638	1638	1638	

TEST NUMBER: P1032101

CATALOG NUMBER: S123RDIW-B1165D1320UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1925.9	1925.9	1925.9	1925.9	1925.9
2.5°	1933.7	1927.5	1908.7	1925.9	1922.8
5°	1925.9	1918.1	1899.4	1913.4	1910.3
7.5°	1911.9	1904.1	1880.6	1890.0	1885.3
10°	1893.1	1882.2	1854.1	1855.6	1847.8
12.5°	1866.6	1854.1	1818.1	1816.6	1807.2
15°	1836.9	1819.7	1776.0	1768.2	1757.2
17.5°	1801.0	1782.2	1727.6	1711.9	1696.3
20°	1760.4	1735.4	1676.0	1655.7	1637.0
22.5°	1715.1	1685.4	1621.3	1594.8	1577.6
25°	1671.3	1632.3	1560.4	1527.6	1510.4
27.5°	1618.2	1576.0	1497.9	1454.2	1427.7
30°	1563.5	1516.7	1429.2	1376.1	1351.1
32.5°	1508.9	1454.2	1360.5	1301.1	1274.6
35°	1446.4	1390.2	1293.3	1226.2	1198.0
37.5°	1383.9	1323.0	1221.5	1146.5	1112.1
40°	1324.6	1255.8	1144.9	1063.7	1027.8
42.5°	1257.4	1188.7	1073.1	982.5	951.2
45°	1188.7	1118.4	998.1	909.1	871.6
47.5°	1121.5	1043.4	924.7	827.8	795.0
50°	1046.5	973.1	846.6	749.8	713.8
52.5°	979.4	898.1	773.2	671.7	640.4
55°	902.8	826.3	693.5	602.9	571.7
57.5°	834.1	751.3	617.0	531.1	504.5
60°	762.2	676.3	546.7	462.3	435.8
62.5°	690.4	604.5	474.8	396.7	368.6
65°	617.0	531.1	409.2	332.7	315.5
67.5°	543.6	456.1	337.4	279.6	260.9
70°	471.7	387.4	278.0	223.4	206.2
72.5°	399.9	317.1	220.2	178.1	173.4
75°	326.5	251.5	165.6	150.0	146.8
77.5°	259.3	190.6	129.6	120.3	117.1
80°	195.2	131.2	98.4	93.7	90.6
82.5°	134.3	81.2	70.3	65.6	65.6
85°	82.8	48.4	43.7	40.6	40.6
87.5°	37.5	20.3	20.3	18.7	17.2
90°	1.3	14.2	30.9	36.0	38.6
92.5°	38.6	46.3	54.0	57.9	55.3
95°	75.9	84.9	95.2	100.3	100.3
97.5°	124.8	131.2	138.9	145.4	144.1
100°	175.0	182.7	189.1	193.0	195.5
102.5°	232.8	236.7	245.7	249.6	248.3
105°	289.4	292.0	303.6	303.6	306.2
107.5°	356.3	357.6	362.8	366.6	365.3
110°	418.1	420.7	423.2	428.4	425.8

TEST NUMBER: P1032101

CATALOG NUMBER: S123RDIW-B1165D1320UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	482.4	483.7	483.7	490.1	490.1
115°	546.7	550.6	548.0	549.3	548.0
117.5°	612.3	613.6	611.1	611.1	607.2
120°	672.8	680.5	674.1	672.8	670.2
122.5°	735.8	741.0	738.4	734.5	730.7
125°	800.2	804.0	801.4	796.3	791.2
127.5°	859.3	867.0	864.5	856.8	851.6
130°	918.5	928.8	924.9	919.8	910.8
132.5°	977.7	988.0	985.4	979.0	972.5
135°	1038.1	1045.9	1044.6	1039.4	1036.9
137.5°	1093.5	1099.9	1103.8	1097.3	1093.5
140°	1151.3	1157.8	1159.1	1157.8	1148.8
142.5°	1204.1	1210.5	1213.1	1211.8	1205.4
145°	1259.4	1262.0	1265.8	1264.6	1259.4
147.5°	1307.0	1312.2	1316.0	1316.0	1308.3
150°	1357.2	1359.7	1362.3	1362.3	1354.6
152.5°	1398.3	1402.2	1403.5	1406.1	1399.6
155°	1442.1	1442.1	1443.4	1448.5	1439.5
157.5°	1479.4	1478.1	1479.4	1484.5	1476.8
160°	1514.1	1511.5	1511.5	1518.0	1512.8
162.5°	1545.0	1541.1	1542.4	1548.9	1539.8
165°	1570.7	1566.9	1566.9	1574.6	1565.6
167.5°	1592.6	1587.4	1588.7	1596.5	1588.7
170°	1610.6	1605.5	1605.5	1614.5	1605.5
172.5°	1624.8	1619.6	1619.6	1627.3	1618.3
175°	1633.8	1628.6	1628.6	1636.3	1627.3
177.5°	1638.9	1633.8	1633.8	1641.5	1632.5
180°	1637.6	1637.6	1637.6	1637.6	1637.6

(END OF REPORT)