

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: P1032104

Luminaire Tested: S123RDIW-B1165D1320UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032104
REPORT IS A COMBINATION OF REPORTS P994006 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D1320UB30-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

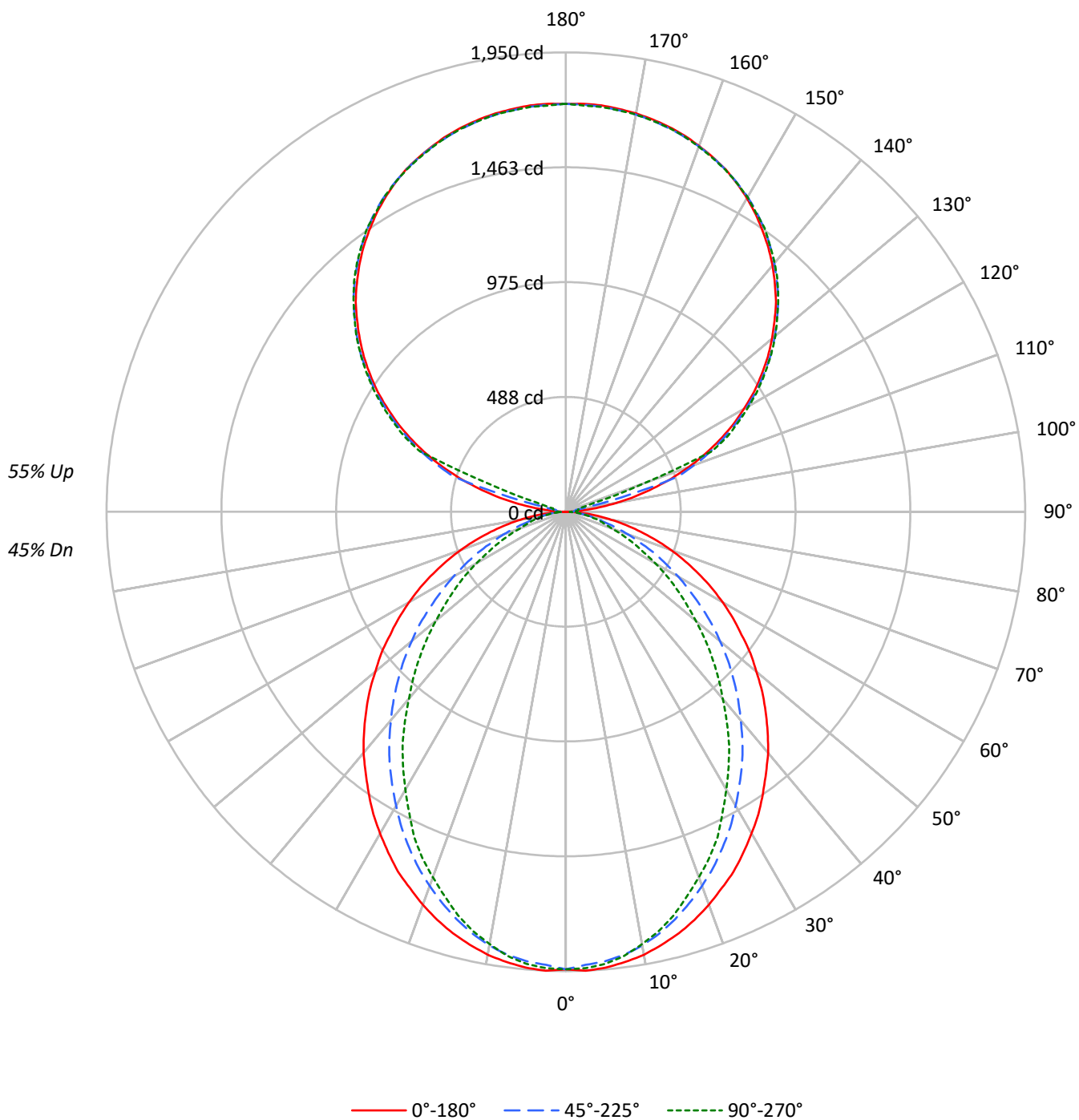
Lumens per Lamp: N/A
Luminaire Lumens: 9670.0 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	97	93	89	86	89	85	82	79	71	69	67	58	57	55	46	45	44
2	89	81	75	71	81	75	70	66	63	59	56	52	49	47	41	39	38
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	34	33
4	74	64	56	50	68	59	52	47	50	44	40	41	37	34	33	30	28
5	68	57	49	43	62	53	46	40	44	39	35	37	33	30	30	27	25
6	63	51	43	37	58	47	40	35	40	35	31	33	29	26	27	24	22
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	25	22	20
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	31	26	46	36	29	25	30	25	22	26	22	19	21	18	16
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20907	20907	20907
5°	20941	20167	20112
10°	20776	19408	19026
15°	20506	18472	17837
20°	20152	17453	16507
25°	19787	16393	15248
30°	19319	15266	13759
35°	18838	14159	12402
40°	18384	12958	10904
45°	17804	11782	9558
50°	17162	10527	8164
55°	16498	9184	6885
60°	15862	7805	5589
65°	15041	6392	4362
70°	14009	4834	3117
75°	12523	3274	2471
80°	10690	2274	1733
85°	8021	1228	909

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17804 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	1.9
10°-20°	507.9	5.3
20°-30°	731.3	7.6
30°-40°	823.6	8.5
40°-50°	787.8	8.1
50°-60°	644.9	6.7
60°-70°	434.8	4.5
70°-80°	218.1	2.3
80°-90°	60.5	0.6
90°-100°	61.1	0.6
100°-110°	295.2	3.1
110°-120°	723.4	7.5
120°-130°	918.4	9.5
130°-140°	981.1	10.1
140°-150°	917.4	9.5
150°-160°	740.0	7.7
160°-170°	477.5	4.9
170°-180°	164.6	1.7
0°-30°	1421.8	14.7
0°-40°	2245.4	23.2
0°-60°	3678.1	38.0
0°-90°	4391.5	45.4
90°-120°	1079.7	11.2
90°-150°	3896.5	40.3
90°-180°	5279.0	54.6
0°-180°	9670.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1942	1942	1942	1942	1942	
5°	1942	1934	1916	1930	1926	184
15°	1852	1835	1791	1783	1772	522
25°	1686	1646	1574	1541	1523	775
35°	1459	1402	1304	1237	1208	913
45°	1199	1128	1007	917	879	925
55°	910	833	699	608	576	817
65°	622	536	413	336	318	616
75°	329	254	167	151	148	351
85°	84	49	44	41	41	91
90°	1	14	31	36	39	10
95°	78	26	40	49	49	94
105°	383	398	282	54	57	406
115°	719	727	738	751	756	710
125°	1014	1024	1029	1032	1034	906
135°	1262	1270	1275	1279	1275	972
145°	1456	1465	1468	1470	1470	912
155°	1604	1602	1603	1609	1602	739
165°	1692	1688	1686	1697	1688	478
175°	1732	1725	1726	1735	1725	165
180°	1732	1732	1732	1732	1732	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1942.3	1942.3	1942.3	1942.3	1942.3
2.5°	1950.2	1943.9	1925.0	1942.3	1939.1
5°	1942.3	1934.4	1915.5	1929.7	1926.5
7.5°	1928.1	1920.2	1896.6	1906.1	1901.3
10°	1909.2	1898.2	1869.8	1871.4	1863.5
12.5°	1882.4	1869.8	1833.6	1832.0	1822.6
15°	1852.5	1835.2	1791.1	1783.2	1772.2
17.5°	1816.3	1797.4	1742.2	1726.5	1710.7
20°	1775.3	1750.1	1690.3	1669.8	1650.9
22.5°	1729.6	1699.7	1635.1	1608.3	1591.0
25°	1685.5	1646.2	1573.7	1540.6	1523.3
27.5°	1632.0	1589.4	1510.7	1466.6	1439.8
30°	1576.8	1529.6	1441.4	1387.8	1362.6
32.5°	1521.7	1466.6	1372.1	1312.2	1285.4
35°	1458.7	1402.0	1304.3	1236.6	1208.2
37.5°	1395.7	1334.2	1231.9	1156.2	1121.6
40°	1335.8	1266.5	1154.7	1072.8	1036.5
42.5°	1268.1	1198.8	1082.2	990.8	959.3
45°	1198.8	1127.9	1006.6	916.8	879.0
47.5°	1131.0	1052.3	932.6	834.9	801.8
50°	1055.4	981.4	853.8	756.1	719.9
52.5°	987.7	905.8	779.8	677.4	645.9
55°	910.5	833.3	699.4	608.1	576.5
57.5°	841.2	757.7	622.2	535.6	508.8
60°	768.7	682.1	551.3	466.3	439.5
62.5°	696.3	609.6	478.9	400.1	371.8
65°	622.2	535.6	412.7	335.5	318.2
67.5°	548.2	460.0	340.3	282.0	263.1
70°	475.7	390.7	280.4	225.3	207.9
72.5°	403.3	319.8	222.1	179.6	174.9
75°	329.2	253.6	167.0	151.2	148.1
77.5°	261.5	192.2	130.7	121.3	118.1
80°	196.9	132.3	99.2	94.5	91.4
82.5°	135.5	81.9	70.9	66.2	66.2
85°	83.5	48.8	44.1	41.0	41.0
87.5°	37.8	20.5	20.5	18.9	17.3
90°	1.3	14.2	30.9	36.0	38.6
92.5°	29.6	21.9	33.4	42.5	43.7
95°	78.5	25.7	39.9	48.9	48.9
97.5°	142.8	106.8	41.2	51.5	52.7
100°	217.4	243.1	42.5	52.7	54.0
102.5°	302.3	319.0	95.2	52.7	55.3
105°	383.3	397.5	281.7	54.0	56.6
107.5°	469.5	481.1	500.4	302.3	133.8
110°	555.7	566.0	580.2	537.7	353.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	638.0	647.1	661.2	672.8	670.2
115°	719.1	726.8	738.4	751.2	756.4
117.5°	798.8	807.8	814.3	824.6	825.9
120°	872.2	883.7	887.6	897.9	897.9
122.5°	946.8	955.8	960.9	967.4	968.6
125°	1013.7	1024.0	1029.1	1031.7	1034.3
127.5°	1080.6	1090.9	1097.3	1101.1	1098.6
130°	1142.3	1152.6	1157.7	1162.9	1160.3
132.5°	1201.5	1211.8	1215.6	1220.8	1216.9
135°	1261.9	1269.7	1274.8	1278.7	1274.8
137.5°	1313.4	1323.7	1326.3	1332.7	1330.1
140°	1364.9	1372.6	1376.4	1381.6	1379.0
142.5°	1412.4	1420.2	1424.0	1427.9	1424.0
145°	1456.2	1465.2	1467.8	1470.3	1470.3
147.5°	1498.6	1505.1	1507.6	1510.2	1503.8
150°	1537.2	1541.1	1543.7	1546.2	1542.4
152.5°	1572.0	1573.2	1574.5	1579.7	1573.2
155°	1604.1	1601.5	1602.8	1609.3	1601.5
157.5°	1629.8	1629.8	1628.6	1636.3	1626.0
160°	1653.0	1651.7	1650.4	1658.1	1649.1
162.5°	1674.9	1671.0	1669.7	1678.7	1671.0
165°	1691.6	1687.7	1686.4	1696.7	1687.7
167.5°	1705.7	1700.6	1700.6	1710.9	1700.6
170°	1717.3	1712.2	1712.2	1722.5	1712.2
172.5°	1725.0	1718.6	1719.9	1730.2	1718.6
175°	1731.5	1725.0	1726.3	1735.3	1725.0
177.5°	1734.0	1727.6	1728.9	1739.2	1726.3
180°	1731.5	1731.5	1731.5	1731.5	1731.5

(END OF REPORT)