

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: CORELITE

Report Number: P934460

Luminaire Tested: SQ4-FA-050U-100D-93050-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934460
REPORT IS A COMBINATION OF REPORTS P933698 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-050U-100D-93050-1D-UNV-STD-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

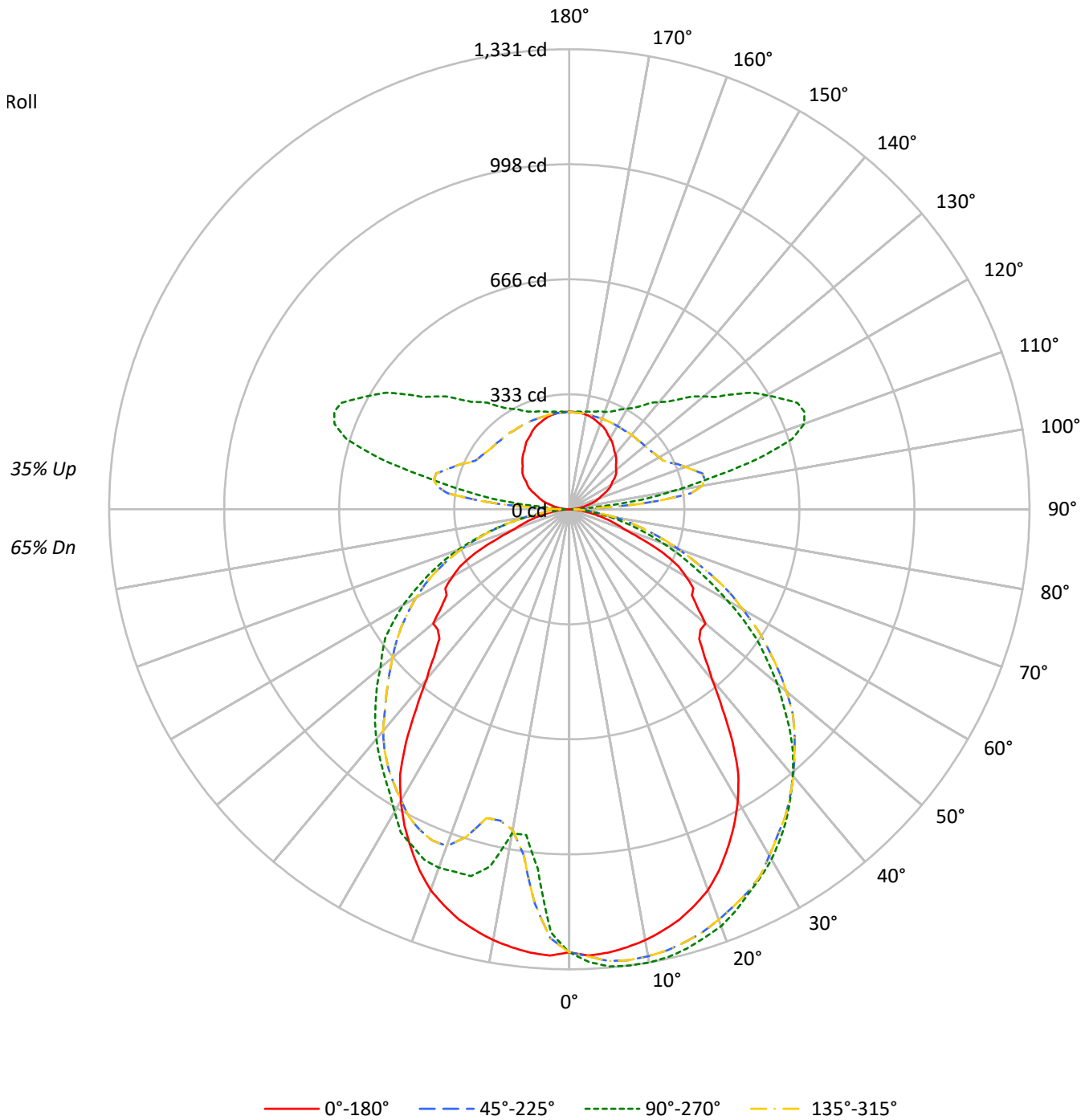
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5151.0 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
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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CATALOG NUMBER: SQ4-FA-050U-100D-93050-1D-UNV-STD-W-4-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P934460

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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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	69	69	69	65
1	101	97	93	89	95	91	88	84	80	78	75	71	69	67	62	60	59	62	60	59	55
2	92	85	78	73	86	80	74	69	70	66	63	62	59	56	54	52	50	54	52	50	46
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	42	48	45	42	39
4	77	66	58	52	72	62	55	49	55	49	45	49	44	41	43	39	36	43	39	36	33
5	71	59	50	44	66	56	48	42	49	43	39	44	39	35	39	35	32	39	35	32	29
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	35	31	28	25
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25	32	28	25	22
8	56	43	35	30	52	41	34	29	37	31	27	33	28	24	29	25	22	29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	27	23	20	18
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11892	11892	11892	11892
5°	11968	12005	11968	9440
10°	11875	11825	11875	8454
15°	11732	11569	11732	9660
20°	11473	11265	11473	9680
25°	10959	10822	10959	9476
30°	10297	10456	10297	9025
35°	9166	9991	9166	8531
40°	7625	9444	7625	8156
45°	6800	8803	6800	7726
50°	7207	8039	7207	7295
55°	6762	7216	6762	7045
60°	6945	6128	6945	6452
65°	6266	5065	6266	5664
70°	4311	4037	4311	4747
75°	3738	2983	3738	3574
80°	2948	1973	2948	2148
85°	1606	1045	1606	888

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 10441 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.7	2.2
10°-20°	328.5	6.4
20°-30°	507.8	9.9
30°-40°	606.1	11.8
40°-50°	609.7	11.8
50°-60°	530.5	10.3
60°-70°	376.1	7.3
70°-80°	199.0	3.9
80°-90°	50.6	1.0
90°-100°	137.4	2.7
100°-110°	361.2	7.0
110°-120°	374.5	7.3
120°-130°	300.4	5.8
130°-140°	235.7	4.6
140°-150°	180.9	3.5
150°-160°	130.3	2.5
160°-170°	79.7	1.5
170°-180°	26.9	0.5
0°-30°	951.9	18.5
0°-40°	1558.1	30.2
0°-60°	2698.3	52.4
0°-90°	3324.1	64.5
90°-120°	873.0	16.9
90°-150°	1590.0	30.9
90°-180°	1827.0	35.5
0°-180°	5151.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1282	1282	1282	1282	1282	
5°	1288	1328	1288	1044	1288	122
15°	1229	1316	1229	1098	1229	346
25°	1083	1227	1083	1074	1083	497
35°	823	1095	823	935	823	509
45°	531	902	531	792	531	425
55°	433	666	433	650	433	398
65°	301	401	301	449	301	287
75°	114	190	114	228	114	120
85°	19	48	19	41	19	26
90°	2	7	2	7	2	2
95°	18	83	18	83	18	20
105°	65	566	65	566	65	69
115°	116	728	116	728	116	114
125°	161	580	161	580	161	143
135°	192	450	192	450	192	148
145°	222	365	222	365	222	139
155°	251	314	251	314	251	115
165°	271	293	271	293	271	76
175°	282	284	282	284	282	27
180°	282	282	282	282	282	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6
2.5°	1292.5	1292.5	1299.8	1302.2	1302.2	1298.5	1295.0	1298.5	1309.5	1313.1	1311.9
5°	1287.7	1297.3	1310.7	1313.1	1315.5	1314.3	1311.9	1314.3	1326.4	1328.9	1330.1
7.5°	1278.0	1296.2	1313.1	1316.8	1320.4	1316.8	1315.5	1318.0	1330.1	1332.5	1332.5
10°	1265.9	1291.3	1310.7	1313.1	1316.8	1313.1	1313.1	1318.0	1330.1	1332.5	1333.8
12.5°	1248.9	1284.0	1302.2	1304.7	1309.5	1308.3	1307.1	1311.9	1324.1	1326.4	1326.4
15°	1229.4	1270.7	1287.7	1290.1	1298.5	1296.2	1296.2	1301.0	1314.3	1318.0	1316.8
17.5°	1202.8	1253.8	1273.1	1276.8	1282.8	1281.6	1282.8	1287.7	1299.8	1302.2	1303.4
20°	1172.4	1230.7	1253.8	1257.3	1263.4	1263.4	1263.4	1269.4	1281.6	1286.4	1286.4
22.5°	1131.2	1206.4	1230.7	1233.1	1240.4	1240.4	1242.8	1251.3	1262.2	1263.4	1263.4
25°	1082.8	1179.8	1200.3	1207.7	1214.9	1218.5	1222.2	1227.0	1230.7	1229.4	1230.7
27.5°	1031.9	1145.8	1172.4	1177.3	1187.0	1190.7	1195.5	1196.8	1198.0	1201.5	1199.2
30°	974.9	1098.5	1138.5	1143.4	1159.1	1161.5	1156.8	1159.1	1165.2	1167.7	1170.1
32.5°	910.5	1028.2	1103.3	1114.3	1128.9	1121.5	1120.3	1124.0	1133.7	1133.7	1136.1
35°	823.3	973.7	1070.7	1080.3	1091.2	1082.8	1087.6	1088.8	1094.9	1098.5	1097.3
37.5°	727.5	926.3	1036.7	1044.0	1052.4	1041.5	1048.8	1052.4	1057.3	1054.9	1054.9
40°	642.7	852.4	996.7	1001.5	1008.8	1000.3	1007.5	1010.0	1012.4	1010.0	1008.8
42.5°	579.6	771.1	954.2	960.3	955.4	961.5	963.9	968.8	965.1	960.3	960.3
45°	531.1	749.3	908.2	915.4	908.2	917.9	921.5	921.5	910.5	908.2	907.0
47.5°	515.3	705.7	862.1	862.1	858.4	870.5	876.7	868.1	857.2	853.6	853.6
50°	514.1	657.2	799.0	794.2	811.2	825.7	819.7	811.2	802.7	789.3	789.3
52.5°	466.8	597.8	717.8	736.0	762.7	771.1	761.4	753.0	738.4	732.3	727.5
55°	432.9	535.9	643.9	680.2	708.1	719.0	700.8	692.3	670.5	666.9	664.4
57.5°	425.6	446.2	575.9	622.0	656.0	654.8	643.9	628.1	609.9	606.2	605.0
60°	390.4	322.5	503.2	557.8	592.9	589.3	579.6	565.0	548.0	545.7	543.2
62.5°	354.0	234.0	420.8	482.6	532.3	531.1	522.6	500.8	488.7	482.6	477.8
65°	300.7	196.4	299.4	401.3	472.9	475.3	457.1	441.3	428.0	420.8	419.5
67.5°	229.1	160.0	202.4	334.7	415.9	413.4	390.4	383.1	366.2	362.5	355.2
70°	169.8	106.7	140.7	271.6	360.1	354.0	335.9	327.3	311.6	303.1	298.3
72.5°	140.7	86.1	103.1	211.0	303.1	295.9	280.1	270.4	257.0	249.8	244.9
75°	114.0	90.9	78.8	156.4	246.1	241.3	226.8	217.0	206.1	196.4	197.7
77.5°	83.7	84.9	63.0	115.2	195.2	187.9	179.4	167.3	162.4	152.8	152.8
80°	63.0	66.7	47.3	78.8	140.7	140.7	133.3	124.9	116.4	111.6	111.6
82.5°	42.4	42.4	35.1	49.7	95.8	92.1	87.3	84.9	80.0	77.6	77.6
85°	19.4	24.2	21.8	30.3	52.1	54.6	54.6	52.1	50.9	48.5	49.7
87.5°	6.1	10.9	13.3	17.0	26.7	27.9	29.1	29.1	29.1	30.3	30.3
90°	1.9	3.4	5.0	5.3	8.4	12.4	14.4	12.8	9.5	7.2	7.2
92.5°	7.5	20.4	33.3	36.5	51.3	71.0	80.9	70.9	50.9	36.0	34.5
95°	18.2	41.7	65.2	71.1	126.3	199.8	236.6	211.1	160.1	122.0	117.6
97.5°	31.4	52.1	72.9	78.1	170.0	292.7	354.0	338.0	305.8	281.6	273.4
100°	41.6	60.4	79.3	84.0	186.0	322.1	390.2	391.4	393.8	395.5	385.7
102.5°	50.3	67.9	85.4	89.8	193.4	331.4	400.4	420.9	462.0	492.7	484.3
105°	65.1	79.9	94.8	98.6	198.8	332.5	399.3	445.3	537.2	606.2	601.7
107.5°	80.2	94.1	107.9	111.4	199.8	317.7	376.6	440.8	569.1	665.2	666.3
110°	90.4	102.9	115.4	118.6	198.3	304.6	357.7	429.4	572.8	680.4	685.1



TEST NUMBER: P934460

CATALOG NUMBER: SQ4-FA-050U-100D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	100.4	112.3	124.3	127.3	198.3	293.1	340.5	413.9	560.6	670.7	678.0
115°	115.5	126.6	137.6	140.3	200.1	279.9	319.8	390.5	531.9	638.0	648.0
117.5°	130.5	140.5	150.5	153.0	203.9	271.7	305.7	369.5	497.0	592.7	603.8
120°	139.2	148.7	158.0	160.4	206.9	269.0	300.0	358.3	474.9	562.4	573.2
122.5°	147.7	157.3	166.7	169.1	211.3	267.5	295.6	348.1	453.2	531.9	542.5
125°	160.8	169.4	178.0	180.2	217.1	266.3	290.9	335.5	424.7	491.6	501.4
127.5°	171.3	180.1	188.9	191.1	223.0	265.7	287.0	325.2	401.8	459.2	467.5
130°	177.0	186.5	195.8	198.2	227.3	266.0	285.4	319.5	387.7	438.8	446.5
132.5°	182.9	192.3	201.7	204.1	230.8	266.3	284.1	314.6	375.6	421.4	428.3
135°	191.6	200.1	208.8	210.9	234.6	266.0	281.8	307.3	358.5	396.8	402.7
137.5°	200.5	209.0	217.5	219.6	240.3	267.7	281.5	303.0	346.2	378.6	383.5
140°	207.9	215.7	223.6	225.5	243.6	268.0	280.1	298.8	336.2	364.1	368.6
142.5°	213.5	220.8	228.0	229.8	246.6	268.9	280.1	296.5	329.3	353.9	357.7
145°	222.3	228.5	234.8	236.4	250.3	269.0	278.2	291.6	318.4	338.5	341.5
147.5°	231.0	237.1	243.2	244.7	255.9	270.8	278.2	288.8	309.9	325.7	328.2
150°	236.6	242.1	247.7	249.1	258.8	271.7	278.2	287.1	305.0	318.3	320.4
152.5°	242.5	246.7	250.9	251.9	260.7	272.4	278.2	285.9	301.1	312.5	313.9
155°	251.2	254.3	257.4	258.1	264.8	273.7	278.2	284.3	296.4	305.5	306.5
157.5°	257.6	260.6	263.7	264.4	269.0	275.1	278.2	282.9	292.4	299.4	300.2
160°	262.0	264.3	266.7	267.2	270.9	275.8	278.2	282.3	290.4	296.4	296.8
162.5°	266.3	268.1	269.8	270.3	272.9	276.5	278.2	281.6	288.4	293.6	293.9
165°	271.1	272.6	274.3	274.7	275.9	277.4	278.2	280.6	285.5	289.2	289.5
167.5°	275.4	276.1	276.9	277.1	278.1	279.4	280.1	281.7	284.9	287.3	287.5
170°	278.2	279.0	279.7	279.9	280.0	280.1	280.1	281.7	284.9	287.3	287.3
172.5°	279.7	279.9	280.1	280.1	280.1	280.1	280.1	281.4	283.8	285.8	285.6
175°	281.8	281.8	281.8	281.8	281.3	280.4	280.1	280.9	282.6	283.8	283.8
177.5°	281.8	281.8	281.8	281.8	281.4	280.8	280.5	281.2	282.5	283.4	283.2
180°	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6
2.5°	1314.3	1310.7	1314.3	1311.9	1313.1	1309.5	1298.5	1295.0	1298.5	1302.2	1302.2
5°	1330.1	1327.7	1330.1	1330.1	1328.9	1326.4	1314.3	1311.9	1314.3	1315.5	1313.1
7.5°	1335.0	1331.3	1335.0	1332.5	1332.5	1330.1	1318.0	1315.5	1316.8	1320.4	1316.8
10°	1335.0	1331.3	1335.0	1333.8	1332.5	1330.1	1318.0	1313.1	1313.1	1316.8	1313.1
12.5°	1328.9	1326.4	1328.9	1326.4	1326.4	1324.1	1311.9	1307.1	1308.3	1309.5	1304.7
15°	1319.2	1315.5	1319.2	1316.8	1318.0	1314.3	1301.0	1296.2	1296.2	1298.5	1290.1
17.5°	1304.7	1299.8	1304.7	1303.4	1302.2	1299.8	1287.7	1282.8	1281.6	1282.8	1276.8
20°	1287.7	1284.0	1287.7	1286.4	1286.4	1281.6	1269.4	1263.4	1263.4	1263.4	1257.3
22.5°	1261.0	1257.3	1261.0	1263.4	1263.4	1262.2	1251.3	1242.8	1240.4	1240.4	1233.1
25°	1230.7	1227.0	1230.7	1230.7	1229.4	1230.7	1227.0	1222.2	1218.5	1214.9	1207.7
27.5°	1201.5	1199.2	1201.5	1199.2	1201.5	1198.0	1196.8	1195.5	1190.7	1187.0	1177.3
30°	1172.4	1170.1	1172.4	1170.1	1167.7	1165.2	1159.1	1156.8	1161.5	1159.1	1143.4
32.5°	1136.1	1133.7	1136.1	1136.1	1133.7	1133.7	1124.0	1120.3	1121.5	1128.9	1114.3
35°	1098.5	1094.9	1098.5	1097.3	1098.5	1094.9	1088.8	1087.6	1082.8	1091.2	1080.3
37.5°	1054.9	1051.2	1054.9	1054.9	1054.9	1057.3	1052.4	1048.8	1041.5	1052.4	1044.0
40°	1010.0	1005.2	1010.0	1008.8	1010.0	1012.4	1010.0	1007.5	1000.3	1008.8	1001.5
42.5°	959.1	957.9	959.1	960.3	960.3	965.1	968.8	963.9	961.5	955.4	960.3
45°	904.5	902.1	904.5	907.0	908.2	910.5	921.5	921.5	917.9	908.2	915.4
47.5°	846.3	840.2	846.3	853.6	853.6	857.2	868.1	876.7	870.5	858.4	862.1
50°	784.4	785.7	784.4	789.3	789.3	802.7	811.2	819.7	825.7	811.2	794.2
52.5°	723.9	722.7	723.9	727.5	732.3	738.4	753.0	761.4	771.1	762.7	736.0
55°	663.2	665.7	663.2	664.4	666.9	670.5	692.3	700.8	719.0	708.1	680.2
57.5°	602.7	599.0	602.7	605.0	606.2	609.9	628.1	643.9	654.8	656.0	622.0
60°	532.3	527.4	532.3	543.2	545.7	548.0	565.0	579.6	589.3	592.9	557.8
62.5°	470.4	462.0	470.4	477.8	482.6	488.7	500.8	522.6	531.1	532.3	482.6
65°	405.0	401.3	405.0	419.5	420.8	428.0	441.3	457.1	475.3	472.9	401.3
67.5°	345.6	345.6	345.6	355.2	362.5	366.2	383.1	390.4	413.4	415.9	334.7
70°	291.0	289.8	291.0	298.3	303.1	311.6	327.3	335.9	354.0	360.1	271.6
72.5°	238.9	237.7	238.9	244.9	249.8	257.0	270.4	280.1	295.9	303.1	211.0
75°	192.8	190.3	192.8	197.7	196.4	206.1	217.0	226.8	241.3	246.1	156.4
77.5°	147.9	147.9	147.9	152.8	152.8	162.4	167.3	179.4	187.9	195.2	115.2
80°	110.3	109.1	110.3	111.6	111.6	116.4	124.9	133.3	140.7	140.7	78.8
82.5°	77.6	75.2	77.6	77.6	77.6	80.0	84.9	87.3	92.1	95.8	49.7
85°	48.5	48.5	48.5	49.7	48.5	50.9	52.1	54.6	54.6	52.1	30.3
87.5°	31.6	30.3	31.6	30.3	30.3	29.1	29.1	29.1	27.9	26.7	17.0
90°	7.2	7.2	7.2	7.2	7.2	9.5	12.8	14.4	12.4	8.4	5.3
92.5°	28.8	23.0	28.8	34.5	36.0	50.9	70.9	80.9	71.0	51.3	36.5
95°	100.3	83.1	100.3	117.6	122.0	160.1	211.1	236.6	199.8	126.3	71.1
97.5°	240.4	207.5	240.4	273.4	281.6	305.8	338.0	354.0	292.7	170.0	78.1
100°	346.4	307.2	346.4	385.7	395.5	393.8	391.4	390.2	322.1	186.0	84.0
102.5°	450.7	417.1	450.7	484.3	492.7	462.0	420.9	400.4	331.4	193.4	89.8
105°	583.7	565.6	583.7	601.7	606.2	537.2	445.3	399.3	332.5	198.8	98.6
107.5°	670.7	675.1	670.7	666.3	665.2	569.1	440.8	376.6	317.7	199.8	111.4
110°	703.9	722.7	703.9	685.1	680.4	572.8	429.4	357.7	304.6	198.3	118.6



TEST NUMBER: P934460

CATALOG NUMBER: SQ4-FA-050U-100D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	706.9	735.8	706.9	678.0	670.7	560.6	413.9	340.5	293.1	198.3	127.3
115°	688.1	728.2	688.1	648.0	638.0	531.9	390.5	319.8	279.9	200.1	140.3
117.5°	648.4	692.9	648.4	603.8	592.7	497.0	369.5	305.7	271.7	203.9	153.0
120°	616.3	659.5	616.3	573.2	562.4	474.9	358.3	300.0	269.0	206.9	160.4
122.5°	585.2	627.8	585.2	542.5	531.9	453.2	348.1	295.6	267.5	211.3	169.1
125°	540.6	579.9	540.6	501.4	491.6	424.7	335.5	290.9	266.3	217.1	180.2
127.5°	500.6	533.7	500.6	467.5	459.2	401.8	325.2	287.0	265.7	223.0	191.1
130°	477.1	507.7	477.1	446.5	438.8	387.7	319.5	285.4	266.0	227.3	198.2
132.5°	455.6	483.1	455.6	428.3	421.4	375.6	314.6	284.1	266.3	230.8	204.1
135°	426.4	449.9	426.4	402.7	396.8	358.5	307.3	281.8	266.0	234.6	210.9
137.5°	402.8	422.1	402.8	383.5	378.6	346.2	303.0	281.5	267.7	240.3	219.6
140°	386.7	404.8	386.7	368.6	364.1	336.2	298.8	280.1	268.0	243.6	225.5
142.5°	373.3	388.9	373.3	357.7	353.9	329.3	296.5	280.1	268.9	246.6	229.8
145°	353.3	365.1	353.3	341.5	338.5	318.4	291.6	278.2	269.0	250.3	236.4
147.5°	337.9	347.6	337.9	328.2	325.7	309.9	288.8	278.2	270.8	255.9	244.7
150°	328.3	336.2	328.3	320.4	318.3	305.0	287.1	278.2	271.7	258.8	249.1
152.5°	319.9	325.9	319.9	313.9	312.5	301.1	285.9	278.2	272.4	260.7	251.9
155°	310.5	314.4	310.5	306.5	305.5	296.4	284.3	278.2	273.7	264.8	258.1
157.5°	302.9	305.7	302.9	300.2	299.4	292.4	282.9	278.2	275.1	269.0	264.4
160°	298.4	300.0	298.4	296.8	296.4	290.4	282.3	278.2	275.8	270.9	267.2
162.5°	295.5	297.0	295.5	293.9	293.6	288.4	281.6	278.2	276.5	272.9	270.3
165°	291.2	292.8	291.2	289.5	289.2	285.5	280.6	278.2	277.4	275.9	274.7
167.5°	288.2	288.8	288.2	287.5	287.3	284.9	281.7	280.1	279.4	278.1	277.1
170°	287.3	287.3	287.3	287.3	287.3	284.9	281.7	280.1	280.1	280.0	279.9
172.5°	285.0	284.5	285.0	285.6	285.8	283.8	281.4	280.1	280.1	280.1	280.1
175°	283.8	283.8	283.8	283.8	283.8	282.6	280.9	280.1	280.4	281.3	281.8
177.5°	282.6	281.8	282.6	283.2	283.4	282.5	281.2	280.5	280.8	281.4	281.8
180°	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8



TEST NUMBER: P934460

CATALOG NUMBER: SQ4-FA-050U-100D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6
2.5°	1299.8	1292.5	1292.5	1280.4	1275.5	1271.9	1265.9	1247.7	1242.8	1238.0	1245.2
5°	1310.7	1297.3	1287.7	1265.9	1247.7	1240.4	1217.3	1173.7	1144.5	1122.8	1110.7
7.5°	1313.1	1296.2	1278.0	1244.0	1200.3	1181.0	1110.7	1030.7	1008.8	989.4	977.3
10°	1310.7	1291.3	1265.9	1214.9	1111.9	1077.9	1007.5	955.4	942.1	938.4	942.1
12.5°	1302.2	1284.0	1248.9	1164.0	1019.7	996.7	955.4	925.1	922.7	928.8	961.5
15°	1287.7	1270.7	1229.4	1096.1	968.8	951.8	922.7	911.8	925.1	967.5	1065.8
17.5°	1273.1	1253.8	1202.8	1029.4	930.0	917.9	897.2	919.1	994.2	1051.2	1084.0
20°	1253.8	1230.7	1172.4	980.9	902.1	891.2	881.4	979.7	1036.7	1057.3	1075.4
22.5°	1230.7	1206.4	1131.2	947.0	873.0	864.5	870.5	1013.7	1036.7	1051.2	1067.0
25°	1200.3	1179.8	1082.8	920.3	850.0	840.2	863.3	1010.0	1023.3	1027.0	1058.5
27.5°	1172.4	1145.8	1031.9	896.0	822.1	818.4	869.3	994.2	1004.0	1007.5	1041.5
30°	1138.5	1098.5	974.9	870.5	793.0	791.8	870.5	974.9	972.4	982.1	1016.1
32.5°	1103.3	1028.2	910.5	839.0	765.1	763.9	862.1	945.8	943.3	956.7	982.1
35°	1070.7	973.7	823.3	802.7	729.9	731.1	841.4	911.8	913.0	925.1	940.9
37.5°	1036.7	926.3	727.5	762.7	696.0	696.0	813.5	880.3	877.9	881.4	903.3
40°	996.7	852.4	642.7	710.5	664.4	660.8	779.7	846.3	837.9	836.7	866.9
42.5°	954.2	771.1	579.6	641.4	628.1	623.2	738.4	805.1	789.3	793.0	831.8
45°	908.2	749.3	531.1	542.0	590.4	586.9	693.5	757.8	746.9	756.6	796.7
47.5°	862.1	705.7	515.3	449.9	550.4	549.2	643.9	711.8	705.7	715.3	757.8
50°	799.0	657.2	514.1	385.6	505.6	510.4	584.4	666.9	666.9	675.3	720.2
52.5°	717.8	597.8	466.8	349.2	453.4	468.0	532.3	628.1	630.5	639.0	679.0
55°	643.9	535.9	432.9	321.3	391.7	423.1	481.3	588.1	592.9	601.4	637.8
57.5°	575.9	446.2	425.6	288.6	334.7	365.0	436.5	549.2	551.7	559.0	594.1
60°	503.2	322.5	390.4	253.4	284.9	308.0	395.3	503.2	511.7	516.5	546.9
62.5°	420.8	234.0	354.0	229.1	260.7	265.6	361.3	459.5	470.4	474.1	492.3
65°	299.4	196.4	300.7	208.6	235.2	236.4	325.0	414.7	424.3	430.4	443.8
67.5°	202.4	160.0	229.1	189.1	215.8	217.0	289.8	362.5	375.9	380.8	389.2
70°	140.7	106.7	169.8	168.6	194.0	196.4	252.2	315.2	327.3	331.0	335.9
72.5°	103.1	86.1	140.7	151.6	171.0	173.4	213.4	261.9	274.0	277.7	280.1
75°	78.8	90.9	114.0	132.1	145.5	146.7	174.6	213.4	221.9	224.3	225.5
77.5°	63.0	84.9	83.7	106.7	118.8	116.4	137.0	164.9	172.2	172.2	172.2
80°	47.3	66.7	63.0	76.4	87.3	84.9	98.2	117.6	120.0	122.4	121.2
82.5°	35.1	42.4	42.4	48.5	58.2	55.8	65.4	76.4	76.4	76.4	78.8
85°	21.8	24.2	19.4	25.4	32.8	31.6	36.3	41.2	42.4	42.4	40.0
87.5°	13.3	10.9	6.1	9.7	14.6	14.6	17.0	18.2	17.0	17.0	17.0
90°	5.0	3.4	1.9	3.4	5.0	5.3	8.4	12.4	14.4	12.8	9.5
92.5°	33.3	20.4	7.5	20.4	33.3	36.5	51.3	71.0	80.9	70.9	50.9
95°	65.2	41.7	18.2	41.7	65.2	71.1	126.3	199.8	236.6	211.1	160.1
97.5°	72.9	52.1	31.4	52.1	72.9	78.1	170.0	292.7	354.0	338.0	305.8
100°	79.3	60.4	41.6	60.4	79.3	84.0	186.0	322.1	390.2	391.4	393.8
102.5°	85.4	67.9	50.3	67.9	85.4	89.8	193.4	331.4	400.4	420.9	462.0
105°	94.8	79.9	65.1	79.9	94.8	98.6	198.8	332.5	399.3	445.3	537.2
107.5°	107.9	94.1	80.2	94.1	107.9	111.4	199.8	317.7	376.6	440.8	569.1
110°	115.4	102.9	90.4	102.9	115.4	118.6	198.3	304.6	357.7	429.4	572.8



TEST NUMBER: P934460

CATALOG NUMBER: SQ4-FA-050U-100D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	124.3	112.3	100.4	112.3	124.3	127.3	198.3	293.1	340.5	413.9	560.6
115°	137.6	126.6	115.5	126.6	137.6	140.3	200.1	279.9	319.8	390.5	531.9
117.5°	150.5	140.5	130.5	140.5	150.5	153.0	203.9	271.7	305.7	369.5	497.0
120°	158.0	148.7	139.2	148.7	158.0	160.4	206.9	269.0	300.0	358.3	474.9
122.5°	166.7	157.3	147.7	157.3	166.7	169.1	211.3	267.5	295.6	348.1	453.2
125°	178.0	169.4	160.8	169.4	178.0	180.2	217.1	266.3	290.9	335.5	424.7
127.5°	188.9	180.1	171.3	180.1	188.9	191.1	223.0	265.7	287.0	325.2	401.8
130°	195.8	186.5	177.0	186.5	195.8	198.2	227.3	266.0	285.4	319.5	387.7
132.5°	201.7	192.3	182.9	192.3	201.7	204.1	230.8	266.3	284.1	314.6	375.6
135°	208.8	200.1	191.6	200.1	208.8	210.9	234.6	266.0	281.8	307.3	358.5
137.5°	217.5	209.0	200.5	209.0	217.5	219.6	240.3	267.7	281.5	303.0	346.2
140°	223.6	215.7	207.9	215.7	223.6	225.5	243.6	268.0	280.1	298.8	336.2
142.5°	228.0	220.8	213.5	220.8	228.0	229.8	246.6	268.9	280.1	296.5	329.3
145°	234.8	228.5	222.3	228.5	234.8	236.4	250.3	269.0	278.2	291.6	318.4
147.5°	243.2	237.1	231.0	237.1	243.2	244.7	255.9	270.8	278.2	288.8	309.9
150°	247.7	242.1	236.6	242.1	247.7	249.1	258.8	271.7	278.2	287.1	305.0
152.5°	250.9	246.7	242.5	246.7	250.9	251.9	260.7	272.4	278.2	285.9	301.1
155°	257.4	254.3	251.2	254.3	257.4	258.1	264.8	273.7	278.2	284.3	296.4
157.5°	263.7	260.6	257.6	260.6	263.7	264.4	269.0	275.1	278.2	282.9	292.4
160°	266.7	264.3	262.0	264.3	266.7	267.2	270.9	275.8	278.2	282.3	290.4
162.5°	269.8	268.1	266.3	268.1	269.8	270.3	272.9	276.5	278.2	281.6	288.4
165°	274.3	272.6	271.1	272.6	274.3	274.7	275.9	277.4	278.2	280.6	285.5
167.5°	276.9	276.1	275.4	276.1	276.9	277.1	278.1	279.4	280.1	281.7	284.9
170°	279.7	279.0	278.2	279.0	279.7	279.9	280.0	280.1	280.1	281.7	284.9
172.5°	280.1	279.9	279.7	279.9	280.1	280.1	280.1	280.1	280.1	281.4	283.8
175°	281.8	281.8	281.8	281.8	281.8	281.8	281.3	280.4	280.1	280.9	282.6
177.5°	281.8	281.8	281.8	281.8	281.8	281.8	281.4	280.8	280.5	281.2	282.5
180°	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8



TEST NUMBER: P934460

CATALOG NUMBER: SQ4-FA-050U-100D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6	1281.6
2.5°	1236.8	1233.1	1238.0	1224.6	1238.0	1233.1	1236.8	1245.2	1238.0	1242.8	1247.7
5°	1085.2	1079.1	1059.8	1044.0	1059.8	1079.1	1085.2	1110.7	1122.8	1144.5	1173.7
7.5°	970.0	965.1	960.3	950.5	960.3	965.1	970.0	977.3	989.4	1008.8	1030.7
10°	944.5	945.8	953.0	951.8	953.0	945.8	944.5	942.1	938.4	942.1	955.4
12.5°	1010.0	1020.9	1060.9	1058.5	1060.9	1020.9	1010.0	961.5	928.8	922.7	925.1
15°	1085.2	1088.8	1097.3	1098.5	1097.3	1088.8	1085.2	1065.8	967.5	925.1	911.8
17.5°	1092.4	1093.7	1099.8	1099.8	1099.8	1093.7	1092.4	1084.0	1051.2	994.2	919.1
20°	1086.4	1088.8	1101.0	1103.3	1101.0	1088.8	1086.4	1075.4	1057.3	1036.7	979.7
22.5°	1084.0	1088.8	1098.5	1097.3	1098.5	1088.8	1084.0	1067.0	1051.2	1036.7	1013.7
25°	1071.9	1071.9	1073.1	1074.3	1073.1	1071.9	1071.9	1058.5	1027.0	1023.3	1010.0
27.5°	1046.4	1048.8	1056.1	1054.9	1056.1	1048.8	1046.4	1041.5	1007.5	1004.0	994.2
30°	1023.3	1020.9	1014.9	1010.0	1014.9	1020.9	1023.3	1016.1	982.1	972.4	974.9
32.5°	984.5	978.4	972.4	968.8	972.4	978.4	984.5	982.1	956.7	943.3	945.8
35°	938.4	939.7	938.4	934.9	938.4	939.7	938.4	940.9	925.1	913.0	911.8
37.5°	905.8	908.2	907.0	902.1	907.0	908.2	905.8	903.3	881.4	877.9	880.3
40°	871.8	873.0	871.8	868.1	871.8	873.0	871.8	866.9	836.7	837.9	846.3
42.5°	839.0	837.9	834.2	831.8	834.2	837.9	839.0	831.8	793.0	789.3	805.1
45°	801.4	802.7	795.4	791.8	795.4	802.7	801.4	796.7	756.6	746.9	757.8
47.5°	763.9	763.9	757.8	754.2	757.8	763.9	763.9	757.8	715.3	705.7	711.8
50°	723.9	722.7	714.2	713.0	714.2	722.7	723.9	720.2	675.3	666.9	666.9
52.5°	677.8	677.8	679.0	681.4	679.0	677.8	677.8	679.0	639.0	630.5	628.1
55°	637.8	639.0	647.4	649.9	647.4	639.0	637.8	637.8	601.4	592.9	588.1
57.5°	596.5	596.5	602.7	602.7	602.7	596.5	596.5	594.1	559.0	551.7	549.2
60°	549.2	551.7	556.5	555.3	556.5	551.7	549.2	546.9	516.5	511.7	503.2
62.5°	499.5	502.0	503.2	500.8	503.2	502.0	499.5	492.3	474.1	470.4	459.5
65°	447.4	449.9	451.0	448.7	451.0	449.9	447.4	443.8	430.4	424.3	414.7
67.5°	394.1	392.9	391.7	396.4	391.7	392.9	394.1	389.2	380.8	375.9	362.5
70°	339.5	339.5	338.3	340.7	338.3	339.5	339.5	335.9	331.0	327.3	315.2
72.5°	281.3	280.1	284.9	281.3	284.9	280.1	281.3	280.1	277.7	274.0	261.9
75°	224.3	226.8	224.3	228.0	224.3	226.8	224.3	225.5	224.3	221.9	213.4
77.5°	171.0	173.4	171.0	171.0	171.0	173.4	171.0	172.2	172.2	172.2	164.9
80°	121.2	120.0	120.0	118.8	120.0	120.0	121.2	121.2	122.4	120.0	117.6
82.5°	77.6	76.4	76.4	78.8	76.4	76.4	77.6	78.8	76.4	76.4	76.4
85°	42.4	43.7	41.2	41.2	41.2	43.7	42.4	40.0	42.4	42.4	41.2
87.5°	15.8	14.6	14.6	14.6	14.6	14.6	15.8	17.0	17.0	17.0	18.2
90°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	9.5	12.8	14.4	12.4
92.5°	36.0	34.5	28.8	23.0	28.8	34.5	36.0	50.9	70.9	80.9	71.0
95°	122.0	117.6	100.3	83.1	100.3	117.6	122.0	160.1	211.1	236.6	199.8
97.5°	281.6	273.4	240.4	207.5	240.4	273.4	281.6	305.8	338.0	354.0	292.7
100°	395.5	385.7	346.4	307.2	346.4	385.7	395.5	393.8	391.4	390.2	322.1
102.5°	492.7	484.3	450.7	417.1	450.7	484.3	492.7	462.0	420.9	400.4	331.4
105°	606.2	601.7	583.7	565.6	583.7	601.7	606.2	537.2	445.3	399.3	332.5
107.5°	665.2	666.3	670.7	675.1	670.7	666.3	665.2	569.1	440.8	376.6	317.7
110°	680.4	685.1	703.9	722.7	703.9	685.1	680.4	572.8	429.4	357.7	304.6



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CATALOG NUMBER: SQ4-FA-050U-100D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	670.7	678.0	706.9	735.8	706.9	678.0	670.7	560.6	413.9	340.5	293.1
115°	638.0	648.0	688.1	728.2	688.1	648.0	638.0	531.9	390.5	319.8	279.9
117.5°	592.7	603.8	648.4	692.9	648.4	603.8	592.7	497.0	369.5	305.7	271.7
120°	562.4	573.2	616.3	659.5	616.3	573.2	562.4	474.9	358.3	300.0	269.0
122.5°	531.9	542.5	585.2	627.8	585.2	542.5	531.9	453.2	348.1	295.6	267.5
125°	491.6	501.4	540.6	579.9	540.6	501.4	491.6	424.7	335.5	290.9	266.3
127.5°	459.2	467.5	500.6	533.7	500.6	467.5	459.2	401.8	325.2	287.0	265.7
130°	438.8	446.5	477.1	507.7	477.1	446.5	438.8	387.7	319.5	285.4	266.0
132.5°	421.4	428.3	455.6	483.1	455.6	428.3	421.4	375.6	314.6	284.1	266.3
135°	396.8	402.7	426.4	449.9	426.4	402.7	396.8	358.5	307.3	281.8	266.0
137.5°	378.6	383.5	402.8	422.1	402.8	383.5	378.6	346.2	303.0	281.5	267.7
140°	364.1	368.6	386.7	404.8	386.7	368.6	364.1	336.2	298.8	280.1	268.0
142.5°	353.9	357.7	373.3	388.9	373.3	357.7	353.9	329.3	296.5	280.1	268.9
145°	338.5	341.5	353.3	365.1	353.3	341.5	338.5	318.4	291.6	278.2	269.0
147.5°	325.7	328.2	337.9	347.6	337.9	328.2	325.7	309.9	288.8	278.2	270.8
150°	318.3	320.4	328.3	336.2	328.3	320.4	318.3	305.0	287.1	278.2	271.7
152.5°	312.5	313.9	319.9	325.9	319.9	313.9	312.5	301.1	285.9	278.2	272.4
155°	305.5	306.5	310.5	314.4	310.5	306.5	305.5	296.4	284.3	278.2	273.7
157.5°	299.4	300.2	302.9	305.7	302.9	300.2	299.4	292.4	282.9	278.2	275.1
160°	296.4	296.8	298.4	300.0	298.4	296.8	296.4	290.4	282.3	278.2	275.8
162.5°	293.6	293.9	295.5	297.0	295.5	293.9	293.6	288.4	281.6	278.2	276.5
165°	289.2	289.5	291.2	292.8	291.2	289.5	289.2	285.5	280.6	278.2	277.4
167.5°	287.3	287.5	288.2	288.8	288.2	287.5	287.3	284.9	281.7	280.1	279.4
170°	287.3	287.3	287.3	287.3	287.3	287.3	287.3	284.9	281.7	280.1	280.1
172.5°	285.8	285.6	285.0	284.5	285.0	285.6	285.8	283.8	281.4	280.1	280.1
175°	283.8	283.8	283.8	283.8	283.8	283.8	283.8	282.6	280.9	280.1	280.4
177.5°	283.4	283.2	282.6	281.8	282.6	283.2	283.4	282.5	281.2	280.5	280.8
180°	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1281.6	1281.6	1281.6	1281.6	1281.6
2.5°	1265.9	1271.9	1275.5	1280.4	1292.5
5°	1217.3	1240.4	1247.7	1265.9	1287.7
7.5°	1110.7	1181.0	1200.3	1244.0	1278.0
10°	1007.5	1077.9	1111.9	1214.9	1265.9
12.5°	955.4	996.7	1019.7	1164.0	1248.9
15°	922.7	951.8	968.8	1096.1	1229.4
17.5°	897.2	917.9	930.0	1029.4	1202.8
20°	881.4	891.2	902.1	980.9	1172.4
22.5°	870.5	864.5	873.0	947.0	1131.2
25°	863.3	840.2	850.0	920.3	1082.8
27.5°	869.3	818.4	822.1	896.0	1031.9
30°	870.5	791.8	793.0	870.5	974.9
32.5°	862.1	763.9	765.1	839.0	910.5
35°	841.4	731.1	729.9	802.7	823.3
37.5°	813.5	696.0	696.0	762.7	727.5
40°	779.7	660.8	664.4	710.5	642.7
42.5°	738.4	623.2	628.1	641.4	579.6
45°	693.5	586.9	590.4	542.0	531.1
47.5°	643.9	549.2	550.4	449.9	515.3
50°	584.4	510.4	505.6	385.6	514.1
52.5°	532.3	468.0	453.4	349.2	466.8
55°	481.3	423.1	391.7	321.3	432.9
57.5°	436.5	365.0	334.7	288.6	425.6
60°	395.3	308.0	284.9	253.4	390.4
62.5°	361.3	265.6	260.7	229.1	354.0
65°	325.0	236.4	235.2	208.6	300.7
67.5°	289.8	217.0	215.8	189.1	229.1
70°	252.2	196.4	194.0	168.6	169.8
72.5°	213.4	173.4	171.0	151.6	140.7
75°	174.6	146.7	145.5	132.1	114.0
77.5°	137.0	116.4	118.8	106.7	83.7
80°	98.2	84.9	87.3	76.4	63.0
82.5°	65.4	55.8	58.2	48.5	42.4
85°	36.3	31.6	32.8	25.4	19.4
87.5°	17.0	14.6	14.6	9.7	6.1
90°	8.4	5.3	5.0	3.4	1.9
92.5°	51.3	36.5	33.3	20.4	7.5
95°	126.3	71.1	65.2	41.7	18.2
97.5°	170.0	78.1	72.9	52.1	31.4
100°	186.0	84.0	79.3	60.4	41.6
102.5°	193.4	89.8	85.4	67.9	50.3
105°	198.8	98.6	94.8	79.9	65.1
107.5°	199.8	111.4	107.9	94.1	80.2
110°	198.3	118.6	115.4	102.9	90.4



TEST NUMBER: P934460

CATALOG NUMBER: SQ4-FA-050U-100D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	198.3	127.3	124.3	112.3	100.4
115°	200.1	140.3	137.6	126.6	115.5
117.5°	203.9	153.0	150.5	140.5	130.5
120°	206.9	160.4	158.0	148.7	139.2
122.5°	211.3	169.1	166.7	157.3	147.7
125°	217.1	180.2	178.0	169.4	160.8
127.5°	223.0	191.1	188.9	180.1	171.3
130°	227.3	198.2	195.8	186.5	177.0
132.5°	230.8	204.1	201.7	192.3	182.9
135°	234.6	210.9	208.8	200.1	191.6
137.5°	240.3	219.6	217.5	209.0	200.5
140°	243.6	225.5	223.6	215.7	207.9
142.5°	246.6	229.8	228.0	220.8	213.5
145°	250.3	236.4	234.8	228.5	222.3
147.5°	255.9	244.7	243.2	237.1	231.0
150°	258.8	249.1	247.7	242.1	236.6
152.5°	260.7	251.9	250.9	246.7	242.5
155°	264.8	258.1	257.4	254.3	251.2
157.5°	269.0	264.4	263.7	260.6	257.6
160°	270.9	267.2	266.7	264.3	262.0
162.5°	272.9	270.3	269.8	268.1	266.3
165°	275.9	274.7	274.3	272.6	271.1
167.5°	278.1	277.1	276.9	276.1	275.4
170°	280.0	279.9	279.7	279.0	278.2
172.5°	280.1	280.1	280.1	279.9	279.7
175°	281.3	281.8	281.8	281.8	281.8
177.5°	281.4	281.8	281.8	281.8	281.8
180°	281.8	281.8	281.8	281.8	281.8



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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	14.64	15.65	15.46	16.49	17.54	17.44	18.44	18.26	19.29	20.34
	3H	15.13	16.03	15.96	16.89	17.96	18.78	19.69	19.62	20.54	21.62
	4H	15.32	16.18	16.18	17.04	18.13	19.23	20.08	20.08	20.94	22.03
	6H	15.45	16.24	16.32	17.11	18.21	19.51	20.30	20.38	21.17	22.27
	8H	15.46	16.21	16.33	17.09	18.19	19.59	20.34	20.46	21.22	22.32
	12H	15.43	16.15	16.31	17.03	18.15	19.63	20.34	20.50	21.22	22.35
4H	2H	15.68	16.54	16.54	17.40	18.48	17.86	18.72	18.72	19.58	20.67
	3H	16.72	17.43	17.59	18.33	19.43	19.37	20.09	20.24	20.98	22.08
	4H	17.00	17.65	17.88	18.54	19.67	19.90	20.55	20.78	21.44	22.57
	6H	17.14	17.70	18.03	18.61	19.74	20.27	20.83	21.16	21.74	22.87
	8H	17.15	17.67	18.05	18.58	19.72	20.37	20.90	21.27	21.81	22.95
	12H	17.12	17.59	18.04	18.52	19.67	20.43	20.90	21.35	21.83	22.98
8H	4H	17.46	17.99	18.36	18.90	20.04	20.04	20.56	20.94	21.47	22.62
	6H	17.73	18.17	18.66	19.12	20.26	20.47	20.91	21.40	21.86	23.00
	8H	17.78	18.16	18.71	19.10	20.26	20.62	21.01	21.56	21.95	23.11
	12H	17.77	18.10	18.70	19.04	20.25	20.72	21.06	21.66	21.99	23.21
12H	4H	17.48	17.95	18.39	18.88	20.03	20.01	20.48	20.93	21.41	22.56
	6H	17.79	18.18	18.73	19.12	20.28	20.47	20.86	21.41	21.80	22.96
	8H	17.87	18.20	18.80	19.14	20.35	20.64	20.97	21.57	21.91	23.12