

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: P1032131

Luminaire Tested: S123RDIW-B1165D1535UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032131
REPORT IS A COMBINATION OF REPORTS P994063 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D1535UB40-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

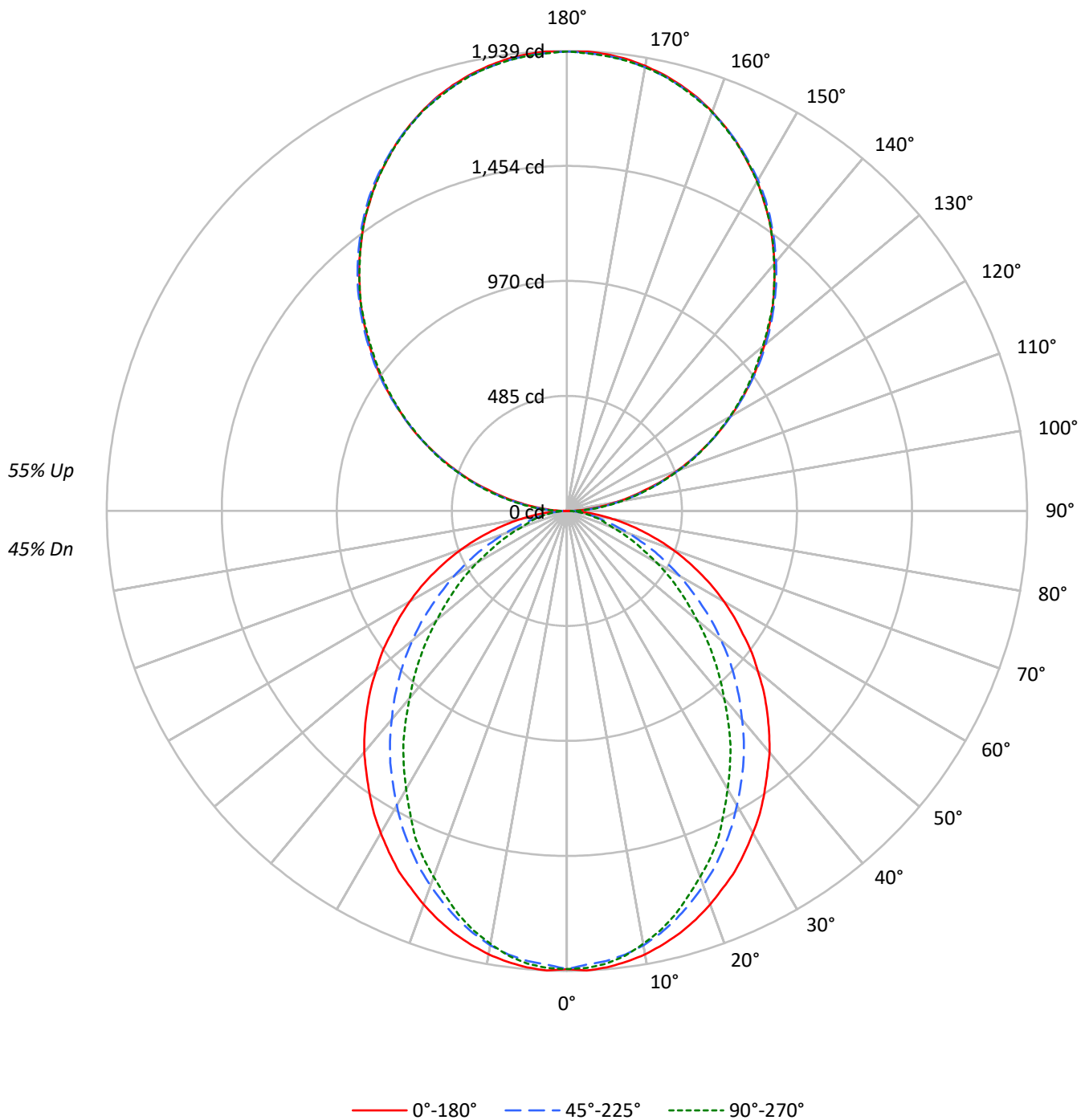
Lumens per Lamp: N/A
Luminaire Lumens: 9733.0 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 113.5
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	80	80	80	65	65	65	51	51	51
1	97	93	89	86	89	85	82	79	71	69	67	58	56	55	46	45	44
2	88	81	75	70	81	75	70	65	63	59	56	51	49	46	41	39	37
3	81	72	65	59	74	66	60	55	55	51	47	45	42	40	36	34	32
4	74	64	56	50	68	59	52	47	49	44	40	41	37	34	33	30	28
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25
6	63	51	43	37	57	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	19
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	17
9	50	38	31	26	46	36	29	24	30	25	22	25	21	19	21	18	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20787	20787	20787
5°	20821	20052	19998
10°	20657	19298	18918
15°	20390	18367	17735
20°	20038	17353	16413
25°	19675	16299	15161
30°	19210	15180	13680
35°	18731	14079	12332
40°	18279	12884	10842
45°	17701	11715	9503
50°	17064	10467	8117
55°	16403	9131	6847
60°	15771	7762	5557
65°	14956	6356	4338
70°	13929	4806	3101
75°	12454	3254	2456
80°	10630	2262	1722
85°	7973	1222	902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17701 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	1.9
10°-20°	505.0	5.2
20°-30°	727.2	7.5
30°-40°	818.9	8.4
40°-50°	783.3	8.0
50°-60°	641.2	6.6
60°-70°	432.3	4.4
70°-80°	216.8	2.2
80°-90°	60.8	0.6
90°-100°	124.7	1.3
100°-110°	377.3	3.9
110°-120°	642.3	6.6
120°-130°	845.1	8.7
130°-140°	949.9	9.8
140°-150°	933.8	9.6
150°-160°	786.2	8.1
160°-170°	523.4	5.4
170°-180°	183.3	1.9
0°-30°	1413.8	14.5
0°-40°	2232.6	22.9
0°-60°	3657.2	37.6
0°-90°	4367.1	44.9
90°-120°	1144.3	11.8
90°-150°	3873.1	39.8
90°-180°	5366.0	55.1
0°-180°	9733.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1931	1923	1905	1919	1916	183
15°	1842	1825	1781	1773	1762	519
25°	1676	1637	1565	1532	1515	771
35°	1450	1394	1297	1230	1201	908
45°	1192	1122	1001	912	874	920
55°	905	829	695	605	573	812
65°	619	532	410	334	316	612
75°	327	252	166	150	147	349
85°	83	49	44	41	41	91
90°	2	17	36	43	46	12
95°	90	100	113	119	119	99
105°	342	345	359	359	362	366
115°	646	651	648	650	648	640
125°	946	951	948	942	936	844
135°	1228	1237	1235	1229	1226	946
145°	1489	1492	1497	1495	1489	930
155°	1705	1705	1707	1713	1702	785
165°	1858	1853	1853	1862	1851	524
175°	1932	1926	1926	1935	1924	184
180°	1937	1937	1937	1937	1937	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.2	1931.2	1931.2	1931.2	1931.2
2.5°	1939.1	1932.8	1914.0	1931.2	1928.1
5°	1931.2	1923.4	1904.6	1918.7	1915.6
7.5°	1917.1	1909.3	1885.8	1895.2	1890.5
10°	1898.3	1887.4	1859.2	1860.8	1852.9
12.5°	1871.7	1859.2	1823.2	1821.6	1812.2
15°	1842.0	1824.7	1780.9	1773.0	1762.1
17.5°	1805.9	1787.1	1732.3	1716.7	1701.0
20°	1765.2	1740.1	1680.6	1660.3	1641.5
22.5°	1719.8	1690.0	1625.8	1599.2	1582.0
25°	1675.9	1636.8	1564.7	1531.8	1514.6
27.5°	1622.7	1580.4	1502.1	1458.2	1431.6
30°	1567.9	1520.9	1433.2	1379.9	1354.8
32.5°	1513.0	1458.2	1364.2	1304.7	1278.1
35°	1450.4	1394.0	1296.9	1229.5	1201.3
37.5°	1387.7	1326.6	1224.8	1149.7	1115.2
40°	1328.2	1259.3	1148.1	1066.6	1030.6
42.5°	1260.9	1191.9	1076.0	985.2	953.9
45°	1191.9	1121.5	1000.9	911.6	874.0
47.5°	1124.6	1046.3	927.2	830.1	797.2
50°	1049.4	975.8	848.9	751.8	715.8
52.5°	982.1	900.6	775.3	673.5	642.2
55°	905.3	828.6	695.4	604.6	573.3
57.5°	836.4	753.4	618.7	532.5	505.9
60°	764.3	678.2	548.2	463.6	437.0
62.5°	692.3	606.2	476.2	397.8	369.6
65°	618.7	532.5	410.4	333.6	316.4
67.5°	545.1	457.4	338.3	280.4	261.6
70°	473.0	388.4	278.8	224.0	206.8
72.5°	401.0	318.0	220.8	178.6	173.9
75°	327.4	252.2	166.0	150.4	147.2
77.5°	260.0	191.1	130.0	120.6	117.5
80°	195.8	131.6	98.7	94.0	90.8
82.5°	134.7	81.4	70.5	65.8	65.8
85°	83.0	48.6	43.9	40.7	40.7
87.5°	37.6	20.4	20.4	18.8	17.2
90°	1.5	16.7	36.5	42.6	45.6
92.5°	45.6	54.8	63.9	68.5	65.4
95°	89.8	100.4	112.6	118.7	118.7
97.5°	147.6	155.2	164.3	171.9	170.4
100°	206.9	216.0	223.6	228.2	231.2
102.5°	275.4	279.9	290.6	295.1	293.6
105°	342.3	345.3	359.0	359.0	362.1
107.5°	421.4	422.9	429.0	433.6	432.0
110°	494.4	497.5	500.5	506.6	503.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	570.5	572.0	572.0	579.6	579.6
115°	646.5	651.1	648.1	649.6	648.1
117.5°	724.1	725.6	722.6	722.6	718.0
120°	795.6	804.8	797.1	795.6	792.6
122.5°	870.2	876.3	873.2	868.6	864.1
125°	946.2	950.8	947.8	941.7	935.6
127.5°	1016.2	1025.3	1022.3	1013.2	1007.1
130°	1086.2	1098.4	1093.8	1087.7	1077.1
132.5°	1156.2	1168.3	1165.3	1157.7	1150.1
135°	1227.7	1236.8	1235.3	1229.2	1226.1
137.5°	1293.1	1300.7	1305.3	1297.6	1293.1
140°	1361.5	1369.1	1370.7	1369.1	1358.5
142.5°	1423.9	1431.5	1434.6	1433.0	1425.4
145°	1489.3	1492.4	1496.9	1495.4	1489.3
147.5°	1545.6	1551.7	1556.3	1556.3	1547.1
150°	1604.9	1608.0	1611.0	1611.0	1601.9
152.5°	1653.6	1658.2	1659.7	1662.7	1655.1
155°	1705.3	1705.3	1706.9	1713.0	1702.3
157.5°	1749.5	1747.9	1749.5	1755.5	1746.4
160°	1790.5	1787.5	1787.5	1795.1	1789.0
162.5°	1827.0	1822.5	1824.0	1831.6	1821.0
165°	1857.5	1852.9	1852.9	1862.0	1851.4
167.5°	1883.3	1877.2	1878.8	1887.9	1878.8
170°	1904.6	1898.5	1898.5	1909.2	1898.5
172.5°	1921.4	1915.3	1915.3	1924.4	1913.8
175°	1932.0	1925.9	1925.9	1935.1	1924.4
177.5°	1938.1	1932.0	1932.0	1941.1	1930.5
180°	1936.6	1936.6	1936.6	1936.6	1936.6

(END OF REPORT)