

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: P1032109

Luminaire Tested: S123RDIW-B1165D1320UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032109
REPORT IS A COMBINATION OF REPORTS P994013 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D1320UB35-4F0-XX-W2A-F1
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

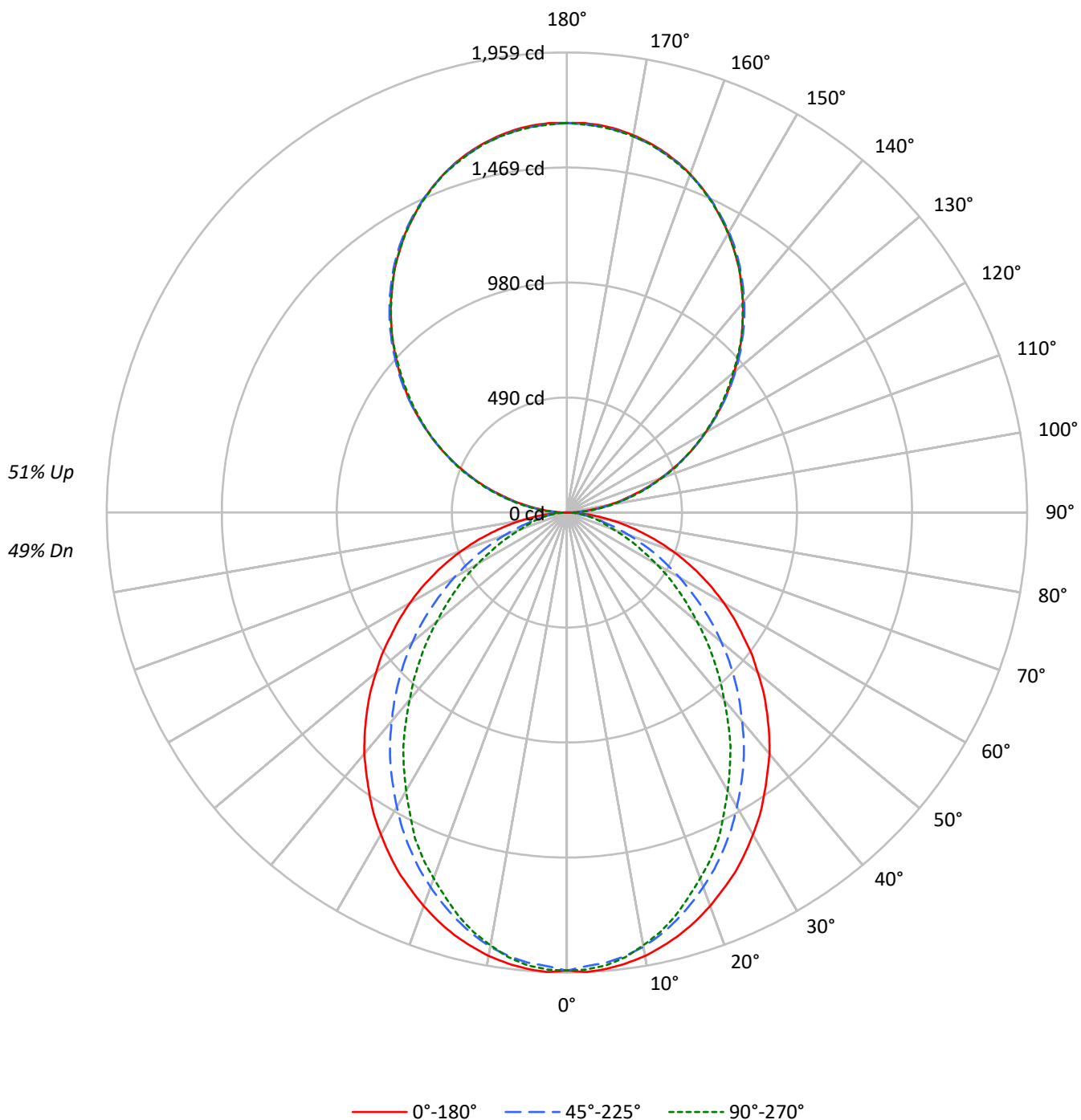
Lumens per Lamp: N/A
Luminaire Lumens: 9007.0 lumens
Efficiency: N/A
Efficacy: 87.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	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°	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	2.0
10°-20°	510.1	5.7
20°-30°	734.5	8.2
30°-40°	827.2	9.2
40°-50°	791.2	8.8
50°-60°	647.7	7.2
60°-70°	436.7	4.8
70°-80°	219.0	2.4
80°-90°	60.8	0.7
90°-100°	106.8	1.2
100°-110°	323.2	3.6
110°-120°	550.2	6.1
120°-130°	723.9	8.0
130°-140°	813.7	9.0
140°-150°	799.9	8.9
150°-160°	673.4	7.5
160°-170°	448.3	5.0
170°-180°	157.0	1.7
0°-30°	1428.0	15.9
0°-40°	2255.2	25.0
0°-60°	3694.0	41.0
0°-90°	4410.5	49.0
90°-120°	980.2	10.9
90°-150°	3317.7	36.8
90°-180°	4596.0	51.0
0°-180°	9007.0	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	11
95°	77	86	96	102	102	85
105°	293	296	308	308	310	314
115°	554	558	555	556	555	548
125°	811	814	812	807	801	723
135°	1052	1060	1058	1053	1050	810
145°	1276	1278	1282	1281	1276	797
155°	1461	1461	1462	1467	1458	672
165°	1591	1587	1587	1595	1586	449
175°	1655	1650	1650	1658	1648	157
180°	1659	1659	1659	1659	1659	

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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	14.3	31.3	36.5	39.1
92.5°	39.1	46.9	54.7	58.6	56.0
95°	76.9	86.0	96.4	101.6	101.6
97.5°	126.4	132.9	140.7	147.3	146.0
100°	177.2	185.0	191.6	195.5	198.1
102.5°	235.9	239.8	248.9	252.8	251.5
105°	293.2	295.8	307.5	307.5	310.1
107.5°	361.0	362.3	367.5	371.4	370.1
110°	423.5	426.1	428.7	433.9	431.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	488.7	490.0	490.0	496.5	496.5
115°	553.8	557.7	555.1	556.4	555.1
117.5°	620.3	621.6	619.0	619.0	615.1
120°	681.5	689.4	682.8	681.5	678.9
122.5°	745.4	750.6	748.0	744.1	740.2
125°	810.6	814.5	811.9	806.6	801.4
127.5°	870.5	878.3	875.7	867.9	862.7
130°	930.4	940.9	937.0	931.7	922.6
132.5°	990.4	1000.8	998.2	991.7	985.2
135°	1051.6	1059.5	1058.1	1052.9	1050.3
137.5°	1107.7	1114.2	1118.1	1111.6	1107.7
140°	1166.3	1172.8	1174.1	1172.8	1163.7
142.5°	1219.7	1226.3	1228.9	1227.6	1221.0
145°	1275.8	1278.4	1282.3	1281.0	1275.8
147.5°	1324.0	1329.2	1333.1	1333.1	1325.3
150°	1374.8	1377.4	1380.0	1380.0	1372.2
152.5°	1416.5	1420.4	1421.7	1424.3	1417.8
155°	1460.8	1460.8	1462.1	1467.3	1458.2
157.5°	1498.6	1497.3	1498.6	1503.8	1496.0
160°	1533.8	1531.2	1531.2	1537.7	1532.5
162.5°	1565.1	1561.2	1562.5	1569.0	1559.9
165°	1591.1	1587.2	1587.2	1595.0	1585.9
167.5°	1613.3	1608.1	1609.4	1617.2	1609.4
170°	1631.5	1626.3	1626.3	1635.4	1626.3
172.5°	1645.9	1640.6	1640.6	1648.5	1639.3
175°	1655.0	1649.8	1649.8	1657.6	1648.5
177.5°	1660.2	1655.0	1655.0	1662.8	1653.7
180°	1658.9	1658.9	1658.9	1658.9	1658.9

(END OF REPORT)