

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: P1032108

Luminaire Tested: S123RDIW-B1165D1320UB35-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032108
REPORT IS A COMBINATION OF REPORTS P994012 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D1320UB35-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

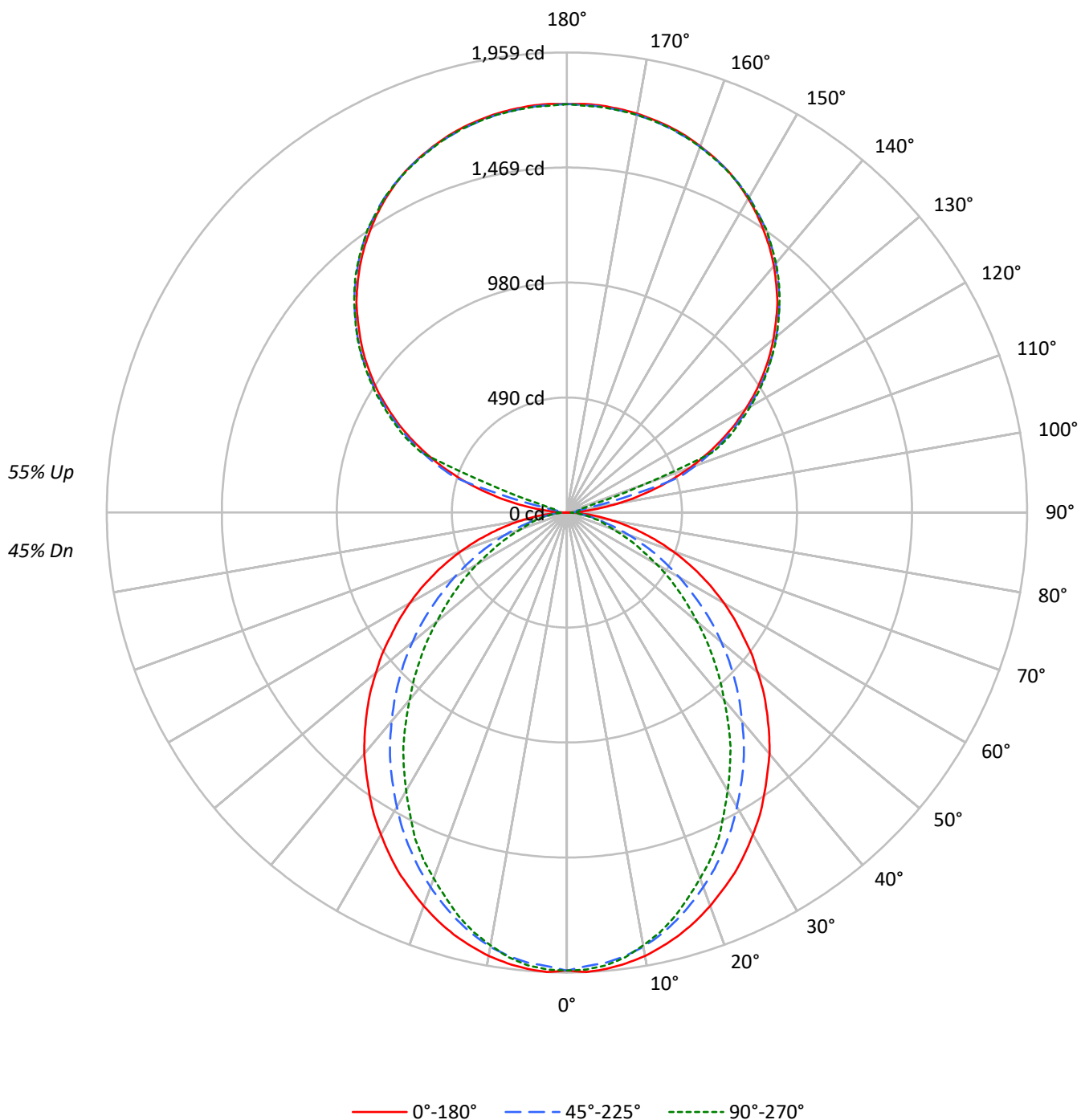
Lumens per Lamp: N/A
Luminaire Lumens: 9712.0 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	20997	20997	20997
5°	21031	20254	20200
10°	20866	19492	19109
15°	20595	18551	17913
20°	20240	17528	16578
25°	19873	16464	15314
30°	19404	15332	13818
35°	18919	14221	12457
40°	18464	13014	10952
45°	17881	11834	9599
50°	17237	10573	8199
55°	16568	9223	6915
60°	15932	7839	5613
65°	15106	6420	4382
70°	14071	4854	3131
75°	12580	3287	2481
80°	10738	2285	1741
85°	8059	1234	911

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.4	1.9
10°-20°	510.1	5.3
20°-30°	734.5	7.6
30°-40°	827.2	8.5
40°-50°	791.2	8.1
50°-60°	647.7	6.7
60°-70°	436.7	4.5
70°-80°	219.0	2.3
80°-90°	60.7	0.6
90°-100°	61.3	0.6
100°-110°	296.5	3.1
110°-120°	726.6	7.5
120°-130°	922.4	9.5
130°-140°	985.3	10.1
140°-150°	921.4	9.5
150°-160°	743.2	7.7
160°-170°	479.6	4.9
170°-180°	165.3	1.7
0°-30°	1428.0	14.7
0°-40°	2255.2	23.2
0°-60°	3694.0	38.0
0°-90°	4410.5	45.4
90°-120°	1084.4	11.2
90°-150°	3913.5	40.3
90°-180°	5302.0	54.6
0°-180°	9712.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1951	1951	1951	1951	1951	
5°	1951	1943	1924	1938	1935	185
15°	1860	1843	1799	1791	1780	524
25°	1693	1653	1580	1547	1530	779
35°	1465	1408	1310	1242	1214	917
45°	1204	1133	1011	921	883	929
55°	914	837	702	611	579	820
65°	625	538	414	337	320	618
75°	331	255	168	152	149	352
85°	84	49	44	41	41	92
90°	1	14	31	36	39	10
95°	79	26	40	49	49	94
105°	385	399	283	54	57	408
115°	722	730	742	754	760	713
125°	1018	1028	1034	1036	1039	910
135°	1267	1275	1280	1284	1280	976
145°	1462	1472	1474	1477	1477	916
155°	1611	1608	1610	1616	1608	742
165°	1699	1695	1694	1704	1695	480
175°	1739	1733	1734	1743	1733	166
180°	1739	1739	1739	1739	1739	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1950.7	1950.7	1950.7	1950.7	1950.7
2.5°	1958.6	1952.3	1933.3	1950.7	1947.5
5°	1950.7	1942.8	1923.8	1938.1	1934.9
7.5°	1936.5	1928.6	1904.8	1914.3	1909.6
10°	1917.5	1906.4	1877.9	1879.5	1871.6
12.5°	1890.6	1877.9	1841.5	1840.0	1830.5
15°	1860.5	1843.1	1798.8	1790.9	1779.8
17.5°	1824.1	1805.2	1749.8	1734.0	1718.1
20°	1783.0	1757.7	1697.6	1677.0	1658.0
22.5°	1737.1	1707.1	1642.2	1615.3	1597.9
25°	1692.8	1653.3	1580.5	1547.3	1529.9
27.5°	1639.0	1596.3	1517.2	1472.9	1446.0
30°	1583.7	1536.2	1447.6	1393.8	1368.5
32.5°	1528.3	1472.9	1378.0	1317.9	1291.0
35°	1465.0	1408.1	1310.0	1241.9	1213.5
37.5°	1401.7	1340.0	1237.2	1161.2	1126.4
40°	1341.6	1272.0	1159.7	1077.4	1041.0
42.5°	1273.6	1204.0	1086.9	995.1	963.5
45°	1204.0	1132.8	1011.0	920.8	882.8
47.5°	1135.9	1056.8	936.6	838.5	805.3
50°	1060.0	985.6	857.5	759.4	723.0
52.5°	992.0	909.7	783.1	680.3	648.7
55°	914.4	836.9	702.4	610.7	579.0
57.5°	844.8	761.0	624.9	537.9	511.0
60°	772.1	685.0	553.7	468.3	441.4
62.5°	699.3	612.3	481.0	401.8	373.4
65°	624.9	537.9	414.5	337.0	319.6
67.5°	550.6	462.0	341.7	283.2	264.2
70°	477.8	392.4	281.6	226.2	208.8
72.5°	405.0	321.2	223.1	180.4	175.6
75°	330.7	254.7	167.7	151.9	148.7
77.5°	262.6	193.0	131.3	121.8	118.7
80°	197.8	132.9	99.7	94.9	91.8
82.5°	136.1	82.3	71.2	66.4	66.4
85°	83.9	49.0	44.3	41.1	41.1
87.5°	38.0	20.6	20.6	19.0	17.4
90°	1.3	14.2	31.0	36.2	38.8
92.5°	29.7	22.0	33.6	42.6	43.9
95°	78.8	25.8	40.1	49.1	49.1
97.5°	143.4	107.2	41.3	51.7	53.0
100°	218.3	244.2	42.6	53.0	54.3
102.5°	303.6	320.4	95.6	53.0	55.6
105°	385.0	399.2	282.9	54.3	56.8
107.5°	471.6	483.2	502.6	303.6	134.4
110°	558.1	568.5	582.7	540.0	355.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.8	649.9	664.1	675.7	673.1
115°	722.2	730.0	741.6	754.5	759.7
117.5°	802.3	811.4	817.8	828.2	829.5
120°	876.0	887.6	891.5	901.8	901.8
122.5°	950.9	959.9	965.1	971.6	972.9
125°	1018.1	1028.4	1033.6	1036.2	1038.8
127.5°	1085.3	1095.6	1102.1	1105.9	1103.4
130°	1147.3	1157.6	1162.8	1168.0	1165.4
132.5°	1206.7	1217.1	1220.9	1226.1	1222.2
135°	1267.4	1275.2	1280.4	1284.2	1280.4
137.5°	1319.1	1329.5	1332.0	1338.5	1335.9
140°	1370.8	1378.5	1382.4	1387.6	1385.0
142.5°	1418.6	1426.4	1430.2	1434.1	1430.2
145°	1462.5	1471.6	1474.2	1476.7	1476.7
147.5°	1505.2	1511.6	1514.2	1516.8	1510.3
150°	1543.9	1547.8	1550.4	1553.0	1549.1
152.5°	1578.8	1580.1	1581.4	1586.6	1580.1
155°	1611.1	1608.5	1609.8	1616.3	1608.5
157.5°	1636.9	1636.9	1635.7	1643.4	1633.1
160°	1660.2	1658.9	1657.6	1665.4	1656.3
162.5°	1682.2	1678.3	1677.0	1686.0	1678.3
165°	1699.0	1695.1	1693.8	1704.1	1695.1
167.5°	1713.2	1708.0	1708.0	1718.3	1708.0
170°	1724.8	1719.6	1719.6	1730.0	1719.6
172.5°	1732.6	1726.1	1727.4	1737.7	1726.1
175°	1739.0	1732.6	1733.8	1742.9	1732.6
177.5°	1741.6	1735.1	1736.4	1746.8	1733.8
180°	1739.0	1739.0	1739.0	1739.0	1739.0

(END OF REPORT)