

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: P1031092

Luminaire Tested: S123RDIW-B1165D1535UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031092
REPORT IS A COMBINATION OF REPORTS P994044 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D1535UB2750-4F0-XX-W2A-F_3500K
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

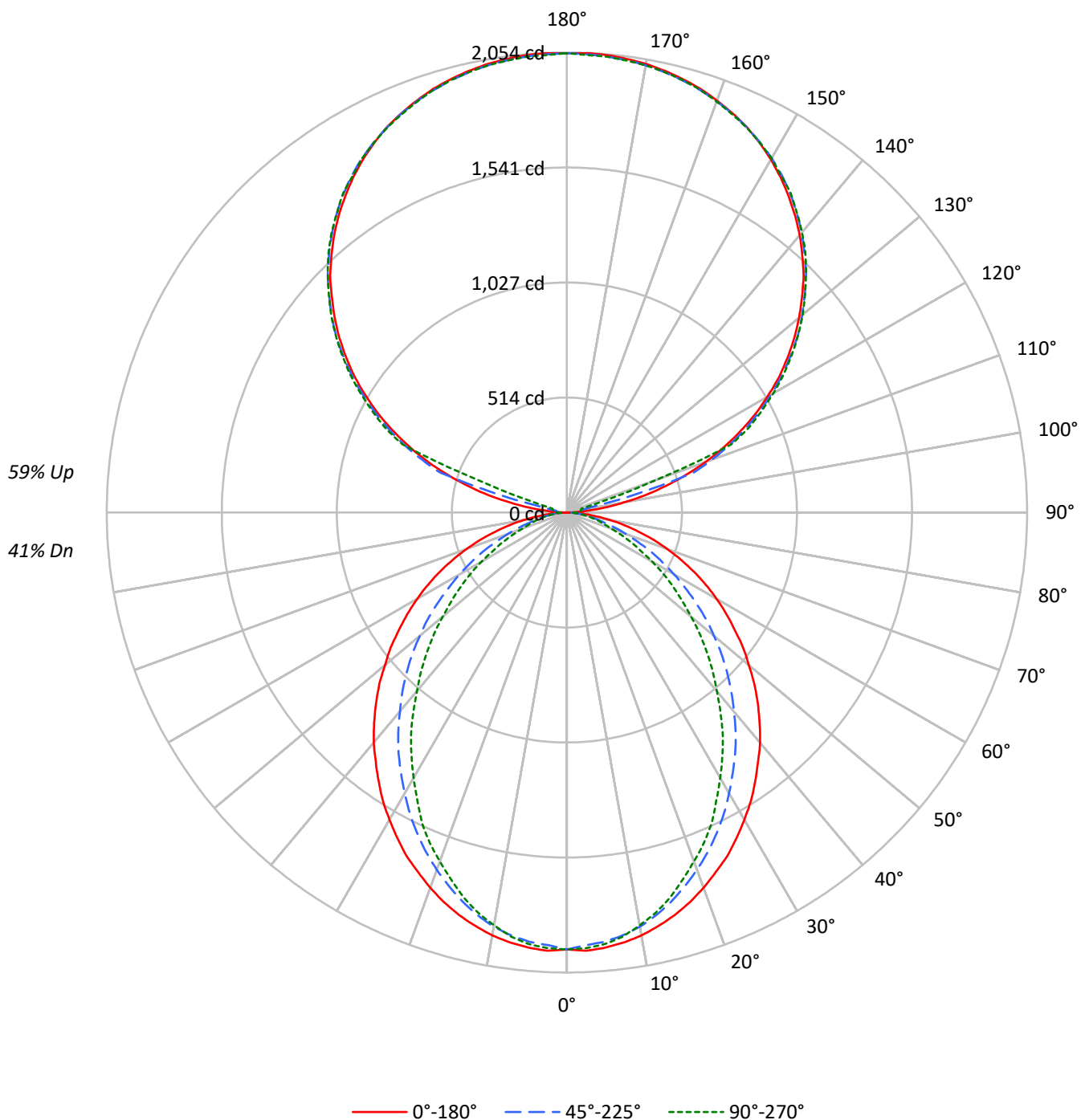
Lumens per Lamp: N/A
Luminaire Lumens: 10662.0 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41	41	41
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41	35	35	35
2	88	81	75	70	80	74	69	64	61	57	54	49	47	44	38	37	35	30	30	30
3	80	71	64	58	73	65	59	54	54	49	46	44	40	38	34	32	30	26	26	26
4	73	63	55	49	67	58	51	46	48	43	39	39	35	33	31	28	26	22	22	22
5	67	56	48	42	61	52	45	40	43	38	34	35	31	28	28	25	23	20	20	20
6	62	50	43	37	57	46	39	34	39	34	30	32	28	25	25	22	20	17	17	17
7	57	46	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15	15	15
8	53	41	34	29	49	38	31	27	32	27	23	26	23	20	21	18	16	14	14	14
9	50	38	30	25	45	35	28	24	29	24	21	24	21	18	20	17	15	13	13	13
10	46	35	28	23	42	32	26	21	27	22	19	23	19	16	18	15	13	11	11	11

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	1.7
10°-20°	510.1	4.8
20°-30°	734.5	6.9
30°-40°	827.2	7.8
40°-50°	791.2	7.4
50°-60°	647.7	6.1
60°-70°	436.7	4.1
70°-80°	219.0	2.1
80°-90°	61.4	0.6
90°-100°	72.3	0.7
100°-110°	349.6	3.3
110°-120°	856.7	8.0
120°-130°	1087.5	10.2
130°-140°	1161.8	10.9
140°-150°	1086.4	10.2
150°-160°	876.3	8.2
160°-170°	565.5	5.3
170°-180°	194.9	1.8
0°-30°	1428.0	13.4
0°-40°	2255.2	21.2
0°-60°	3694.0	34.6
0°-90°	4411.1	41.4
90°-120°	1278.6	12.0
90°-150°	4614.2	43.3
90°-180°	6251.0	58.6
0°-180°	10662.0	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°	2	17	37	43	46	10
95°	93	30	47	58	58	111
105°	454	471	334	64	67	481
115°	852	861	874	890	896	841
125°	1200	1213	1219	1222	1225	1073
135°	1494	1504	1510	1514	1510	1151
145°	1724	1735	1738	1741	1741	1080
155°	1900	1897	1898	1906	1897	875
165°	2003	1999	1997	2009	1999	566
175°	2050	2043	2044	2055	2043	195
180°	2050	2050	2050	2050	2050	

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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°	1.5	16.8	36.6	42.7	45.7
92.5°	35.0	25.9	39.6	50.3	51.8
95°	92.9	30.5	47.2	57.9	57.9
97.5°	169.1	126.4	48.7	60.9	62.5
100°	257.4	287.9	50.3	62.5	64.0
102.5°	358.0	377.8	112.7	62.5	65.5
105°	454.0	470.7	333.6	64.0	67.0
107.5°	556.0	569.7	592.6	358.0	158.4
110°	658.1	670.3	687.0	636.8	418.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	755.6	766.2	783.0	796.7	793.7
115°	851.6	860.7	874.4	889.6	895.7
117.5°	946.0	956.7	964.3	976.5	978.0
120°	1032.8	1046.5	1051.1	1063.3	1063.3
122.5°	1121.2	1131.8	1137.9	1145.6	1147.1
125°	1200.4	1212.6	1218.7	1221.7	1224.8
127.5°	1279.6	1291.8	1299.4	1304.0	1300.9
130°	1352.7	1364.9	1371.0	1377.1	1374.1
132.5°	1422.8	1435.0	1439.6	1445.7	1441.1
135°	1494.4	1503.5	1509.6	1514.2	1509.6
137.5°	1555.3	1567.5	1570.6	1578.2	1575.1
140°	1616.3	1625.4	1630.0	1636.1	1633.0
142.5°	1672.6	1681.8	1686.3	1690.9	1686.3
145°	1724.4	1735.1	1738.1	1741.2	1741.2
147.5°	1774.7	1782.3	1785.4	1788.4	1780.8
150°	1820.4	1825.0	1828.0	1831.1	1826.5
152.5°	1861.5	1863.1	1864.6	1870.7	1863.1
155°	1899.6	1896.6	1898.1	1905.7	1896.6
157.5°	1930.1	1930.1	1928.6	1937.7	1925.5
160°	1957.5	1956.0	1954.5	1963.6	1952.9
162.5°	1983.4	1978.8	1977.3	1988.0	1978.8
165°	2003.2	1998.6	1997.1	2009.3	1998.6
167.5°	2020.0	2013.9	2013.9	2026.1	2013.9
170°	2033.7	2027.6	2027.6	2039.8	2027.6
172.5°	2042.8	2035.2	2036.7	2048.9	2035.2
175°	2050.4	2042.8	2044.3	2055.0	2042.8
177.5°	2053.5	2045.9	2047.4	2059.6	2044.3
180°	2050.4	2050.4	2050.4	2050.4	2050.4

(END OF REPORT)