

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: P973020

Luminaire Tested: 22CGRK-L3C3-UNV-MP4-HI-4000K

Issue Date: 3/12/2025

Test Information

Test Method: LM-79-2019
Report Number: P973020
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-4000K
Description: 2x2 CGRK Backlit Panel Retrofit Kit at, HI lumen, 4000K CCT settings
Light Source: -
Ballast/Driver: -

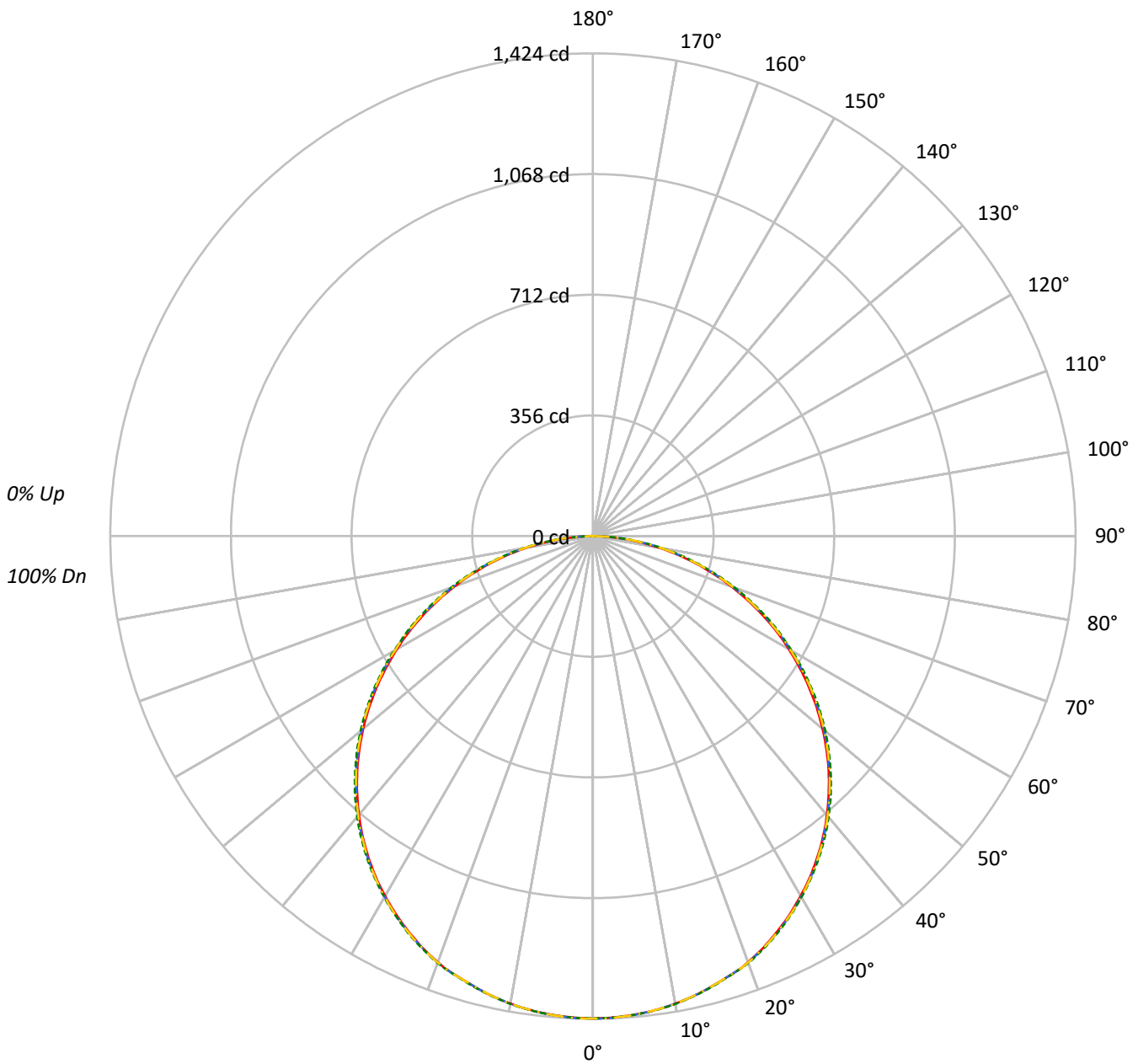
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4300.0 lumens
Efficiency: N/A
Efficacy: 146.8 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): 29.3
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

TEST NUMBER: P973020
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

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				
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°	4559	4559	4559	4559
5°	4556	4557	4556	4557
10°	4554	4558	4554	4558
15°	4551	4556	4551	4556
20°	4560	4568	4560	4568
25°	4548	4562	4548	4562
30°	4533	4551	4533	4551
35°	4516	4541	4516	4541
40°	4489	4523	4489	4523
45°	4453	4497	4453	4497
50°	4407	4460	4407	4460
55°	4347	4409	4347	4409
60°	4271	4345	4271	4345
65°	4189	4279	4189	4279
70°	4067	4175	4067	4175
75°	3910	4040	3910	4040
80°	3650	3858	3650	3858
85°	3175	3564	3175	3564

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4497 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.8	3.1
10°-20°	388.0	9.0
20°-30°	594.2	13.8
30°-40°	724.5	16.8
40°-50°	761.9	17.7
50°-60°	700.9	16.3
60°-70°	552.5	12.8
70°-80°	339.6	7.9
80°-90°	103.5	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°	1117.0	26.0
0°-40°	1841.6	42.8
0°-60°	3304.4	76.8
0°-90°	4300.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4300.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1424	1424	1424	1424	1424	
5°	1417	1418	1417	1418	1417	135
15°	1373	1374	1373	1374	1373	388
25°	1287	1291	1287	1291	1287	593
35°	1155	1161	1155	1161	1155	723
45°	983	993	983	993	983	758
55°	779	790	779	790	779	696
65°	553	565	553	565	553	547
75°	316	326	316	326	316	333
85°	86	97	86	97	86	93
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°	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5
1°	1422.4	1423.6	1422.9	1423.3	1422.8	1423.1	1422.3	1423.1	1422.8	1423.3	1422.9
2°	1421.6	1422.7	1422.3	1422.8	1422.2	1422.1	1421.8	1422.1	1422.2	1422.8	1422.3
3°	1420.8	1421.3	1421.0	1421.7	1421.3	1421.3	1420.8	1421.3	1421.3	1421.7	1421.0
4°	1418.7	1420.0	1419.6	1419.8	1419.5	1419.2	1419.4	1419.2	1419.5	1419.8	1419.6
5°	1417.1	1418.0	1417.8	1417.8	1417.8	1417.5	1417.5	1417.5	1417.8	1417.8	1417.8
6°	1414.3	1415.5	1415.0	1415.0	1415.0	1415.1	1415.6	1415.1	1415.0	1415.0	1415.0
7°	1412.2	1412.4	1412.1	1412.0	1411.9	1412.3	1412.8	1412.3	1411.9	1412.0	1412.1
8°	1408.6	1408.9	1408.9	1408.8	1409.0	1409.0	1409.2	1409.0	1409.0	1408.8	1408.9
9°	1405.0	1404.9	1405.2	1405.1	1404.9	1405.1	1405.5	1405.1	1404.9	1405.1	1405.2
10°	1400.5	1401.0	1400.4	1400.4	1400.7	1401.4	1401.7	1401.4	1400.7	1400.4	1400.4
11°	1396.1	1395.3	1395.6	1395.9	1395.8	1396.3	1396.4	1396.3	1395.8	1395.9	1395.6
12°	1390.7	1390.2	1390.5	1390.6	1390.7	1391.6	1392.0	1391.6	1390.7	1390.6	1390.5
13°	1385.4	1385.0	1384.9	1385.0	1385.6	1385.8	1386.2	1385.8	1385.6	1385.0	1384.9
14°	1379.2	1378.9	1378.8	1379.0	1379.5	1379.7	1380.4	1379.7	1379.5	1379.0	1378.8
15°	1372.7	1372.2	1372.5	1372.5	1373.3	1373.5	1374.2	1373.5	1373.3	1372.5	1372.5
16°	1366.2	1365.3	1365.6	1366.2	1366.6	1366.8	1367.4	1366.8	1366.6	1366.2	1365.6
17°	1359.2	1359.4	1359.3	1359.9	1359.2	1360.2	1360.3	1360.2	1359.2	1359.9	1359.3
18°	1353.4	1353.2	1353.3	1353.6	1353.7	1354.1	1354.1	1354.1	1353.7	1353.6	1353.3
19°	1347.0	1346.1	1346.9	1347.4	1347.5	1347.8	1348.0	1347.8	1347.5	1347.4	1346.9
20°	1338.0	1337.4	1338.1	1338.8	1339.4	1340.1	1340.5	1340.1	1339.4	1338.8	1338.1
21°	1328.5	1328.1	1328.8	1329.8	1330.6	1330.9	1331.2	1330.9	1330.6	1329.8	1328.8
22°	1318.9	1318.5	1319.3	1319.9	1320.9	1321.4	1321.9	1321.4	1320.9	1319.9	1319.3
23°	1309.0	1308.7	1309.1	1310.2	1311.3	1311.9	1311.8	1311.9	1311.3	1310.2	1309.1
24°	1297.8	1298.1	1298.6	1300.1	1300.8	1301.4	1301.8	1301.4	1300.8	1300.1	1298.6
25°	1287.2	1287.0	1287.9	1289.2	1289.9	1291.1	1291.1	1291.1	1289.9	1289.2	1287.9
26°	1275.5	1275.9	1276.5	1277.9	1279.1	1279.7	1279.7	1279.7	1279.1	1277.9	1276.5
27°	1264.0	1264.0	1265.2	1266.5	1267.3	1268.1	1267.9	1268.1	1267.3	1266.5	1265.2
28°	1251.4	1252.1	1253.2	1254.3	1255.5	1256.0	1256.0	1256.0	1255.5	1254.3	1253.2
29°	1238.6	1239.2	1240.5	1241.7	1243.1	1243.6	1243.6	1243.6	1243.1	1241.7	1240.5
30°	1225.7	1226.5	1227.6	1228.9	1230.2	1230.9	1230.6	1230.9	1230.2	1228.9	1227.6
31°	1212.8	1213.0	1214.0	1215.6	1216.7	1217.5	1217.7	1217.5	1216.7	1215.6	1214.0
32°	1199.1	1199.4	1200.6	1201.9	1203.1	1204.0	1204.0	1204.0	1203.1	1201.9	1200.6
33°	1184.9	1185.0	1186.2	1187.5	1188.9	1190.0	1190.4	1190.0	1188.9	1187.5	1186.2
34°	1169.9	1170.6	1171.6	1172.9	1174.7	1175.6	1175.8	1175.6	1174.7	1172.9	1171.6
35°	1155.1	1155.5	1156.6	1158.2	1159.7	1160.9	1161.4	1160.9	1159.7	1158.2	1156.6
36°	1139.6	1140.4	1141.1	1142.6	1144.5	1145.9	1146.3	1145.9	1144.5	1142.6	1141.1
37°	1123.6	1124.2	1125.4	1127.0	1128.9	1130.1	1130.5	1130.1	1128.9	1127.0	1125.4
38°	1107.8	1108.0	1109.2	1110.7	1112.9	1113.9	1114.9	1113.9	1112.9	1110.7	1109.2
39°	1090.9	1091.5	1092.8	1094.3	1096.6	1098.0	1098.5	1098.0	1096.6	1094.3	1092.8
40°	1073.8	1074.5	1076.0	1077.2	1079.8	1081.0	1081.9	1081.0	1079.8	1077.2	1076.0
41°	1056.3	1057.0	1058.3	1060.0	1062.8	1063.7	1064.5	1063.7	1062.8	1060.0	1058.3
42°	1038.6	1039.6	1041.0	1042.6	1045.3	1046.3	1047.5	1046.3	1045.3	1042.6	1041.0
43°	1020.5	1021.4	1022.8	1024.6	1027.1	1028.4	1029.7	1028.4	1027.1	1024.6	1022.8
44°	1002.0	1003.0	1004.8	1006.3	1009.1	1010.2	1011.2	1010.2	1009.1	1006.3	1004.8



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	983.3	984.3	985.9	987.7	990.6	991.8	993.0	991.8	990.6	987.7	985.9
46°	964.6	965.1	966.9	968.6	971.6	972.9	973.9	972.9	971.6	968.6	966.9
47°	944.5	945.5	947.4	949.6	952.2	953.5	954.6	953.5	952.2	949.6	947.4
48°	924.7	925.7	927.9	929.9	932.9	934.1	935.3	934.1	932.9	929.9	927.9
49°	904.7	905.5	907.8	910.3	912.7	914.1	915.4	914.1	912.7	910.3	907.8
50°	884.5	885.2	887.5	890.1	892.6	894.2	895.1	894.2	892.6	890.1	887.5
51°	863.7	864.6	866.9	869.5	871.9	873.9	874.5	873.9	871.9	869.5	866.9
52°	842.8	843.7	845.8	848.9	851.4	852.9	853.6	852.9	851.4	848.9	845.8
53°	822.1	822.4	824.9	828.1	830.2	832.0	832.8	832.0	830.2	828.1	824.9
54°	800.2	801.2	803.3	806.3	808.8	810.8	811.2	810.8	808.8	806.3	803.3
55°	778.6	779.4	781.9	785.1	787.2	789.4	789.7	789.4	787.2	785.1	781.9
56°	756.9	757.4	759.6	763.2	765.6	767.4	767.8	767.4	765.6	763.2	759.6
57°	734.4	735.2	737.7	741.0	743.4	745.5	746.1	745.5	743.4	741.0	737.7
58°	712.1	712.9	715.5	718.9	721.0	723.2	723.8	723.2	721.0	718.9	715.5
59°	689.8	690.4	692.6	696.2	698.4	700.6	701.2	700.6	698.4	696.2	692.6
60°	666.9	667.6	670.1	673.4	675.9	678.0	678.4	678.0	675.9	673.4	670.1
61°	644.9	645.6	647.9	652.3	653.0	655.1	654.4	655.1	653.0	652.3	647.9
62°	622.7	623.5	625.6	628.9	631.1	633.6	633.6	633.6	631.1	628.9	625.6
63°	600.0	600.6	603.0	606.0	608.8	610.9	611.7	610.9	608.8	606.0	603.0
64°	576.3	577.4	579.7	582.8	585.6	587.7	588.4	587.7	585.6	582.8	579.7
65°	552.8	553.9	556.1	559.1	562.1	564.1	564.7	564.1	562.1	559.1	556.1
66°	529.3	530.2	532.5	535.4	538.4	540.4	541.2	540.4	538.4	535.4	532.5
67°	505.7	506.6	508.7	511.8	514.7	516.8	517.6	516.8	514.7	511.8	508.7
68°	482.0	482.9	485.0	487.9	491.0	492.8	493.7	492.8	491.0	487.9	485.0
69°	458.2	459.1	461.3	464.2	467.1	468.9	470.0	468.9	467.1	464.2	461.3
70°	434.4	435.3	437.4	440.5	443.2	445.1	445.9	445.1	443.2	440.5	437.4
71°	410.7	411.5	413.7	416.6	419.3	421.3	422.3	421.3	419.3	416.6	413.7
72°	387.1	387.8	390.0	392.8	395.6	397.3	398.2	397.3	395.6	392.8	390.0
73°	363.3	364.0	366.3	369.0	371.7	373.5	374.0	373.5	371.7	369.0	366.3
74°	339.5	340.4	342.7	345.5	348.0	349.8	350.4	349.8	348.0	345.5	342.7
75°	316.0	316.9	319.1	321.9	324.4	326.0	326.5	326.0	324.4	321.9	319.1
76°	292.5	293.3	295.8	298.3	300.8	302.4	302.9	302.4	300.8	298.3	295.8
77°	269.0	269.9	272.3	275.0	277.4	279.0	279.4	279.0	277.4	275.0	272.3
78°	245.3	246.4	248.9	251.8	254.1	255.5	255.5	255.5	254.1	251.8	248.9
79°	221.4	222.7	225.9	228.7	230.7	232.2	232.5	232.2	230.7	228.7	225.9
80°	197.9	199.1	202.4	205.8	207.8	209.1	209.2	209.1	207.8	205.8	202.4
81°	174.8	175.9	179.0	182.9	185.0	186.2	186.2	186.2	185.0	182.9	179.0
82°	152.0	153.0	156.0	159.8	162.5	163.5	163.7	163.5	162.5	159.8	156.0
83°	129.4	130.3	132.9	136.6	139.8	141.0	141.1	141.0	139.8	136.6	132.9
84°	107.6	108.5	110.7	114.0	117.6	119.1	119.1	119.1	117.6	114.0	110.7
85°	86.4	87.1	89.1	92.1	95.5	97.3	97.0	97.3	95.5	92.1	89.1
86°	65.9	66.5	68.4	70.8	73.3	74.9	74.5	74.9	73.3	70.8	68.4
87°	46.8	47.3	48.7	50.0	51.3	52.9	52.7	52.9	51.3	50.0	48.7
88°	29.6	29.9	30.6	31.6	31.4	33.0	32.7	33.0	31.4	31.6	30.6
89°	14.2	14.4	14.5	15.1	13.8	14.4	14.3	14.4	13.8	15.1	14.5



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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: P973020
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

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: P973020
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

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: P973020
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5	1423.5
1°	1423.6	1422.4	1423.6	1422.9	1423.3	1422.8	1423.1	1422.3	1423.1	1422.8	1423.3
2°	1422.7	1421.6	1422.7	1422.3	1422.8	1422.2	1422.1	1421.8	1422.1	1422.2	1422.8
3°	1421.3	1420.8	1421.3	1421.0	1421.7	1421.3	1421.3	1420.8	1421.3	1421.3	1421.7
4°	1420.0	1418.7	1420.0	1419.6	1419.8	1419.5	1419.2	1419.4	1419.2	1419.5	1419.8
5°	1418.0	1417.1	1418.0	1417.8	1417.8	1417.8	1417.5	1417.5	1417.5	1417.8	1417.8
6°	1415.5	1414.3	1415.5	1415.0	1415.0	1415.0	1415.1	1415.6	1415.1	1415.0	1415.0
7°	1412.4	1412.2	1412.4	1412.1	1412.0	1411.9	1412.3	1412.8	1412.3	1411.9	1412.0
8°	1408.9	1408.6	1408.9	1408.9	1408.8	1409.0	1409.0	1409.2	1409.0	1409.0	1408.8
9°	1404.9	1405.0	1404.9	1405.2	1405.1	1404.9	1405.1	1405.5	1405.1	1404.9	1405.1
10°	1401.0	1400.5	1401.0	1400.4	1400.4	1400.7	1401.4	1401.7	1401.4	1400.7	1400.4
11°	1395.3	1396.1	1395.3	1395.6	1395.9	1395.8	1396.3	1396.4	1396.3	1395.8	1395.9
12°	1390.2	1390.7	1390.2	1390.5	1390.6	1390.7	1391.6	1392.0	1391.6	1390.7	1390.6
13°	1385.0	1385.4	1385.0	1384.9	1385.0	1385.6	1385.8	1386.2	1385.8	1385.6	1385.0
14°	1378.9	1379.2	1378.9	1378.8	1379.0	1379.5	1379.7	1380.4	1379.7	1379.5	1379.0
15°	1372.2	1372.7	1372.2	1372.5	1372.5	1373.3	1373.5	1374.2	1373.5	1373.3	1372.5
16°	1365.3	1366.2	1365.3	1365.6	1366.2	1366.6	1366.8	1367.4	1366.8	1366.6	1366.2
17°	1359.4	1359.2	1359.4	1359.3	1359.9	1359.2	1360.2	1360.3	1360.2	1359.2	1359.9
18°	1353.2	1353.4	1353.2	1353.3	1353.6	1353.7	1354.1	1354.1	1354.1	1353.7	1353.6
19°	1346.1	1347.0	1346.1	1346.9	1347.4	1347.5	1347.8	1348.0	1347.8	1347.5	1347.4
20°	1337.4	1338.0	1337.4	1338.1	1338.8	1339.4	1340.1	1340.5	1340.1	1339.4	1338.8
21°	1328.1	1328.5	1328.1	1328.8	1329.8	1330.6	1330.9	1331.2	1330.9	1330.6	1329.8
22°	1318.5	1318.9	1318.5	1319.3	1319.9	1320.9	1321.4	1321.9	1321.4	1320.9	1319.9
23°	1308.7	1309.0	1308.7	1309.1	1310.2	1311.3	1311.9	1311.8	1311.9	1311.3	1310.2
24°	1298.1	1297.8	1298.1	1298.6	1300.1	1300.8	1301.4	1301.8	1301.4	1300.8	1300.1
25°	1287.0	1287.2	1287.0	1287.9	1289.2	1289.9	1291.1	1291.1	1291.1	1289.9	1289.2
26°	1275.9	1275.5	1275.9	1276.5	1277.9	1279.1	1279.7	1279.7	1279.7	1279.1	1277.9
27°	1264.0	1264.0	1264.0	1265.2	1266.5	1267.3	1268.1	1267.9	1268.1	1267.3	1266.5
28°	1252.1	1251.4	1252.1	1253.2	1254.3	1255.5	1256.0	1256.0	1256.0	1255.5	1254.3
29°	1239.2	1238.6	1239.2	1240.5	1241.7	1243.1	1243.6	1243.6	1243.6	1243.1	1241.7
30°	1226.5	1225.7	1226.5	1227.6	1228.9	1230.2	1230.9	1230.6	1230.9	1230.2	1228.9
31°	1213.0	1212.8	1213.0	1214.0	1215.6	1216.7	1217.5	1217.7	1217.5	1216.7	1215.6
32°	1199.4	1199.1	1199.4	1200.6	1201.9	1203.1	1204.0	1204.0	1204.0	1203.1	1201.9
33°	1185.0	1184.9	1185.0	1186.2	1187.5	1188.9	1190.0	1190.4	1190.0	1188.9	1187.5
34°	1170.6	1169.9	1170.6	1171.6	1172.9	1174.7	1175.6	1175.8	1175.6	1174.7	1172.9
35°	1155.5	1155.1	1155.5	1156.6	1158.2	1159.7	1160.9	1161.4	1160.9	1159.7	1158.2
36°	1140.4	1139.6	1140.4	1141.1	1142.6	1144.5	1145.9	1146.3	1145.9	1144.5	1142.6
37°	1124.2	1123.6	1124.2	1125.4	1127.0	1128.9	1130.1	1130.5	1130.1	1128.9	1127.0
38°	1108.0	1107.8	1108.0	1109.2	1110.7	1112.9	1113.9	1114.9	1113.9	1112.9	1110.7
39°	1091.5	1090.9	1091.5	1092.8	1094.3	1096.6	1098.0	1098.5	1098.0	1096.6	1094.3
40°	1074.5	1073.8	1074.5	1076.0	1077.2	1079.8	1081.0	1081.9	1081.0	1079.8	1077.2
41°	1057.0	1056.3	1057.0	1058.3	1060.0	1062.8	1063.7	1064.5	1063.7	1062.8	1060.0
42°	1039.6	1038.6	1039.6	1041.0	1042.6	1045.3	1046.3	1047.5	1046.3	1045.3	1042.6
43°	1021.4	1020.5	1021.4	1022.8	1024.6	1027.1	1028.4	1029.7	1028.4	1027.1	1024.6
44°	1003.0	1002.0	1003.0	1004.8	1006.3	1009.1	1010.2	1011.2	1010.2	1009.1	1006.3



TEST NUMBER: P973020
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	984.3	983.3	984.3	985.9	987.7	990.6	991.8	993.0	991.8	990.6	987.7
46°	965.1	964.6	965.1	966.9	968.6	971.6	972.9	973.9	972.9	971.6	968.6
47°	945.5	944.5	945.5	947.4	949.6	952.2	953.5	954.6	953.5	952.2	949.6
48°	925.7	924.7	925.7	927.9	929.9	932.9	934.1	935.3	934.1	932.9	929.9
49°	905.5	904.7	905.5	907.8	910.3	912.7	914.1	915.4	914.1	912.7	910.3
50°	885.2	884.5	885.2	887.5	890.1	892.6	894.2	895.1	894.2	892.6	890.1
51°	864.6	863.7	864.6	866.9	869.5	871.9	873.9	874.5	873.9	871.9	869.5
52°	843.7	842.8	843.7	845.8	848.9	851.4	852.9	853.6	852.9	851.4	848.9
53°	822.4	822.1	822.4	824.9	828.1	830.2	832.0	832.8	832.0	830.2	828.1
54°	801.2	800.2	801.2	803.3	806.3	808.8	810.8	811.2	810.8	808.8	806.3
55°	779.4	778.6	779.4	781.9	785.1	787.2	789.4	789.7	789.4	787.2	785.1
56°	757.4	756.9	757.4	759.6	763.2	765.6	767.4	767.8	767.4	765.6	763.2
57°	735.2	734.4	735.2	737.7	741.0	743.4	745.5	746.1	745.5	743.4	741.0
58°	712.9	712.1	712.9	715.5	718.9	721.0	723.2	723.8	723.2	721.0	718.9
59°	690.4	689.8	690.4	692.6	696.2	698.4	700.6	701.2	700.6	698.4	696.2
60°	667.6	666.9	667.6	670.1	673.4	675.9	678.0	678.4	678.0	675.9	673.4
61°	645.6	644.9	645.6	647.9	652.3	653.0	655.1	654.4	655.1	653.0	652.3
62°	623.5	622.7	623.5	625.6	628.9	631.1	633.6	633.6	633.6	631.1	628.9
63°	600.6	600.0	600.6	603.0	606.0	608.8	610.9	611.7	610.9	608.8	606.0
64°	577.4	576.3	577.4	579.7	582.8	585.6	587.7	588.4	587.7	585.6	582.8
65°	553.9	552.8	553.9	556.1	559.1	562.1	564.1	564.7	564.1	562.1	559.1
66°	530.2	529.3	530.2	532.5	535.4	538.4	540.4	541.2	540.4	538.4	535.4
67°	506.6	505.7	506.6	508.7	511.8	514.7	516.8	517.6	516.8	514.7	511.8
68°	482.9	482.0	482.9	485.0	487.9	491.0	492.8	493.7	492.8	491.0	487.9
69°	459.1	458.2	459.1	461.3	464.2	467.1	468.9	470.0	468.9	467.1	464.2
70°	435.3	434.4	435.3	437.4	440.5	443.2	445.1	445.9	445.1	443.2	440.5
71°	411.5	410.7	411.5	413.7	416.6	419.3	421.3	422.3	421.3	419.3	416.6
72°	387.8	387.1	387.8	390.0	392.8	395.6	397.3	398.2	397.3	395.6	392.8
73°	364.0	363.3	364.0	366.3	369.0	371.7	373.5	374.0	373.5	371.7	369.0
74°	340.4	339.5	340.4	342.7	345.5	348.0	349.8	350.4	349.8	348.0	345.5
75°	316.9	316.0	316.9	319.1	321.9	324.4	326.0	326.5	326.0	324.4	321.9
76°	293.3	292.5	293.3	295.8	298.3	300.8	302.4	302.9	302.4	300.8	298.3
77°	269.9	269.0	269.9	272.3	275.0	277.4	279.0	279.4	279.0	277.4	275.0
78°	246.4	245.3	246.4	248.9	251.8	254.1	255.5	255.5	255.5	254.1	251.8
79°	222.7	221.4	222.7	225.9	228.7	230.7	232.2	232.5	232.2	230.7	228.7
80°	199.1	197.9	199.1	202.4	205.8	207.8	209.1	209.2	209.1	207.8	205.8
81°	175.9	174.8	175.9	179.0	182.9	185.0	186.2	186.2	186.2	185.0	182.9
82°	153.0	152.0	153.0	156.0	159.8	162.5	163.5	163.7	163.5	162.5	159.8
83°	130.3	129.4	130.3	132.9	136.6	139.8	141.0	141.1	141.0	139.8	136.6
84°	108.5	107.6	108.5	110.7	114.0	117.6	119.1	119.1	119.1	117.6	114.0
85°	87.1	86.4	87.1	89.1	92.1	95.5	97.3	97.0	97.3	95.5	92.1
86°	66.5	65.9	66.5	68.4	70.8	73.3	74.9	74.5	74.9	73.3	70.8
87°	47.3	46.8	47.3	48.7	50.0	51.3	52.9	52.7	52.9	51.3	50.0
88°	29.9	29.6	29.9	30.6	31.6	31.4	33.0	32.7	33.0	31.4	31.6
89°	14.4	14.2	14.4	14.5	15.1	13.8	14.4	14.3	14.4	13.8	15.1



TEST NUMBER: P973020
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

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: P973020
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

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: P973020
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

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: P973020
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1423.5	1423.5	1423.5
1°	1422.9	1423.6	1422.4
2°	1422.3	1422.7	1421.6
3°	1421.0	1421.3	1420.8
4°	1419.6	1420.0	1418.7
5°	1417.8	1418.0	1417.1
6°	1415.0	1415.5	1414.3
7°	1412.1	1412.4	1412.2
8°	1408.9	1408.9	1408.6
9°	1405.2	1404.9	1405.0
10°	1400.4	1401.0	1400.5
11°	1395.6	1395.3	1396.1
12°	1390.5	1390.2	1390.7
13°	1384.9	1385.0	1385.4
14°	1378.8	1378.9	1379.2
15°	1372.5	1372.2	1372.7
16°	1365.6	1365.3	1366.2
17°	1359.3	1359.4	1359.2
18°	1353.3	1353.2	1353.4
19°	1346.9	1346.1	1347.0
20°	1338.1	1337.4	1338.0
21°	1328.8	1328.1	1328.5
22°	1319.3	1318.5	1318.9
23°	1309.1	1308.7	1309.0
24°	1298.6	1298.1	1297.8
25°	1287.9	1287.0	1287.2
26°	1276.5	1275.9	1275.5
27°	1265.2	1264.0	1264.0
28°	1253.2	1252.1	1251.4
29°	1240.5	1239.2	1238.6
30°	1227.6	1226.5	1225.7
31°	1214.0	1213.0	1212.8
32°	1200.6	1199.4	1199.1
33°	1186.2	1185.0	1184.9
34°	1171.6	1170.6	1169.9
35°	1156.6	1155.5	1155.1
36°	1141.1	1140.4	1139.6
37°	1125.4	1124.2	1123.6
38°	1109.2	1108.0	1107.8
39°	1092.8	1091.5	1090.9
40°	1076.0	1074.5	1073.8
41°	1058.3	1057.0	1056.3
42°	1041.0	1039.6	1038.6
43°	1022.8	1021.4	1020.5
44°	1004.8	1003.0	1002.0



TEST NUMBER: P973020
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	985.9	984.3	983.3
46°	966.9	965.1	964.6
47°	947.4	945.5	944.5
48°	927.9	925.7	924.7
49°	907.8	905.5	904.7
50°	887.5	885.2	884.5
51°	866.9	864.6	863.7
52°	845.8	843.7	842.8
53°	824.9	822.4	822.1
54°	803.3	801.2	800.2
55°	781.9	779.4	778.6
56°	759.6	757.4	756.9
57°	737.7	735.2	734.4
58°	715.5	712.9	712.1
59°	692.6	690.4	689.8
60°	670.1	667.6	666.9
61°	647.9	645.6	644.9
62°	625.6	623.5	622.7
63°	603.0	600.6	600.0
64°	579.7	577.4	576.3
65°	556.1	553.9	552.8
66°	532.5	530.2	529.3
67°	508.7	506.6	505.7
68°	485.0	482.9	482.0
69°	461.3	459.1	458.2
70°	437.4	435.3	434.4
71°	413.7	411.5	410.7
72°	390.0	387.8	387.1
73°	366.3	364.0	363.3
74°	342.7	340.4	339.5
75°	319.1	316.9	316.0
76°	295.8	293.3	292.5
77°	272.3	269.9	269.0
78°	248.9	246.4	245.3
79°	225.9	222.7	221.4
80°	202.4	199.1	197.9
81°	179.0	175.9	174.8
82°	156.0	153.0	152.0
83°	132.9	130.3	129.4
84°	110.7	108.5	107.6
85°	89.1	87.1	86.4
86°	68.4	66.5	65.9
87°	48.7	47.3	46.8
88°	30.6	29.9	29.6
89°	14.5	14.4	14.2



TEST NUMBER: P973020
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

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: P973020
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

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: P973020
CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0



TEST NUMBER: P973020
 CATALOG NUMBER: 22CGRK-L3C3-UNV-MP4-HI-4000K

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	17.29	18.95	17.65	19.27	19.58	17.37	19.04	17.74	19.36	19.67
	3H	19.23	20.74	19.60	21.07	21.43	19.34	20.86	19.72	21.18	21.54
	4H	19.99	21.42	20.39	21.77	22.14	20.13	21.55	20.52	21.90	22.28
	6H	20.58	21.91	20.99	22.27	22.66	20.75	22.07	21.16	22.44	22.83
	8H	20.78	22.05	21.20	22.44	22.83	20.96	22.23	21.39	22.62	23.02
	12H	20.87	22.09	21.30	22.47	22.90	21.07	22.29	21.50	22.67	23.10
4H	2H	17.98	19.41	18.37	19.75	20.13	18.05	19.47	18.44	19.82	20.20
	3H	20.15	21.35	20.55	21.75	22.14	20.24	21.45	20.65	21.84	22.24
	4H	21.05	22.14	21.48	22.55	22.98	21.17	22.26	21.60	22.67	23.10
	6H	21.77	22.73	22.23	23.17	23.62	21.93	22.89	22.38	23.33	23.78
	8H	22.03	22.92	22.48	23.36	23.83	22.21	23.10	22.67	23.54	24.01
	12H	22.18	22.99	22.66	23.46	23.93	22.39	23.20	22.87	23.67	24.14
8H	4H	21.42	22.32	21.88	22.76	23.22	21.53	22.42	21.98	22.86	23.33
	6H	22.29	23.04	22.78	23.52	24.00	22.43	23.18	22.92	23.67	24.14
	8H	22.62	23.30	23.13	23.80	24.29	22.80	23.47	23.30	23.97	24.46
	12H	22.87	23.46	23.37	23.95	24.51	23.08	23.67	23.58	24.16	24.72
12H	4H	21.47	22.28	21.95	22.76	23.22	21.57	22.38	22.05	22.86	23.32
	6H	22.37	23.05	22.88	23.55	24.04	22.51	23.18	23.01	23.69	24.17
	8H	22.77	23.37	23.28	23.86	24.42	22.94	23.54	23.45	24.03	24.58