

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: P1032086

Luminaire Tested: S123RDIW-B1165D1030UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032086
REPORT IS A COMBINATION OF REPORTS P993962 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D1030UB30-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

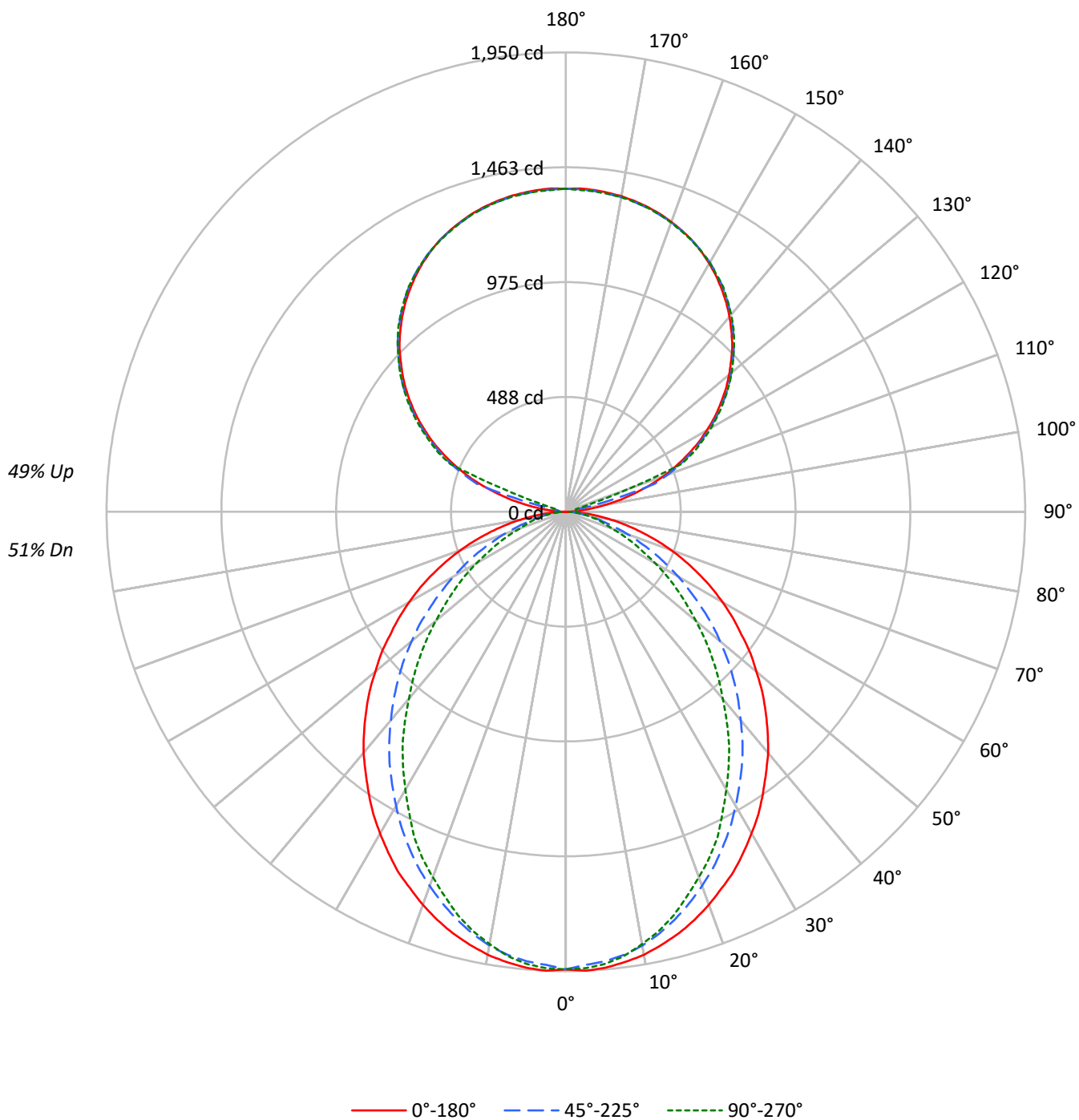
Lumens per Lamp: N/A
Luminaire Lumens: 8571.0 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1032086

CATALOG NUMBER: S123RDIW-B1165D1030UB30-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1032086

CATALOG NUMBER: S123RDIW-B1165D1030UB30-4F0-XX-W2A-F

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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	57	57	51
1	98	94	90	87	91	87	84	81	74	72	70	62	61	59	51	50	49	49	49	44
2	90	83	77	72	83	77	71	67	65	62	58	55	52	50	45	43	42	42	42	37
3	82	73	66	60	76	68	61	56	58	53	49	49	45	43	41	38	36	36	36	32
4	75	65	57	51	69	60	53	48	52	46	42	44	40	37	36	34	31	31	31	28
5	69	58	50	44	64	54	47	41	46	41	37	39	35	32	33	30	27	27	27	24
6	64	52	44	38	59	49	41	36	42	36	32	36	31	28	30	27	24	24	24	21
7	59	47	39	34	55	44	37	32	38	33	28	33	28	25	27	24	22	22	22	19
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	25	22	19	19	19	17
9	51	39	32	27	47	37	30	25	32	27	23	28	23	20	23	20	18	18	18	16
10	48	36	29	24	44	34	27	23	29	24	21	25	21	18	22	18	16	16	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20907	20907	20907
5°	20941	20167	20112
10°	20776	19408	19026
15°	20506	18472	17837
20°	20152	17453	16507
25°	19787	16393	15248
30°	19319	15266	13759
35°	18838	14159	12402
40°	18384	12958	10904
45°	17804	11782	9558
50°	17162	10527	8164
55°	16498	9184	6885
60°	15862	7805	5589
65°	15041	6392	4362
70°	14009	4834	3117
75°	12523	3274	2471
80°	10690	2274	1733
85°	8021	1228	909

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17804 cd/sqm

TEST NUMBER: P1032086

CATALOG NUMBER: S123RDIW-B1165D1030UB30-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	2.1
10°-20°	507.9	5.9
20°-30°	731.3	8.5
30°-40°	823.6	9.6
40°-50°	787.8	9.2
50°-60°	644.9	7.5
60°-70°	434.8	5.1
70°-80°	218.1	2.5
80°-90°	59.8	0.7
90°-100°	48.4	0.6
100°-110°	233.8	2.7
110°-120°	572.9	6.7
120°-130°	727.3	8.5
130°-140°	776.9	9.1
140°-150°	726.5	8.5
150°-160°	586.0	6.8
160°-170°	378.2	4.4
170°-180°	130.3	1.5
0°-30°	1421.8	16.6
0°-40°	2245.4	26.2
0°-60°	3678.1	42.9
0°-90°	4390.8	51.2
90°-120°	855.0	10.0
90°-150°	3085.8	36.0
90°-180°	4180.0	48.8
0°-180°	8571.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1942	1942	1942	1942	1942	
5°	1942	1934	1916	1930	1926	184
15°	1852	1835	1791	1783	1772	522
25°	1686	1646	1574	1541	1523	775
35°	1459	1402	1304	1237	1208	913
45°	1199	1128	1007	917	879	925
55°	910	833	699	608	576	817
65°	622	536	413	336	318	616
75°	329	254	167	151	148	351
85°	84	49	44	41	41	91
90°	1	11	24	28	31	9
95°	62	20	32	39	39	74
105°	304	315	223	43	45	322
115°	570	576	585	595	599	562
125°	803	811	815	817	819	717
135°	999	1006	1010	1013	1010	769
145°	1153	1160	1162	1164	1164	722
155°	1270	1268	1269	1274	1268	585
165°	1340	1337	1336	1344	1337	379
175°	1371	1366	1367	1374	1366	130
180°	1371	1371	1371	1371	1371	

TEST NUMBER: P1032086

CATALOG NUMBER: S123RDIW-B1165D1030UB30-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1942.3	1942.3	1942.3	1942.3	1942.3
2.5°	1950.2	1943.9	1925.0	1942.3	1939.1
5°	1942.3	1934.4	1915.5	1929.7	1926.5
7.5°	1928.1	1920.2	1896.6	1906.1	1901.3
10°	1909.2	1898.2	1869.8	1871.4	1863.5
12.5°	1882.4	1869.8	1833.6	1832.0	1822.6
15°	1852.5	1835.2	1791.1	1783.2	1772.2
17.5°	1816.3	1797.4	1742.2	1726.5	1710.7
20°	1775.3	1750.1	1690.3	1669.8	1650.9
22.5°	1729.6	1699.7	1635.1	1608.3	1591.0
25°	1685.5	1646.2	1573.7	1540.6	1523.3
27.5°	1632.0	1589.4	1510.7	1466.6	1439.8
30°	1576.8	1529.6	1441.4	1387.8	1362.6
32.5°	1521.7	1466.6	1372.1	1312.2	1285.4
35°	1458.7	1402.0	1304.3	1236.6	1208.2
37.5°	1395.7	1334.2	1231.9	1156.2	1121.6
40°	1335.8	1266.5	1154.7	1072.8	1036.5
42.5°	1268.1	1198.8	1082.2	990.8	959.3
45°	1198.8	1127.9	1006.6	916.8	879.0
47.5°	1131.0	1052.3	932.6	834.9	801.8
50°	1055.4	981.4	853.8	756.1	719.9
52.5°	987.7	905.8	779.8	677.4	645.9
55°	910.5	833.3	699.4	608.1	576.5
57.5°	841.2	757.7	622.2	535.6	508.8
60°	768.7	682.1	551.3	466.3	439.5
62.5°	696.3	609.6	478.9	400.1	371.8
65°	622.2	535.6	412.7	335.5	318.2
67.5°	548.2	460.0	340.3	282.0	263.1
70°	475.7	390.7	280.4	225.3	207.9
72.5°	403.3	319.8	222.1	179.6	174.9
75°	329.2	253.6	167.0	151.2	148.1
77.5°	261.5	192.2	130.7	121.3	118.1
80°	196.9	132.3	99.2	94.5	91.4
82.5°	135.5	81.9	70.9	66.2	66.2
85°	83.5	48.8	44.1	41.0	41.0
87.5°	37.8	20.5	20.5	18.9	17.3
90°	1.0	11.2	24.4	28.5	30.6
92.5°	23.4	17.3	26.5	33.6	34.6
95°	62.1	20.4	31.6	38.7	38.7
97.5°	113.1	84.6	32.6	40.7	41.8
100°	172.2	192.5	33.6	41.8	42.8
102.5°	239.4	252.6	75.4	41.8	43.8
105°	303.6	314.8	223.1	42.8	44.8
107.5°	371.8	381.0	396.3	239.4	105.9
110°	440.1	448.2	459.4	425.8	280.2

TEST NUMBER: P1032086

CATALOG NUMBER: S123RDIW-B1165D1030UB30-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	505.3	512.4	523.6	532.8	530.8
115°	569.5	575.6	584.8	594.9	599.0
117.5°	632.6	639.8	644.9	653.0	654.0
120°	690.7	699.9	702.9	711.1	711.1
122.5°	749.8	756.9	761.0	766.1	767.1
125°	802.8	810.9	815.0	817.0	819.1
127.5°	855.7	863.9	869.0	872.0	870.0
130°	904.6	912.8	916.9	920.9	918.9
132.5°	951.5	959.6	962.7	966.8	963.7
135°	999.4	1005.5	1009.6	1012.6	1009.6
137.5°	1040.1	1048.3	1050.3	1055.4	1053.4
140°	1080.9	1087.0	1090.0	1094.1	1092.1
142.5°	1118.6	1124.7	1127.7	1130.8	1127.7
145°	1153.2	1160.3	1162.4	1164.4	1164.4
147.5°	1186.8	1191.9	1194.0	1196.0	1190.9
150°	1217.4	1220.4	1222.5	1224.5	1221.5
152.5°	1244.9	1245.9	1246.9	1251.0	1245.9
155°	1270.4	1268.3	1269.3	1274.4	1268.3
157.5°	1290.7	1290.7	1289.7	1295.8	1287.7
160°	1309.1	1308.1	1307.0	1313.1	1306.0
162.5°	1326.4	1323.3	1322.3	1329.4	1323.3
165°	1339.6	1336.6	1335.6	1343.7	1336.6
167.5°	1350.8	1346.8	1346.8	1354.9	1346.8
170°	1360.0	1355.9	1355.9	1364.1	1355.9
172.5°	1366.1	1361.0	1362.0	1370.2	1361.0
175°	1371.2	1366.1	1367.1	1374.3	1366.1
177.5°	1373.3	1368.2	1369.2	1377.3	1367.1
180°	1371.2	1371.2	1371.2	1371.2	1371.2

(END OF REPORT)