

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: P1032097

Luminaire Tested: S123RDIW-B1165D1030UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032097
REPORT IS A COMBINATION OF REPORTS P993981 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D1030UB50-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

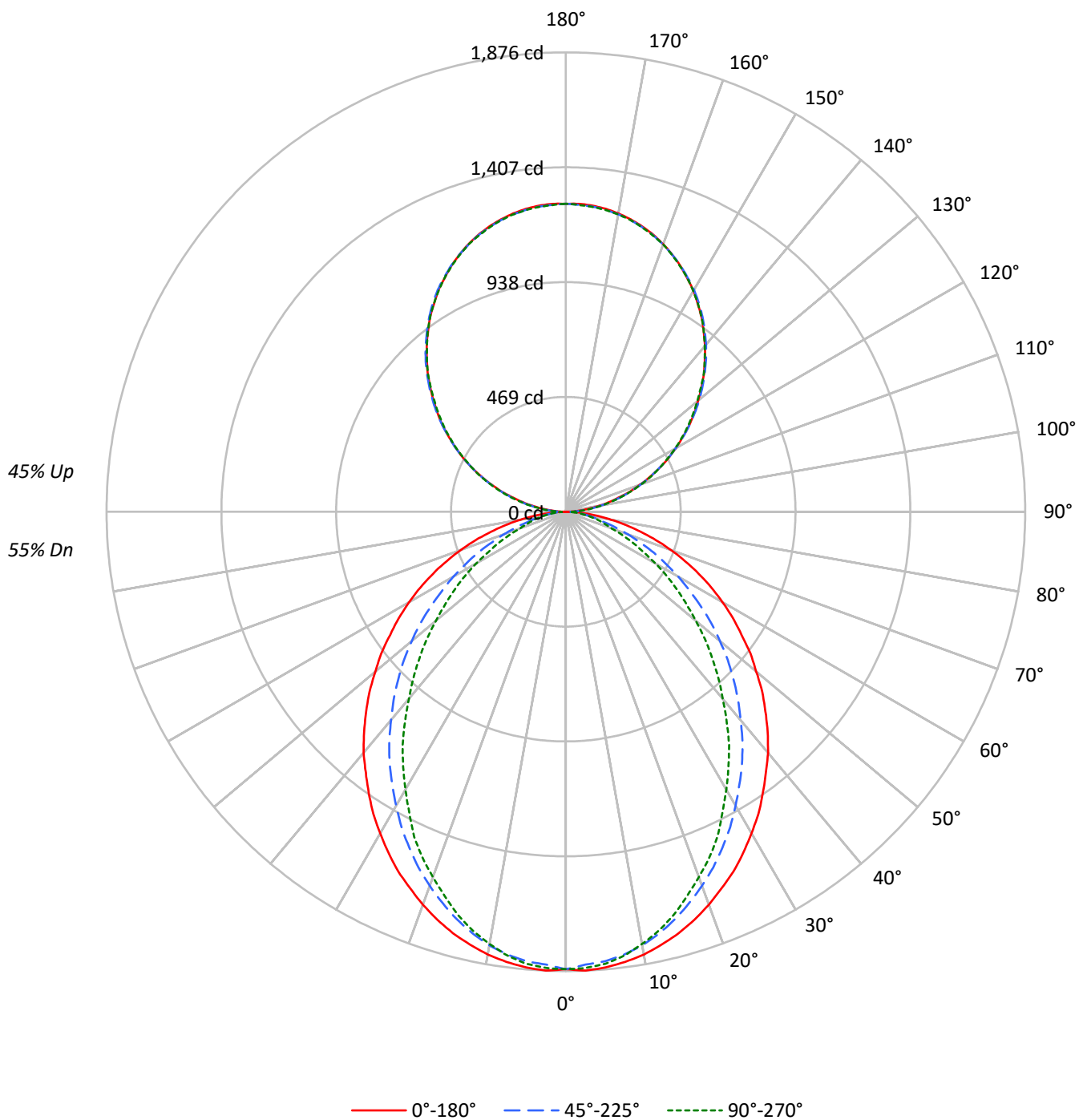
Lumens per Lamp: N/A
Luminaire Lumens: 7708.0 lumens
Efficiency: N/A
Efficacy: 83.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
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

TEST NUMBER: P1032097

CATALOG NUMBER: S123RDIW-B1165D1030UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1032097

CATALOG NUMBER: S123RDIW-B1165D1030UB50-4F0-XX-W2A-F1

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	108	108	108	108		101	101	101	101		86	86	86		73	73	73		61	61	61
1	99	95	91	88		92	88	85	82		76	74	71		65	63	61		54	53	52
2	91	83	77	72		84	78	72	68		67	63	60		57	54	52		48	46	44
3	83	74	66	61		77	69	62	57		59	55	51		51	47	44		43	40	38
4	76	65	58	52		70	61	54	49		53	48	43		45	41	38		38	35	33
5	70	58	50	44		65	55	48	42		48	42	38		41	37	33		35	32	29
6	65	53	45	39		60	49	42	37		43	37	33		37	33	29		32	28	26
7	60	48	40	34		55	45	38	33		39	33	29		34	29	26		29	26	23
8	56	43	36	30		52	41	34	29		36	30	26		31	27	23		27	23	21
9	52	40	32	27		48	37	31	26		33	27	23		29	24	21		25	21	19
10	48	36	29	24		45	34	28	23		30	25	21		27	22	19		23	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20106	20106	20106
5°	20139	19395	19343
10°	19980	18665	18298
15°	19721	17764	17154
20°	19381	16784	15875
25°	19030	15765	14664
30°	18581	14682	13231
35°	18116	13618	11928
40°	17681	12462	10487
45°	17122	11332	9191
50°	16505	10124	7851
55°	15865	8832	6623
60°	15255	7507	5376
65°	14465	6147	4195
70°	13473	4649	2999
75°	12043	3148	2376
80°	10282	2187	1667
85°	7713	1181	873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17122 cd/sqm

TEST NUMBER: P1032097

CATALOG NUMBER: S123RDIW-B1165D1030UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.6	2.3
10°-20°	488.5	6.3
20°-30°	703.3	9.1
30°-40°	792.1	10.3
40°-50°	757.6	9.8
50°-60°	620.2	8.0
60°-70°	418.1	5.4
70°-80°	209.7	2.7
80°-90°	57.5	0.7
90°-100°	81.0	1.1
100°-110°	245.1	3.2
110°-120°	417.2	5.4
120°-130°	548.9	7.1
130°-140°	617.0	8.0
140°-150°	606.5	7.9
150°-160°	510.6	6.6
160°-170°	340.0	4.4
170°-180°	119.0	1.5
0°-30°	1367.4	17.7
0°-40°	2159.5	28.0
0°-60°	3537.3	45.9
0°-90°	4222.7	54.8
90°-120°	743.3	9.6
90°-150°	2515.7	32.6
90°-180°	3485.0	45.2
0°-180°	7708.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1868	1868	1868	1868	1868	
5°	1868	1860	1842	1856	1853	177
15°	1782	1765	1722	1715	1704	502
25°	1621	1583	1513	1482	1465	746
35°	1403	1348	1254	1189	1162	878
45°	1153	1085	968	882	845	890
55°	876	801	673	585	554	785
65°	598	515	397	323	306	592
75°	317	244	161	145	142	337
85°	80	47	42	39	39	88
90°	1	11	24	28	30	9
95°	58	65	73	77	77	64
105°	222	224	233	233	235	238
115°	420	423	421	422	421	416
125°	615	618	616	612	608	548
135°	797	803	802	798	796	614
145°	967	969	972	971	967	604
155°	1108	1108	1109	1113	1106	510
165°	1206	1204	1204	1210	1202	340
175°	1255	1251	1251	1257	1250	119
180°	1258	1258	1258	1258	1258	

TEST NUMBER: P1032097

CATALOG NUMBER: S123RDIW-B1165D1030UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1867.9	1867.9	1867.9	1867.9	1867.9
2.5°	1875.5	1869.5	1851.3	1867.9	1864.9
5°	1867.9	1860.4	1842.2	1855.8	1852.8
7.5°	1854.3	1846.7	1824.0	1833.1	1828.5
10°	1836.1	1825.5	1798.2	1799.8	1792.2
12.5°	1810.4	1798.2	1763.4	1761.9	1752.8
15°	1781.6	1764.9	1722.5	1714.9	1704.3
17.5°	1746.7	1728.6	1675.5	1660.4	1645.2
20°	1707.4	1683.1	1625.5	1605.8	1587.7
22.5°	1663.4	1634.6	1572.5	1546.8	1530.1
25°	1621.0	1583.1	1513.4	1481.6	1465.0
27.5°	1569.5	1528.6	1452.8	1410.4	1384.7
30°	1516.5	1471.0	1386.2	1334.7	1310.4
32.5°	1463.4	1410.4	1319.5	1262.0	1236.2
35°	1402.8	1348.3	1254.4	1189.2	1162.0
37.5°	1342.2	1283.2	1184.7	1112.0	1078.6
40°	1284.7	1218.0	1110.5	1031.7	996.8
42.5°	1219.5	1152.9	1040.8	952.9	922.6
45°	1152.9	1084.7	968.1	881.7	845.3
47.5°	1087.7	1012.0	896.9	802.9	771.1
50°	1015.0	943.8	821.1	727.2	692.3
52.5°	949.9	871.1	749.9	651.4	621.1
55°	875.6	801.4	672.6	584.8	554.5
57.5°	809.0	728.7	598.4	515.1	489.3
60°	739.3	656.0	530.2	448.4	422.7
62.5°	669.6	586.3	460.5	384.8	357.5
65°	598.4	515.1	396.9	322.7	306.0
67.5°	527.2	442.4	327.2	271.2	253.0
70°	457.5	375.7	269.7	216.6	200.0
72.5°	387.8	307.5	213.6	172.7	168.2
75°	316.6	243.9	160.6	145.4	142.4
77.5°	251.5	184.8	125.7	116.7	113.6
80°	189.4	127.3	95.4	90.9	87.9
82.5°	130.3	78.8	68.2	63.6	63.6
85°	80.3	47.0	42.4	39.4	39.4
87.5°	36.4	19.7	19.7	18.2	16.7
90°	1.0	10.9	23.7	27.7	29.6
92.5°	29.6	35.6	41.5	44.5	42.5
95°	58.3	65.2	73.1	77.1	77.1
97.5°	95.8	100.8	106.7	111.7	110.7
100°	134.4	140.3	145.3	148.2	150.2
102.5°	178.8	181.8	188.7	191.7	190.7
105°	222.3	224.3	233.2	233.2	235.2
107.5°	273.7	274.7	278.6	281.6	280.6
110°	321.1	323.1	325.1	329.0	327.1

TEST NUMBER: P1032097

CATALOG NUMBER: S123RDIW-B1165D1030UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	370.5	371.5	371.5	376.5	376.5
115°	420.0	422.9	420.9	421.9	420.9
117.5°	470.3	471.3	469.4	469.4	466.4
120°	516.8	522.7	517.8	516.8	514.8
122.5°	565.2	569.2	567.2	564.2	561.3
125°	614.6	617.6	615.6	611.6	607.7
127.5°	660.1	666.0	664.0	658.1	654.1
130°	705.5	713.4	710.5	706.5	699.6
132.5°	751.0	758.9	756.9	752.0	747.0
135°	797.4	803.3	802.4	798.4	796.4
137.5°	839.9	844.8	847.8	842.9	839.9
140°	884.4	889.3	890.3	889.3	882.4
142.5°	924.9	929.8	931.8	930.8	925.9
145°	967.4	969.3	972.3	971.3	967.4
147.5°	1003.9	1007.9	1010.8	1010.8	1004.9
150°	1042.5	1044.4	1046.4	1046.4	1040.5
152.5°	1074.1	1077.0	1078.0	1080.0	1075.1
155°	1107.7	1107.7	1108.7	1112.6	1105.7
157.5°	1136.3	1135.3	1136.3	1140.3	1134.4
160°	1163.0	1161.0	1161.0	1166.0	1162.0
162.5°	1186.7	1183.8	1184.8	1189.7	1182.8
165°	1206.5	1203.5	1203.5	1209.5	1202.5
167.5°	1223.3	1219.3	1220.3	1226.3	1220.3
170°	1237.1	1233.2	1233.2	1240.1	1233.2
172.5°	1248.0	1244.0	1244.0	1250.0	1243.1
175°	1254.9	1251.0	1251.0	1256.9	1250.0
177.5°	1258.9	1254.9	1254.9	1260.8	1253.9
180°	1257.9	1257.9	1257.9	1257.9	1257.9

(END OF REPORT)