

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: METALUX

Report Number: P973021

Luminaire Tested: 22CGRK-L3C3-UNV-MP4-HI-5000K

Issue Date: 3/12/2025

Test Information

Test Method: LM-79-2019
Report Number: P973021
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (DLF2412105-2a)
Test Lab: INNOVATION CENTER
Issue Date: 3/12/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CGRK-L3C3-UNV-MP4-HI-5000K
Description: 2x2 CGRK Backlit Panel Retrofit Kit at, HI lumen, 5000K CCT settings
Light Source: -
Ballast/Driver: -

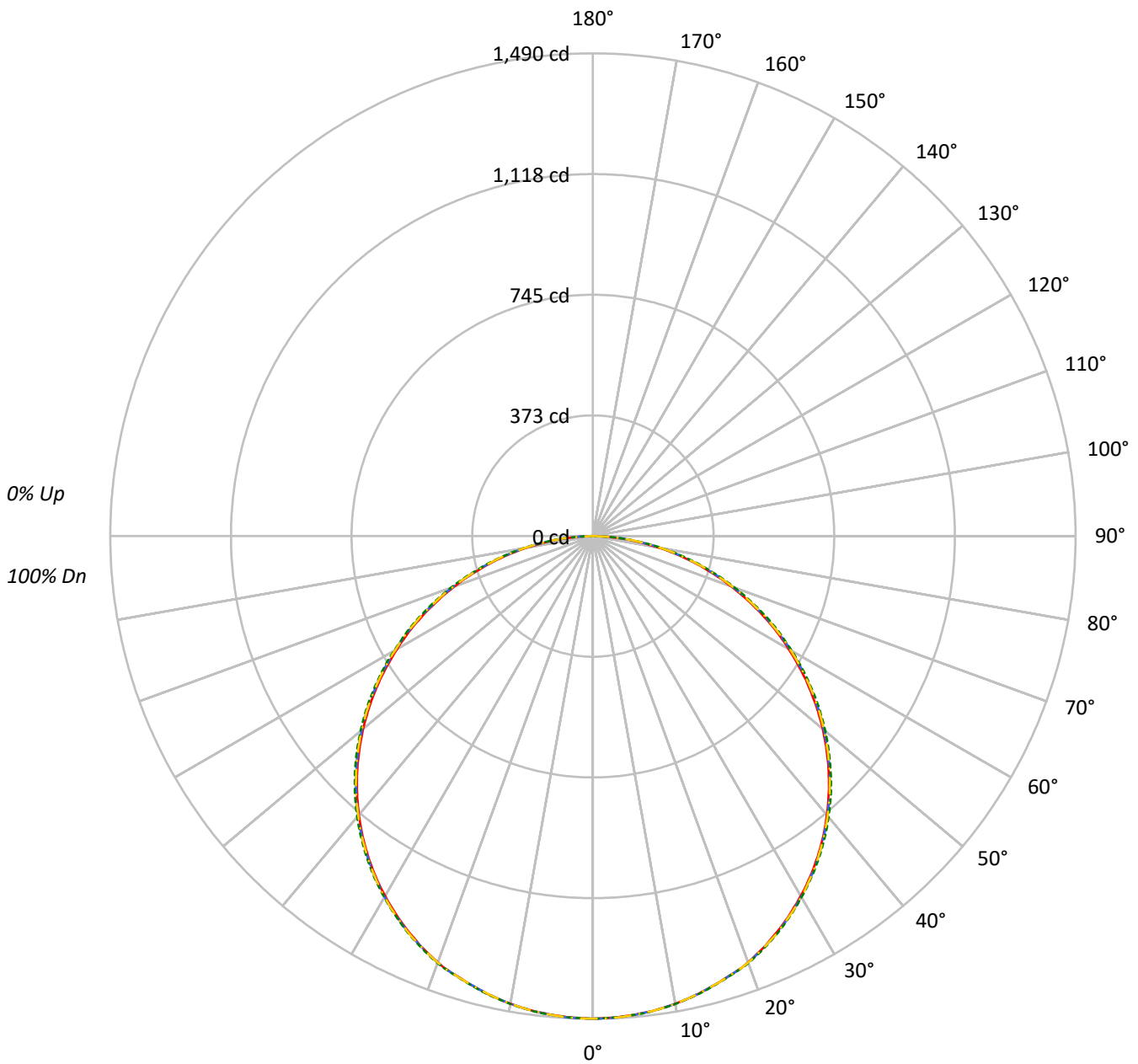
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4500.0 lumens
Efficiency: N/A
Efficacy: 140.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.1
Input Voltage (V): NR
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



— 0°-180° - - 45°-225° - - - 90°-270° - · - 135°-315°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	85	85	85	83
2	98	90	82	77	95	88	81	76	84	79	74	81	76	72	78	74	70	70	70	70	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	59	59	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	51	51	51	48
5	75	62	53	46	73	61	52	45	58	51	45	56	50	44	55	49	44	44	44	44	42
6	69	55	46	40	67	55	46	40	53	45	39	51	44	39	49	43	38	38	38	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	34	34	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	30	30	30	29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	27	27	27	26
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	25	25	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4771	4771	4771	4771
5°	4767	4769	4767	4769
10°	4766	4770	4766	4770
15°	4763	4768	4763	4768
20°	4772	4781	4772	4781
25°	4760	4774	4760	4774
30°	4744	4762	4744	4762
35°	4726	4752	4726	4752
40°	4698	4733	4698	4733
45°	4660	4706	4660	4706
50°	4612	4667	4612	4667
55°	4549	4614	4549	4614
60°	4471	4548	4471	4548
65°	4384	4478	4384	4478
70°	4257	4370	4257	4370
75°	4092	4228	4092	4228
80°	3819	4037	3819	4037
85°	3322	3730	3322	3730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4706 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.1	3.1
10°-20°	406.0	9.0
20°-30°	621.9	13.8
30°-40°	758.2	16.8
40°-50°	797.4	17.7
50°-60°	733.5	16.3
60°-70°	578.2	12.8
70°-80°	355.4	7.9
80°-90°	108.3	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1169.0	26.0
0°-40°	1927.2	42.8
0°-60°	3458.1	76.8
0°-90°	4500.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4500.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1490	1490	1490	1490	1490	
5°	1483	1483	1483	1483	1483	141
15°	1436	1438	1436	1438	1436	406
25°	1347	1351	1347	1351	1347	621
35°	1209	1215	1209	1215	1209	756
45°	1029	1039	1029	1039	1029	794
55°	815	826	815	826	815	728
65°	578	591	578	591	578	572
75°	331	342	331	342	331	349
85°	90	102	90	102	90	98
90°	0	0	0	0	0	5
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7
1°	1488.6	1489.8	1489.1	1489.5	1489.0	1489.3	1488.5	1489.3	1489.0	1489.5	1489.1
2°	1487.7	1488.9	1488.5	1489.0	1488.4	1488.3	1487.9	1488.3	1488.4	1489.0	1488.5
3°	1486.9	1487.4	1487.1	1487.8	1487.4	1487.4	1486.9	1487.4	1487.4	1487.8	1487.1
4°	1484.7	1486.1	1485.7	1485.9	1485.6	1485.2	1485.4	1485.2	1485.6	1485.9	1485.7
5°	1483.0	1483.9	1483.7	1483.7	1483.7	1483.4	1483.4	1483.4	1483.7	1483.7	1483.7
6°	1480.0	1481.3	1480.8	1480.8	1480.8	1480.9	1481.5	1480.9	1480.8	1480.8	1480.8
7°	1477.9	1478.1	1477.8	1477.7	1477.6	1478.0	1478.5	1478.0	1477.6	1477.7	1477.8
8°	1474.1	1474.4	1474.4	1474.3	1474.5	1474.5	1474.8	1474.5	1474.5	1474.3	1474.4
9°	1470.3	1470.2	1470.5	1470.4	1470.2	1470.4	1470.9	1470.4	1470.2	1470.4	1470.5
10°	1465.7	1466.1	1465.6	1465.6	1465.9	1466.5	1466.9	1466.5	1465.9	1465.6	1465.6
11°	1461.0	1460.2	1460.5	1460.8	1460.7	1461.3	1461.4	1461.3	1460.7	1460.8	1460.5
12°	1455.4	1454.9	1455.2	1455.3	1455.4	1456.3	1456.7	1456.3	1455.4	1455.3	1455.2
13°	1449.8	1449.4	1449.3	1449.4	1450.0	1450.2	1450.7	1450.2	1450.0	1449.4	1449.3
14°	1443.3	1443.0	1442.9	1443.1	1443.7	1443.9	1444.6	1443.9	1443.7	1443.1	1442.9
15°	1436.5	1436.0	1436.3	1436.3	1437.2	1437.4	1438.1	1437.4	1437.2	1436.3	1436.3
16°	1429.7	1428.8	1429.1	1429.7	1430.2	1430.4	1431.0	1430.4	1430.2	1429.7	1429.1
17°	1422.4	1422.6	1422.5	1423.1	1422.4	1423.5	1423.6	1423.5	1422.4	1423.1	1422.5
18°	1416.3	1416.1	1416.2	1416.6	1416.7	1417.1	1417.1	1417.1	1416.7	1416.6	1416.2
19°	1409.6	1408.7	1409.5	1410.1	1410.2	1410.5	1410.7	1410.5	1410.2	1410.1	1409.5
20°	1400.2	1399.6	1400.4	1401.1	1401.6	1402.4	1402.8	1402.4	1401.6	1401.1	1400.4
21°	1390.3	1389.9	1390.6	1391.6	1392.5	1392.8	1393.1	1392.8	1392.5	1391.6	1390.6
22°	1380.3	1379.8	1380.7	1381.2	1382.3	1382.9	1383.4	1382.9	1382.3	1381.2	1380.7
23°	1369.9	1369.6	1370.0	1371.1	1372.3	1372.9	1372.8	1372.9	1372.3	1371.1	1370.0
24°	1358.1	1358.5	1359.0	1360.6	1361.3	1361.9	1362.3	1361.9	1361.3	1360.6	1359.0
25°	1347.1	1346.9	1347.8	1349.2	1349.9	1351.1	1351.1	1351.1	1349.9	1349.2	1347.8
26°	1334.8	1335.2	1335.9	1337.3	1338.6	1339.2	1339.2	1339.2	1338.6	1337.3	1335.9
27°	1322.8	1322.8	1324.0	1325.4	1326.3	1327.0	1326.9	1327.0	1326.3	1325.4	1324.0
28°	1309.6	1310.3	1311.5	1312.7	1313.9	1314.4	1314.4	1314.4	1313.9	1312.7	1311.5
29°	1296.3	1296.8	1298.2	1299.5	1300.9	1301.4	1301.4	1301.4	1300.9	1299.5	1298.2
30°	1282.8	1283.5	1284.7	1286.1	1287.4	1288.2	1287.8	1288.2	1287.4	1286.1	1284.7
31°	1269.3	1269.4	1270.4	1272.2	1273.3	1274.1	1274.3	1274.1	1273.3	1272.2	1270.4
32°	1254.9	1255.2	1256.4	1257.8	1259.1	1260.0	1260.0	1260.0	1259.1	1257.8	1256.4
33°	1240.0	1240.1	1241.4	1242.7	1244.2	1245.4	1245.7	1245.4	1244.2	1242.7	1241.4
34°	1224.3	1225.1	1226.1	1227.5	1229.3	1230.3	1230.5	1230.3	1229.3	1227.5	1226.1
35°	1208.8	1209.2	1210.4	1212.0	1213.6	1214.9	1215.4	1214.9	1213.6	1212.0	1210.4
36°	1192.6	1193.5	1194.2	1195.7	1197.8	1199.2	1199.6	1199.2	1197.8	1195.7	1194.2
37°	1175.9	1176.5	1177.8	1179.4	1181.4	1182.7	1183.1	1182.7	1181.4	1179.4	1177.8
38°	1159.3	1159.5	1160.8	1162.4	1164.6	1165.7	1166.8	1165.7	1164.6	1162.4	1160.8
39°	1141.6	1142.3	1143.7	1145.2	1147.6	1149.1	1149.6	1149.1	1147.6	1145.2	1143.7
40°	1123.7	1124.5	1126.1	1127.3	1130.1	1131.3	1132.2	1131.3	1130.1	1127.3	1126.1
41°	1105.4	1106.2	1107.5	1109.3	1112.2	1113.2	1114.0	1113.2	1112.2	1109.3	1107.5
42°	1086.9	1088.0	1089.5	1091.1	1093.9	1095.0	1096.3	1095.0	1093.9	1091.1	1089.5
43°	1067.9	1068.9	1070.4	1072.2	1074.9	1076.2	1077.6	1076.2	1074.9	1072.2	1070.4
44°	1048.6	1049.6	1051.6	1053.1	1056.1	1057.2	1058.2	1057.2	1056.1	1053.1	1051.6



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	1029.0	1030.1	1031.8	1033.6	1036.6	1037.9	1039.1	1037.9	1036.6	1033.6	1031.8
46°	1009.5	1010.0	1011.8	1013.7	1016.8	1018.2	1019.2	1018.2	1016.8	1013.7	1011.8
47°	988.5	989.5	991.5	993.8	996.5	997.8	999.0	997.8	996.5	993.8	991.5
48°	967.7	968.8	971.1	973.2	976.3	977.5	978.8	977.5	976.3	973.2	971.1
49°	946.8	947.6	950.0	952.7	955.2	956.6	957.9	956.6	955.2	952.7	950.0
50°	925.7	926.3	928.8	931.4	934.2	935.8	936.8	935.8	934.2	931.4	928.8
51°	903.9	904.8	907.2	910.0	912.5	914.5	915.2	914.5	912.5	910.0	907.2
52°	882.0	883.0	885.2	888.4	891.0	892.6	893.4	892.6	891.0	888.4	885.2
53°	860.3	860.7	863.2	866.6	868.8	870.7	871.5	870.7	868.8	866.6	863.2
54°	837.4	838.4	840.7	843.8	846.4	848.6	849.0	848.6	846.4	843.8	840.7
55°	814.8	815.7	818.2	821.6	823.8	826.1	826.4	826.1	823.8	821.6	818.2
56°	792.1	792.6	794.9	798.7	801.2	803.1	803.5	803.1	801.2	798.7	794.9
57°	768.6	769.4	772.0	775.5	777.9	780.2	780.8	780.2	777.9	775.5	772.0
58°	745.2	746.1	748.8	752.3	754.6	756.9	757.4	756.9	754.6	752.3	748.8
59°	721.9	722.6	724.8	728.6	730.9	733.2	733.9	733.2	730.9	728.6	724.8
60°	698.0	698.7	701.2	704.7	707.4	709.6	710.0	709.6	707.4	704.7	701.2
61°	674.9	675.6	678.0	682.6	683.4	685.6	684.8	685.6	683.4	682.6	678.0
62°	651.7	652.5	654.7	658.1	660.5	663.1	663.1	663.1	660.5	658.1	654.7
63°	627.9	628.6	631.0	634.2	637.1	639.4	640.1	639.4	637.1	634.2	631.0
64°	603.1	604.2	606.7	609.9	612.8	615.0	615.8	615.0	612.8	609.9	606.7
65°	578.5	579.7	582.0	585.1	588.2	590.3	591.0	590.3	588.2	585.1	582.0
66°	553.9	554.9	557.3	560.3	563.4	565.5	566.4	565.5	563.4	560.3	557.3
67°	529.2	530.2	532.4	535.6	538.7	540.8	541.6	540.8	538.7	535.6	532.4
68°	504.4	505.4	507.6	510.6	513.8	515.8	516.6	515.8	513.8	510.6	507.6
69°	479.5	480.5	482.8	485.8	488.8	490.7	491.9	490.7	488.8	485.8	482.8
70°	454.6	455.5	457.8	461.0	463.8	465.8	466.7	465.8	463.8	461.0	457.8
71°	429.8	430.7	432.9	435.9	438.9	440.9	441.9	440.9	438.9	435.9	432.9
72°	405.1	405.8	408.2	411.1	414.0	415.7	416.8	415.7	414.0	411.1	408.2
73°	380.2	381.0	383.3	386.2	389.0	390.8	391.4	390.8	389.0	386.2	383.3
74°	355.3	356.2	358.6	361.6	364.2	366.1	366.7	366.1	364.2	361.6	358.6
75°	330.7	331.6	334.0	336.8	339.4	341.2	341.7	341.2	339.4	336.8	334.0
76°	306.1	306.9	309.5	312.2	314.8	316.4	317.0	316.4	314.8	312.2	309.5
77°	281.5	282.5	285.0	287.8	290.3	291.9	292.3	291.9	290.3	287.8	285.0
78°	256.7	257.8	260.5	263.6	265.9	267.4	267.4	267.4	265.9	263.6	260.5
79°	231.7	233.1	236.4	239.3	241.5	243.0	243.3	243.0	241.5	239.3	236.4
80°	207.1	208.4	211.8	215.4	217.5	218.8	218.9	218.8	217.5	215.4	211.8
81°	182.9	184.1	187.3	191.4	193.6	194.9	194.9	194.9	193.6	191.4	187.3
82°	159.1	160.1	163.2	167.2	170.0	171.2	171.3	171.2	170.0	167.2	163.2
83°	135.4	136.4	139.1	143.0	146.3	147.6	147.6	147.6	146.3	143.0	139.1
84°	112.7	113.5	115.8	119.3	123.0	124.6	124.6	124.6	123.0	119.3	115.8
85°	90.4	91.1	93.2	96.3	100.0	101.8	101.5	101.8	100.0	96.3	93.2
86°	68.9	69.6	71.6	74.1	76.7	78.4	78.0	78.4	76.7	74.1	71.6
87°	49.0	49.5	50.9	52.3	53.7	55.3	55.1	55.3	53.7	52.3	50.9
88°	31.0	31.2	32.0	33.1	32.9	34.5	34.2	34.5	32.9	33.1	32.0
89°	14.8	15.1	15.2	15.8	14.4	15.0	15.0	15.0	14.4	15.8	15.2



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P973021
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P973021
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P973021
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7	1489.7
1°	1489.8	1488.6	1489.8	1489.1	1489.5	1489.0	1489.3	1488.5	1489.3	1489.0	1489.5
2°	1488.9	1487.7	1488.9	1488.5	1489.0	1488.4	1488.3	1487.9	1488.3	1488.4	1489.0
3°	1487.4	1486.9	1487.4	1487.1	1487.8	1487.4	1487.4	1486.9	1487.4	1487.4	1487.8
4°	1486.1	1484.7	1486.1	1485.7	1485.9	1485.6	1485.2	1485.4	1485.2	1485.6	1485.9
5°	1483.9	1483.0	1483.9	1483.7	1483.7	1483.7	1483.4	1483.4	1483.4	1483.7	1483.7
6°	1481.3	1480.0	1481.3	1480.8	1480.8	1480.8	1480.9	1481.5	1480.9	1480.8	1480.8
7°	1478.1	1477.9	1478.1	1477.8	1477.7	1477.6	1478.0	1478.5	1478.0	1477.6	1477.7
8°	1474.4	1474.1	1474.4	1474.4	1474.3	1474.5	1474.5	1474.8	1474.5	1474.5	1474.3
9°	1470.2	1470.3	1470.2	1470.5	1470.4	1470.2	1470.4	1470.9	1470.4	1470.2	1470.4
10°	1466.1	1465.7	1466.1	1465.6	1465.6	1465.9	1466.5	1466.9	1466.5	1465.9	1465.6
11°	1460.2	1461.0	1460.2	1460.5	1460.8	1460.7	1461.3	1461.4	1461.3	1460.7	1460.8
12°	1454.9	1455.4	1454.9	1455.2	1455.3	1455.4	1456.3	1456.7	1456.3	1455.4	1455.3
13°	1449.4	1449.8	1449.4	1449.3	1449.4	1450.0	1450.2	1450.7	1450.2	1450.0	1449.4
14°	1443.0	1443.3	1443.0	1442.9	1443.1	1443.7	1443.9	1444.6	1443.9	1443.7	1443.1
15°	1436.0	1436.5	1436.0	1436.3	1436.3	1437.2	1437.4	1438.1	1437.4	1437.2	1436.3
16°	1428.8	1429.7	1428.8	1429.1	1429.7	1430.2	1430.4	1431.0	1430.4	1430.2	1429.7
17°	1422.6	1422.4	1422.6	1422.5	1423.1	1422.4	1423.5	1423.6	1423.5	1422.4	1423.1
18°	1416.1	1416.3	1416.1	1416.2	1416.6	1416.7	1417.1	1417.1	1417.1	1416.7	1416.6
19°	1408.7	1409.6	1408.7	1409.5	1410.1	1410.2	1410.5	1410.7	1410.5	1410.2	1410.1
20°	1399.6	1400.2	1399.6	1400.4	1401.1	1401.6	1402.4	1402.8	1402.4	1401.6	1401.1
21°	1389.9	1390.3	1389.9	1390.6	1391.6	1392.5	1392.8	1393.1	1392.8	1392.5	1391.6
22°	1379.8	1380.3	1379.8	1380.7	1381.2	1382.3	1382.9	1383.4	1382.9	1382.3	1381.2
23°	1369.6	1369.9	1369.6	1370.0	1371.1	1372.3	1372.9	1372.8	1372.9	1372.3	1371.1
24°	1358.5	1358.1	1358.5	1359.0	1360.6	1361.3	1361.9	1362.3	1361.9	1361.3	1360.6
25°	1346.9	1347.1	1346.9	1347.8	1349.2	1349.9	1351.1	1351.1	1351.1	1349.9	1349.2
26°	1335.2	1334.8	1335.2	1335.9	1337.3	1338.6	1339.2	1339.2	1339.2	1338.6	1337.3
27°	1322.8	1322.8	1322.8	1324.0	1325.4	1326.3	1327.0	1326.9	1327.0	1326.3	1325.4
28°	1310.3	1309.6	1310.3	1311.5	1312.7	1313.9	1314.4	1314.4	1314.4	1313.9	1312.7
29°	1296.8	1296.3	1296.8	1298.2	1299.5	1300.9	1301.4	1301.4	1301.4	1300.9	1299.5
30°	1283.5	1282.8	1283.5	1284.7	1286.1	1287.4	1288.2	1287.8	1288.2	1287.4	1286.1
31°	1269.4	1269.3	1269.4	1270.4	1272.2	1273.3	1274.1	1274.3	1274.1	1273.3	1272.2
32°	1255.2	1254.9	1255.2	1256.4	1257.8	1259.1	1260.0	1260.0	1260.0	1259.1	1257.8
33°	1240.1	1240.0	1240.1	1241.4	1242.7	1244.2	1245.4	1245.7	1245.4	1244.2	1242.7
34°	1225.1	1224.3	1225.1	1226.1	1227.5	1229.3	1230.3	1230.5	1230.3	1229.3	1227.5
35°	1209.2	1208.8	1209.2	1210.4	1212.0	1213.6	1214.9	1215.4	1214.9	1213.6	1212.0
36°	1193.5	1192.6	1193.5	1194.2	1195.7	1197.8	1199.2	1199.6	1199.2	1197.8	1195.7
37°	1176.5	1175.9	1176.5	1177.8	1179.4	1181.4	1182.7	1183.1	1182.7	1181.4	1179.4
38°	1159.5	1159.3	1159.5	1160.8	1162.4	1164.6	1165.7	1166.8	1165.7	1164.6	1162.4
39°	1142.3	1141.6	1142.3	1143.7	1145.2	1147.6	1149.1	1149.6	1149.1	1147.6	1145.2
40°	1124.5	1123.7	1124.5	1126.1	1127.3	1130.1	1131.3	1132.2	1131.3	1130.1	1127.3
41°	1106.2	1105.4	1106.2	1107.5	1109.3	1112.2	1113.2	1114.0	1113.2	1112.2	1109.3
42°	1088.0	1086.9	1088.0	1089.5	1091.1	1093.9	1095.0	1096.3	1095.0	1093.9	1091.1
43°	1068.9	1067.9	1068.9	1070.4	1072.2	1074.9	1076.2	1077.6	1076.2	1074.9	1072.2
44°	1049.6	1048.6	1049.6	1051.6	1053.1	1056.1	1057.2	1058.2	1057.2	1056.1	1053.1



TEST NUMBER: P973021
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1030.1	1029.0	1030.1	1031.8	1033.6	1036.6	1037.9	1039.1	1037.9	1036.6	1033.6
46°	1010.0	1009.5	1010.0	1011.8	1013.7	1016.8	1018.2	1019.2	1018.2	1016.8	1013.7
47°	989.5	988.5	989.5	991.5	993.8	996.5	997.8	999.0	997.8	996.5	993.8
48°	968.8	967.7	968.8	971.1	973.2	976.3	977.5	978.8	977.5	976.3	973.2
49°	947.6	946.8	947.6	950.0	952.7	955.2	956.6	957.9	956.6	955.2	952.7
50°	926.3	925.7	926.3	928.8	931.4	934.2	935.8	936.8	935.8	934.2	931.4
51°	904.8	903.9	904.8	907.2	910.0	912.5	914.5	915.2	914.5	912.5	910.0
52°	883.0	882.0	883.0	885.2	888.4	891.0	892.6	893.4	892.6	891.0	888.4
53°	860.7	860.3	860.7	863.2	866.6	868.8	870.7	871.5	870.7	868.8	866.6
54°	838.4	837.4	838.4	840.7	843.8	846.4	848.6	849.0	848.6	846.4	843.8
55°	815.7	814.8	815.7	818.2	821.6	823.8	826.1	826.4	826.1	823.8	821.6
56°	792.6	792.1	792.6	794.9	798.7	801.2	803.1	803.5	803.1	801.2	798.7
57°	769.4	768.6	769.4	772.0	775.5	777.9	780.2	780.8	780.2	777.9	775.5
58°	746.1	745.2	746.1	748.8	752.3	754.6	756.9	757.4	756.9	754.6	752.3
59°	722.6	721.9	722.6	724.8	728.6	730.9	733.2	733.9	733.2	730.9	728.6
60°	698.7	698.0	698.7	701.2	704.7	707.4	709.6	710.0	709.6	707.4	704.7
61°	675.6	674.9	675.6	678.0	682.6	683.4	685.6	684.8	685.6	683.4	682.6
62°	652.5	651.7	652.5	654.7	658.1	660.5	663.1	663.1	663.1	660.5	658.1
63°	628.6	627.9	628.6	631.0	634.2	637.1	639.4	640.1	639.4	637.1	634.2
64°	604.2	603.1	604.2	606.7	609.9	612.8	615.0	615.8	615.0	612.8	609.9
65°	579.7	578.5	579.7	582.0	585.1	588.2	590.3	591.0	590.3	588.2	585.1
66°	554.9	553.9	554.9	557.3	560.3	563.4	565.5	566.4	565.5	563.4	560.3
67°	530.2	529.2	530.2	532.4	535.6	538.7	540.8	541.6	540.8	538.7	535.6
68°	505.4	504.4	505.4	507.6	510.6	513.8	515.8	516.6	515.8	513.8	510.6
69°	480.5	479.5	480.5	482.8	485.8	488.8	490.7	491.9	490.7	488.8	485.8
70°	455.5	454.6	455.5	457.8	461.0	463.8	465.8	466.7	465.8	463.8	461.0
71°	430.7	429.8	430.7	432.9	435.9	438.9	440.9	441.9	440.9	438.9	435.9
72°	405.8	405.1	405.8	408.2	411.1	414.0	415.7	416.8	415.7	414.0	411.1
73°	381.0	380.2	381.0	383.3	386.2	389.0	390.8	391.4	390.8	389.0	386.2
74°	356.2	355.3	356.2	358.6	361.6	364.2	366.1	366.7	366.1	364.2	361.6
75°	331.6	330.7	331.6	334.0	336.8	339.4	341.2	341.7	341.2	339.4	336.8
76°	306.9	306.1	306.9	309.5	312.2	314.8	316.4	317.0	316.4	314.8	312.2
77°	282.5	281.5	282.5	285.0	287.8	290.3	291.9	292.3	291.9	290.3	287.8
78°	257.8	256.7	257.8	260.5	263.6	265.9	267.4	267.4	267.4	265.9	263.6
79°	233.1	231.7	233.1	236.4	239.3	241.5	243.0	243.3	243.0	241.5	239.3
80°	208.4	207.1	208.4	211.8	215.4	217.5	218.8	218.9	218.8	217.5	215.4
81°	184.1	182.9	184.1	187.3	191.4	193.6	194.9	194.9	194.9	193.6	191.4
82°	160.1	159.1	160.1	163.2	167.2	170.0	171.2	171.3	171.2	170.0	167.2
83°	136.4	135.4	136.4	139.1	143.0	146.3	147.6	147.6	147.6	146.3	143.0
84°	113.5	112.7	113.5	115.8	119.3	123.0	124.6	124.6	124.6	123.0	119.3
85°	91.1	90.4	91.1	93.2	96.3	100.0	101.8	101.5	101.8	100.0	96.3
86°	69.6	68.9	69.6	71.6	74.1	76.7	78.4	78.0	78.4	76.7	74.1
87°	49.5	49.0	49.5	50.9	52.3	53.7	55.3	55.1	55.3	53.7	52.3
88°	31.2	31.0	31.2	32.0	33.1	32.9	34.5	34.2	34.5	32.9	33.1
89°	15.1	14.8	15.1	15.2	15.8	14.4	15.0	15.0	15.0	14.4	15.8



TEST NUMBER: P973021
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P973021
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P973021
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P973021
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1489.7	1489.7	1489.7
1°	1489.1	1489.8	1488.6
2°	1488.5	1488.9	1487.7
3°	1487.1	1487.4	1486.9
4°	1485.7	1486.1	1484.7
5°	1483.7	1483.9	1483.0
6°	1480.8	1481.3	1480.0
7°	1477.8	1478.1	1477.9
8°	1474.4	1474.4	1474.1
9°	1470.5	1470.2	1470.3
10°	1465.6	1466.1	1465.7
11°	1460.5	1460.2	1461.0
12°	1455.2	1454.9	1455.4
13°	1449.3	1449.4	1449.8
14°	1442.9	1443.0	1443.3
15°	1436.3	1436.0	1436.5
16°	1429.1	1428.8	1429.7
17°	1422.5	1422.6	1422.4
18°	1416.2	1416.1	1416.3
19°	1409.5	1408.7	1409.6
20°	1400.4	1399.6	1400.2
21°	1390.6	1389.9	1390.3
22°	1380.7	1379.8	1380.3
23°	1370.0	1369.6	1369.9
24°	1359.0	1358.5	1358.1
25°	1347.8	1346.9	1347.1
26°	1335.9	1335.2	1334.8
27°	1324.0	1322.8	1322.8
28°	1311.5	1310.3	1309.6
29°	1298.2	1296.8	1296.3
30°	1284.7	1283.5	1282.8
31°	1270.4	1269.4	1269.3
32°	1256.4	1255.2	1254.9
33°	1241.4	1240.1	1240.0
34°	1226.1	1225.1	1224.3
35°	1210.4	1209.2	1208.8
36°	1194.2	1193.5	1192.6
37°	1177.8	1176.5	1175.9
38°	1160.8	1159.5	1159.3
39°	1143.7	1142.3	1141.6
40°	1126.1	1124.5	1123.7
41°	1107.5	1106.2	1105.4
42°	1089.5	1088.0	1086.9
43°	1070.4	1068.9	1067.9
44°	1051.6	1049.6	1048.6



TEST NUMBER: P973021
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	1031.8	1030.1	1029.0
46°	1011.8	1010.0	1009.5
47°	991.5	989.5	988.5
48°	971.1	968.8	967.7
49°	950.0	947.6	946.8
50°	928.8	926.3	925.7
51°	907.2	904.8	903.9
52°	885.2	883.0	882.0
53°	863.2	860.7	860.3
54°	840.7	838.4	837.4
55°	818.2	815.7	814.8
56°	794.9	792.6	792.1
57°	772.0	769.4	768.6
58°	748.8	746.1	745.2
59°	724.8	722.6	721.9
60°	701.2	698.7	698.0
61°	678.0	675.6	674.9
62°	654.7	652.5	651.7
63°	631.0	628.6	627.9
64°	606.7	604.2	603.1
65°	582.0	579.7	578.5
66°	557.3	554.9	553.9
67°	532.4	530.2	529.2
68°	507.6	505.4	504.4
69°	482.8	480.5	479.5
70°	457.8	455.5	454.6
71°	432.9	430.7	429.8
72°	408.2	405.8	405.1
73°	383.3	381.0	380.2
74°	358.6	356.2	355.3
75°	334.0	331.6	330.7
76°	309.5	306.9	306.1
77°	285.0	282.5	281.5
78°	260.5	257.8	256.7
79°	236.4	233.1	231.7
80°	211.8	208.4	207.1
81°	187.3	184.1	182.9
82°	163.2	160.1	159.1
83°	139.1	136.4	135.4
84°	115.8	113.5	112.7
85°	93.2	91.1	90.4
86°	71.6	69.6	68.9
87°	50.9	49.5	49.0
88°	32.0	31.2	31.0
89°	15.2	15.1	14.8



TEST NUMBER: P973021
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
90°	0.0	0.0	0.0
91°	0.0	0.0	0.0
92°	0.0	0.0	0.0
93°	0.0	0.0	0.0
94°	0.0	0.0	0.0
95°	0.0	0.0	0.0
96°	0.0	0.0	0.0
97°	0.0	0.0	0.0
98°	0.0	0.0	0.0
99°	0.0	0.0	0.0
100°	0.0	0.0	0.0
101°	0.0	0.0	0.0
102°	0.0	0.0	0.0
103°	0.0	0.0	0.0
104°	0.0	0.0	0.0
105°	0.0	0.0	0.0
106°	0.0	0.0	0.0
107°	0.0	0.0	0.0
108°	0.0	0.0	0.0
109°	0.0	0.0	0.0
110°	0.0	0.0	0.0
111°	0.0	0.0	0.0
112°	0.0	0.0	0.0
113°	0.0	0.0	0.0
114°	0.0	0.0	0.0
115°	0.0	0.0	0.0
116°	0.0	0.0	0.0
117°	0.0	0.0	0.0
118°	0.0	0.0	0.0
119°	0.0	0.0	0.0
120°	0.0	0.0	0.0
121°	0.0	0.0	0.0
122°	0.0	0.0	0.0
123°	0.0	0.0	0.0
124°	0.0	0.0	0.0
125°	0.0	0.0	0.0
126°	0.0	0.0	0.0
127°	0.0	0.0	0.0
128°	0.0	0.0	0.0
129°	0.0	0.0	0.0
130°	0.0	0.0	0.0
131°	0.0	0.0	0.0
132°	0.0	0.0	0.0
133°	0.0	0.0	0.0
134°	0.0	0.0	0.0



TEST NUMBER: P973021
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
135°	0.0	0.0	0.0
136°	0.0	0.0	0.0
137°	0.0	0.0	0.0
138°	0.0	0.0	0.0
139°	0.0	0.0	0.0
140°	0.0	0.0	0.0
141°	0.0	0.0	0.0
142°	0.0	0.0	0.0
143°	0.0	0.0	0.0
144°	0.0	0.0	0.0
145°	0.0	0.0	0.0
146°	0.0	0.0	0.0
147°	0.0	0.0	0.0
148°	0.0	0.0	0.0
149°	0.0	0.0	0.0
150°	0.0	0.0	0.0
151°	0.0	0.0	0.0
152°	0.0	0.0	0.0
153°	0.0	0.0	0.0
154°	0.0	0.0	0.0
155°	0.0	0.0	0.0
156°	0.0	0.0	0.0
157°	0.0	0.0	0.0
158°	0.0	0.0	0.0
159°	0.0	0.0	0.0
160°	0.0	0.0	0.0
161°	0.0	0.0	0.0
162°	0.0	0.0	0.0
163°	0.0	0.0	0.0
164°	0.0	0.0	0.0
165°	0.0	0.0	0.0
166°	0.0	0.0	0.0
167°	0.0	0.0	0.0
168°	0.0	0.0	0.0
169°	0.0	0.0	0.0
170°	0.0	0.0	0.0
171°	0.0	0.0	0.0
172°	0.0	0.0	0.0
173°	0.0	0.0	0.0
174°	0.0	0.0	0.0
175°	0.0	0.0	0.0
176°	0.0	0.0	0.0
177°	0.0	0.0	0.0
178°	0.0	0.0	0.0
179°	0.0	0.0	0.0



TEST NUMBER: P973021
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0



TEST NUMBER: P973021
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-5000K

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.44	19.11	17.81	19.43	19.74	17.53	19.20	17.90	19.52	19.83
	3H	19.39	20.90	19.76	21.23	21.58	19.50	21.02	19.88	21.34	21.70
	4H	20.15	21.58	20.55	21.92	22.30	20.28	21.71	20.68	22.06	22.43
	6H	20.74	22.07	21.15	22.43	22.82	20.90	22.23	21.31	22.59	22.98
	8H	20.94	22.21	21.36	22.59	22.99	21.12	22.39	21.55	22.78	23.18
	12H	21.03	22.25	21.46	22.63	23.05	21.23	22.45	21.66	22.83	23.26
4H	2H	18.14	19.56	18.53	19.91	20.29	18.20	19.63	18.60	19.98	20.35
	3H	20.30	21.51	20.71	21.90	22.30	20.40	21.61	20.81	22.00	22.40
	4H	21.20	22.30	21.63	22.71	23.14	21.32	22.42	21.75	22.83	23.26
	6H	21.93	22.89	22.39	23.33	23.78	22.09	23.04	22.54	23.48	23.94
	8H	22.18	23.08	22.64	23.52	23.99	22.36	23.26	22.82	23.70	24.17
	12H	22.34	23.15	22.82	23.62	24.09	22.55	23.36	23.03	23.83	24.30
8H	4H	21.58	22.48	22.04	22.92	23.38	21.68	22.58	22.14	23.02	23.49
	6H	22.45	23.20	22.94	23.68	24.16	22.59	23.34	23.08	23.82	24.30
	8H	22.78	23.45	23.29	23.96	24.44	22.96	23.63	23.46	24.13	24.62
	12H	23.02	23.62	23.53	24.11	24.67	23.24	23.83	23.74	24.32	24.88
12H	4H	21.63	22.44	22.11	22.91	23.38	21.73	22.54	22.21	23.01	23.48
	6H	22.53	23.21	23.04	23.71	24.19	22.67	23.34	23.17	23.84	24.33
	8H	22.93	23.53	23.44	24.01	24.57	23.10	23.69	23.60	24.18	24.74