

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: P1031923

Luminaire Tested: S123DIW-B775D1535UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031923
REPORT IS A COMBINATION OF REPORTS P992035 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1535UB50-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

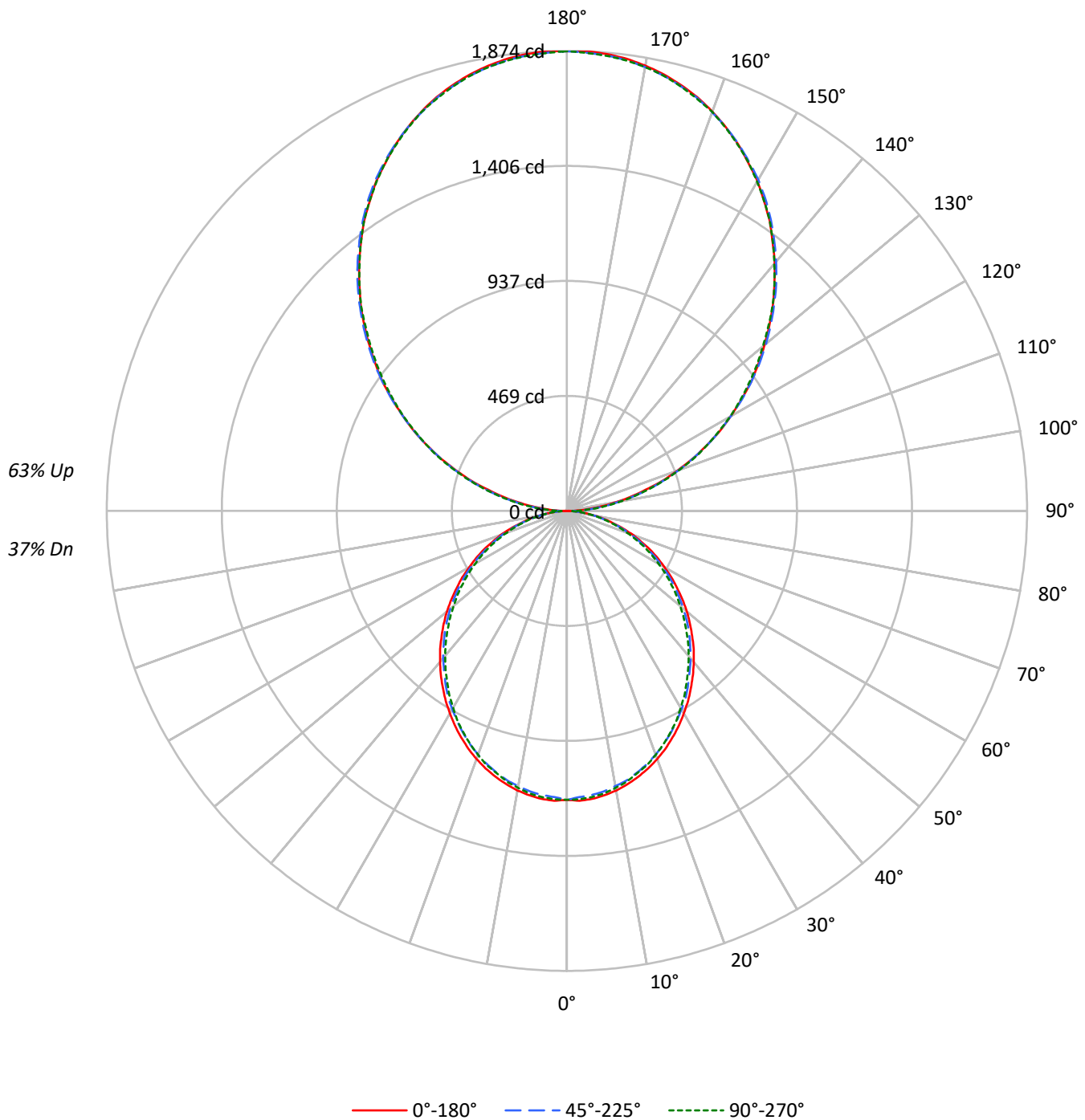
Lumens per Lamp: N/A
Luminaire Lumens: 8256.0 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 88.1
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: P1031923

CATALOG NUMBER: S123DIW-B775D1535UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1031923

CATALOG NUMBER: S123DIW-B775D1535UB50-4F0-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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44
1	95	91	87	83	86	82	79	76	67	64	62	52	51	49	39	38	37
2	86	79	73	68	78	72	67	62	58	55	52	46	43	41	34	33	31
3	79	69	62	57	71	63	57	52	51	47	43	41	37	35	30	28	27
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20
6	61	49	41	35	55	45	38	33	37	31	27	29	25	22	22	20	18
7	56	44	36	31	51	40	33	29	33	28	24	26	23	20	20	18	16
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	19	16	14
9	48	36	29	24	44	33	27	22	28	23	19	22	18	16	17	14	13
10	45	33	26	21	41	31	24	20	25	20	17	20	17	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12668	12668	12668
5°	12699	12231	12212
10°	12587	11818	11695
15°	12412	11387	11133
20°	12211	10909	10574
25°	11951	10404	9978
30°	11668	9882	9350
35°	11370	9349	8726
40°	11058	8790	8112
45°	10715	8244	7471
50°	10367	7636	6828
55°	9920	7003	6176
60°	9459	6305	5482
65°	9026	5548	4759
70°	8405	4710	3915
75°	7505	3730	3040
80°	6482	2622	2149
85°	5052	1409	1077

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10715 cd/sqm

TEST NUMBER: P1031923

CATALOG NUMBER: S123DIW-B775D1535UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	1.3
10°-20°	313.3	3.8
20°-30°	462.7	5.6
30°-40°	540.4	6.5
40°-50°	543.3	6.6
50°-60°	477.2	5.8
60°-70°	355.4	4.3
70°-80°	202.3	2.4
80°-90°	61.5	0.7
90°-100°	120.6	1.5
100°-110°	364.9	4.4
110°-120°	621.2	7.5
120°-130°	817.2	9.9
130°-140°	918.6	11.1
140°-150°	903.0	10.9
150°-160°	760.3	9.2
160°-170°	506.1	6.1
170°-180°	177.2	2.1
0°-30°	886.9	10.7
0°-40°	1427.3	17.3
0°-60°	2447.8	29.6
0°-90°	3067.0	37.1
90°-120°	1106.6	13.4
90°-150°	3745.4	45.4
90°-180°	5189.0	62.9
0°-180°	8256.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1178	1173	1162	1172	1170	112
15°	1121	1117	1104	1112	1106	316
25°	1018	1012	999	1000	997	469
35°	880	874	861	855	850	551
45°	722	718	704	692	687	557
55°	548	546	533	522	517	490
65°	373	368	358	350	347	368
75°	197	193	190	185	182	211
85°	53	51	51	49	49	56
90°	2	16	35	41	44	10
95°	87	97	109	115	115	96
105°	331	334	347	347	350	354
115°	625	630	627	628	627	619
125°	915	920	916	911	905	816
135°	1187	1196	1195	1189	1186	915
145°	1440	1443	1448	1446	1440	900
155°	1649	1649	1651	1656	1646	759
165°	1796	1792	1792	1801	1790	507
175°	1868	1862	1862	1871	1861	178
180°	1873	1873	1873	1873	1873	

TEST NUMBER: P1031923

CATALOG NUMBER: S123DIW-B775D1535UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1176.9	1176.9	1176.9	1176.9	1176.9
2.5°	1182.0	1177.9	1166.8	1176.9	1175.9
5°	1177.9	1172.9	1161.7	1171.9	1169.8
7.5°	1168.8	1163.8	1152.6	1161.7	1160.7
10°	1156.7	1151.6	1138.5	1147.6	1145.5
12.5°	1140.5	1136.4	1124.3	1130.4	1129.4
15°	1121.3	1117.2	1104.1	1112.2	1106.1
17.5°	1100.0	1095.0	1081.8	1087.9	1085.8
20°	1075.7	1069.7	1056.5	1060.5	1057.5
22.5°	1048.4	1042.3	1029.2	1032.2	1028.2
25°	1018.0	1012.0	998.8	999.8	996.8
27.5°	986.7	980.6	966.4	967.4	964.4
30°	952.3	947.2	933.0	933.0	926.0
32.5°	917.9	910.8	900.7	893.6	890.5
35°	880.4	874.3	861.2	855.1	850.1
37.5°	843.0	834.9	821.7	814.6	811.6
40°	803.5	797.4	783.3	775.2	771.1
42.5°	764.0	757.0	742.8	734.7	730.6
45°	721.5	717.5	704.3	692.2	687.1
47.5°	680.0	674.0	661.8	649.7	645.6
50°	637.5	632.5	619.3	608.2	602.1
52.5°	593.0	590.0	575.8	566.7	560.6
55°	547.5	546.5	533.3	522.2	517.1
57.5°	505.0	500.9	490.8	480.7	474.6
60°	458.4	457.4	445.3	436.2	431.1
62.5°	416.9	413.9	401.8	392.6	389.6
65°	373.4	368.4	358.2	350.1	347.1
67.5°	326.9	322.8	314.7	307.6	303.6
70°	285.4	279.3	273.2	266.1	261.1
72.5°	241.9	237.8	230.7	224.7	222.6
75°	197.3	193.3	190.3	185.2	182.2
77.5°	157.9	155.8	151.8	147.7	147.7
80°	119.4	116.4	114.4	113.3	113.3
82.5°	82.0	82.0	82.0	79.9	78.9
85°	52.6	50.6	50.6	48.6	48.6
87.5°	26.3	23.3	22.3	21.3	21.3
90°	1.5	16.2	35.3	41.2	44.1
92.5°	44.1	53.0	61.8	66.2	63.3
95°	86.8	97.1	108.9	114.7	114.7
97.5°	142.7	150.1	158.9	166.2	164.8
100°	200.1	208.9	216.3	220.7	223.6
102.5°	266.3	270.7	281.0	285.4	283.9
105°	331.0	333.9	347.2	347.2	350.1
107.5°	407.5	409.0	414.9	419.3	417.8
110°	478.1	481.1	484.0	489.9	486.9

TEST NUMBER: P1031923

CATALOG NUMBER: S123DIW-B775D1535UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	551.7	553.1	553.1	560.5	560.5
115°	625.2	629.6	626.7	628.2	626.7
117.5°	700.3	701.7	698.8	698.8	694.4
120°	769.4	778.2	770.9	769.4	766.5
122.5°	841.5	847.4	844.4	840.0	835.6
125°	915.0	919.5	916.5	910.6	904.7
127.5°	982.7	991.5	988.6	979.8	973.9
130°	1050.4	1062.2	1057.7	1051.9	1041.6
132.5°	1118.1	1129.8	1126.9	1119.5	1112.2
135°	1187.2	1196.0	1194.6	1188.7	1185.7
137.5°	1250.5	1257.8	1262.2	1254.9	1250.5
140°	1316.7	1324.0	1325.5	1324.0	1313.7
142.5°	1377.0	1384.3	1387.3	1385.8	1378.4
145°	1440.2	1443.2	1447.6	1446.1	1440.2
147.5°	1494.7	1500.6	1505.0	1505.0	1496.1
150°	1552.0	1555.0	1557.9	1557.9	1549.1
152.5°	1599.1	1603.5	1605.0	1607.9	1600.6
155°	1649.1	1649.1	1650.6	1656.5	1646.2
157.5°	1691.8	1690.3	1691.8	1697.7	1688.9
160°	1731.5	1728.6	1728.6	1735.9	1730.0
162.5°	1766.8	1762.4	1763.9	1771.2	1760.9
165°	1796.2	1791.8	1791.8	1800.7	1790.4
167.5°	1821.3	1815.4	1816.8	1825.7	1816.8
170°	1841.9	1836.0	1836.0	1846.3	1836.0
172.5°	1858.0	1852.2	1852.2	1861.0	1850.7
175°	1868.3	1862.4	1862.4	1871.3	1861.0
177.5°	1874.2	1868.3	1868.3	1877.2	1866.9
180°	1872.7	1872.7	1872.7	1872.7	1872.7

(END OF REPORT)