

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: P935234

Luminaire Tested: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935234
REPORT IS A COMBINATION OF REPORTS P933746 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

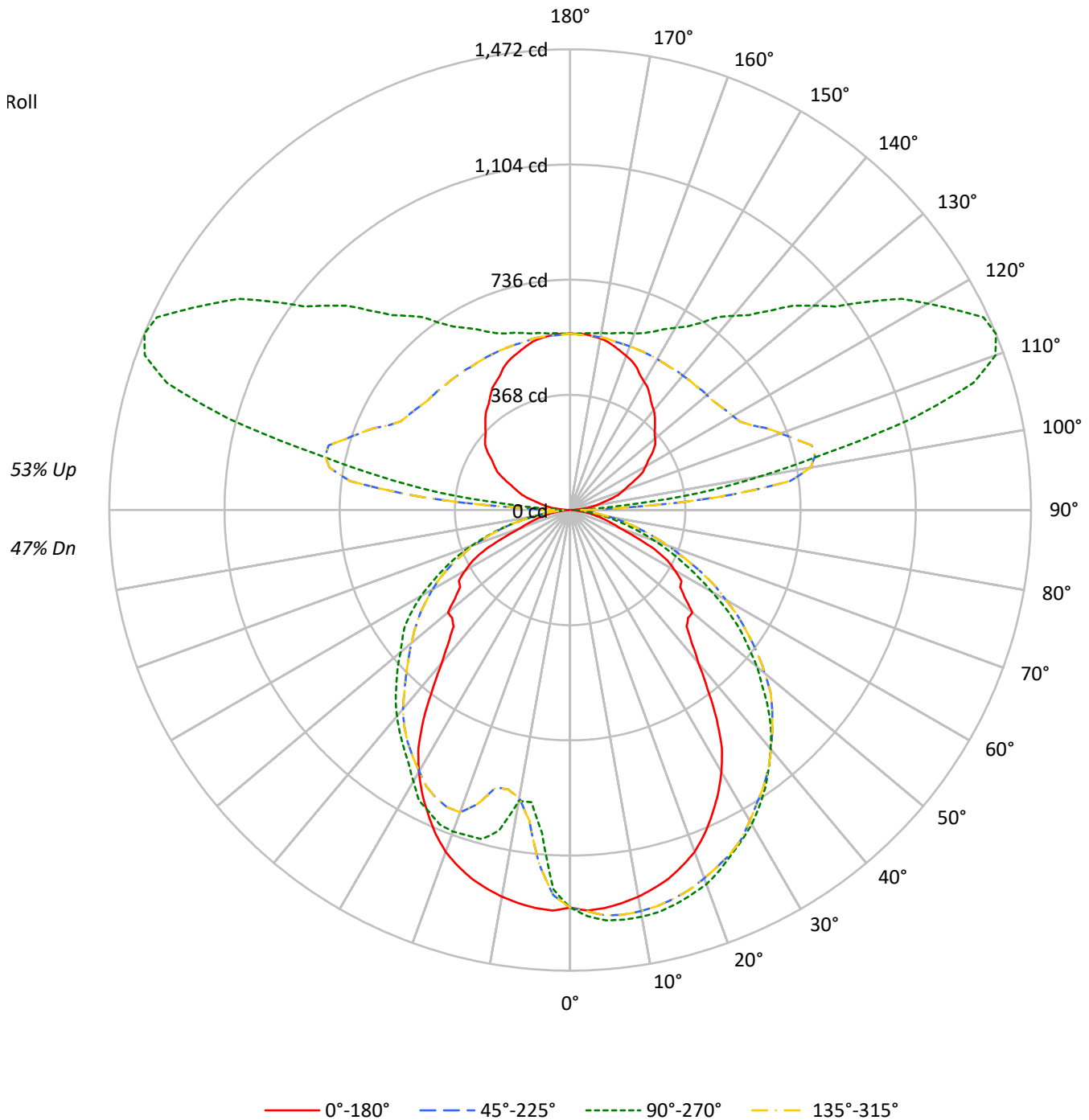
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6950.5 lumens
Efficiency: N/A
Efficacy: 119.8 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: General Diffuse

Input Watts (W): 58
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: P935234
CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

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	0
RCR																		
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	97	93	89	86	89	86	82	79	72	70	67	59	58	56	48	47	46	40
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38	34
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33	28
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	24	21
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	27	24	21	19
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	21	19	16
8	53	41	33	28	49	38	31	27	33	27	23	28	23	20	23	19	17	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13
10	46	34	27	22	43	32	26	21	28	22	19	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11787	11787	11787	11787
5°	11863	11900	11863	9357
10°	11771	11721	11771	8380
15°	11629	11467	11629	9575
20°	11373	11167	11373	9596
25°	10862	10728	10862	9392
30°	10206	10364	10206	8946
35°	9085	9903	9085	8455
40°	7558	9360	7558	8084
45°	6739	8726	6739	7658
50°	7144	7968	7144	7231
55°	6703	7153	6703	6983
60°	6884	6074	6884	6395
65°	6212	5021	6212	5613
70°	4273	4003	4273	4705
75°	3706	2958	3706	3543
80°	2925	1956	2925	2130
85°	1590	1034	1590	879

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 10349 cd/sqm



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.7	1.6
10°-20°	325.6	4.7
20°-30°	503.3	7.2
30°-40°	600.8	8.6
40°-50°	604.4	8.7
50°-60°	525.9	7.6
60°-70°	372.8	5.4
70°-80°	197.3	2.8
80°-90°	51.3	0.7
90°-100°	274.8	4.0
100°-110°	722.5	10.4
110°-120°	749.1	10.8
120°-130°	600.9	8.6
130°-140°	471.5	6.8
140°-150°	361.9	5.2
150°-160°	260.6	3.7
160°-170°	159.5	2.3
170°-180°	53.9	0.8
0°-30°	943.6	13.6
0°-40°	1544.4	22.2
0°-60°	2674.6	38.5
0°-90°	3295.9	47.4
90°-120°	1746.4	25.1
90°-150°	3180.6	45.8
90°-180°	3655.0	52.6
0°-180°	6950.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1270	1270	1270	1270	1270	
5°	1276	1316	1276	1035	1276	121
15°	1219	1304	1219	1089	1219	343
25°	1073	1216	1073	1065	1073	493
35°	816	1085	816	927	816	505
45°	526	894	526	785	526	422
55°	429	660	429	644	429	394
65°	298	398	298	445	298	285
75°	113	189	113	226	113	119
85°	19	48	19	41	19	26
90°	4	14	4	14	4	4
95°	36	166	36	166	36	40
105°	130	1131	130	1131	130	138
115°	231	1457	231	1457	231	228
125°	322	1160	322	1160	322	286
135°	383	900	383	900	383	297
145°	444	730	444	730	444	279
155°	502	629	502	629	502	231
165°	542	586	542	586	542	153
175°	564	568	564	568	564	54
180°	564	564	564	564	564	



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3
2.5°	1281.1	1281.1	1288.4	1290.8	1290.8	1287.1	1283.6	1287.1	1298.0	1301.6	1300.4
5°	1276.4	1286.0	1299.2	1301.6	1304.0	1302.8	1300.4	1302.8	1314.8	1317.2	1318.4
7.5°	1266.8	1284.8	1301.6	1305.2	1308.8	1305.2	1304.0	1306.4	1318.4	1320.8	1320.8
10°	1254.8	1280.0	1299.2	1301.6	1305.2	1301.6	1301.6	1306.4	1318.4	1320.8	1322.1
12.5°	1237.9	1272.8	1290.8	1293.2	1298.0	1296.8	1295.6	1300.4	1312.4	1314.8	1314.8
15°	1218.6	1259.6	1276.4	1278.8	1287.1	1284.8	1284.8	1289.6	1302.8	1306.4	1305.2
17.5°	1192.3	1242.7	1261.9	1265.6	1271.6	1270.3	1271.6	1276.4	1288.4	1290.8	1292.0
20°	1162.2	1219.9	1242.7	1246.3	1252.3	1252.3	1252.3	1258.3	1270.3	1275.1	1275.1
22.5°	1121.3	1195.8	1219.9	1222.3	1229.5	1229.5	1231.9	1240.3	1251.1	1252.3	1252.3
25°	1073.3	1169.4	1189.8	1197.1	1204.3	1207.8	1211.5	1216.3	1219.9	1218.6	1219.9
27.5°	1022.8	1135.8	1162.2	1167.0	1176.6	1180.3	1185.0	1186.3	1187.4	1191.0	1188.6
30°	966.3	1088.8	1128.5	1133.3	1149.0	1151.3	1146.6	1149.0	1155.0	1157.4	1159.8
32.5°	902.5	1019.2	1093.7	1104.5	1118.9	1111.7	1110.5	1114.1	1123.8	1123.8	1126.1
35°	816.0	965.1	1061.3	1070.8	1081.6	1073.3	1078.0	1079.3	1085.3	1088.8	1087.7
37.5°	721.1	918.2	1027.6	1034.8	1043.2	1032.3	1039.6	1043.2	1048.0	1045.6	1045.6
40°	637.0	844.9	988.0	992.7	1000.0	991.5	998.7	1001.1	1003.5	1001.1	1000.0
42.5°	574.5	764.4	945.8	951.8	947.0	953.0	955.5	960.3	956.7	951.8	951.8
45°	526.4	742.7	900.2	907.4	900.2	909.8	913.4	913.4	902.5	900.2	899.0
47.5°	510.8	699.5	854.5	854.5	850.9	862.9	869.0	860.5	849.7	846.1	846.1
50°	509.6	651.4	792.0	787.2	804.0	818.5	812.5	804.0	795.7	782.4	782.4
52.5°	462.7	592.5	711.5	729.5	756.0	764.4	754.7	746.4	731.9	725.9	721.1
55°	429.1	531.2	638.2	674.2	701.9	712.7	694.7	686.2	664.6	661.0	658.6
57.5°	421.9	442.3	570.9	616.6	650.2	649.0	638.2	622.6	604.5	600.9	599.7
60°	387.0	319.6	498.8	552.9	587.7	584.1	574.5	560.1	543.2	540.9	538.4
62.5°	350.9	232.0	417.1	478.4	527.6	526.4	518.0	496.4	484.4	478.4	473.6
65°	298.1	194.7	296.8	397.8	468.7	471.1	453.1	437.4	424.3	417.1	415.8
67.5°	227.1	158.6	200.7	331.7	412.2	409.8	387.0	379.8	362.9	359.3	352.1
70°	168.3	105.8	139.4	269.3	356.9	350.9	332.9	324.5	308.9	300.5	295.6
72.5°	139.4	85.3	102.2	209.1	300.5	293.3	277.6	268.0	254.8	247.6	242.8
75°	113.0	90.1	78.1	155.0	244.0	239.1	224.8	215.1	204.3	194.7	195.9
77.5°	83.0	84.1	62.5	114.2	193.5	186.3	177.8	165.8	161.0	151.5	151.5
80°	62.5	66.1	46.8	78.1	139.4	139.4	132.2	123.8	115.3	110.6	110.6
82.5°	42.0	42.0	34.8	49.3	95.0	91.3	86.5	84.1	79.3	77.0	77.0
85°	19.2	24.0	21.6	30.0	51.7	54.1	54.1	51.7	50.5	48.0	49.3
87.5°	6.0	10.8	13.2	16.8	26.5	27.7	28.8	28.8	28.8	30.0	30.0
90°	3.8	6.8	9.8	10.6	16.6	24.7	28.7	25.6	19.2	14.4	14.4
92.5°	15.1	40.8	66.6	73.0	102.7	142.2	161.9	141.9	101.9	71.9	69.0
95°	36.3	83.4	130.5	142.3	252.6	399.7	473.3	422.3	320.5	244.1	235.4
97.5°	62.8	104.3	145.9	156.3	340.3	585.6	708.2	676.0	611.6	563.3	546.9
100°	83.2	120.9	158.5	168.0	372.2	644.5	780.6	782.9	787.6	791.1	771.5
102.5°	100.6	135.8	170.9	179.7	386.9	662.9	801.0	842.1	924.1	985.6	968.8
105°	130.2	159.9	189.7	197.1	397.7	665.0	798.8	890.7	1074.6	1212.6	1203.6
107.5°	160.5	188.2	215.9	222.9	399.7	635.4	753.3	881.6	1138.2	1330.7	1332.9
110°	180.8	205.9	231.0	237.2	396.6	609.2	715.4	858.9	1145.8	1360.9	1370.4



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	200.9	224.8	248.6	254.6	396.8	586.3	681.0	827.9	1121.4	1341.6	1356.1
115°	231.1	253.2	275.2	280.7	400.4	560.1	639.8	781.3	1064.1	1276.2	1296.2
117.5°	261.1	281.1	301.1	306.1	407.9	543.6	611.5	739.1	994.3	1185.8	1208.0
120°	278.4	297.3	316.1	320.8	413.9	538.1	600.1	716.7	949.9	1124.9	1146.5
122.5°	295.5	314.6	333.6	338.3	422.6	535.1	591.4	696.3	906.4	1063.9	1085.2
125°	321.6	338.9	356.2	360.6	434.4	532.7	581.9	671.1	849.5	983.3	1003.0
127.5°	342.8	360.2	377.8	382.1	446.1	531.3	574.0	650.6	803.8	918.6	935.2
130°	354.1	373.0	391.8	396.5	454.6	532.2	571.0	639.2	775.6	877.8	893.1
132.5°	365.9	384.7	403.5	408.2	461.5	532.7	568.3	629.3	751.4	843.0	856.7
135°	383.3	400.4	417.6	421.9	469.2	532.2	563.8	614.9	717.1	793.7	805.6
137.5°	401.1	418.1	435.0	439.3	480.5	535.5	563.0	606.2	692.6	757.5	767.1
140°	415.8	431.4	447.1	451.0	487.5	536.0	560.3	597.6	672.3	728.3	737.4
142.5°	427.2	441.6	456.1	459.7	493.3	538.0	560.3	593.1	658.7	707.9	715.7
145°	444.5	457.2	469.7	472.9	500.8	538.1	556.6	583.4	637.0	677.2	683.1
147.5°	462.0	474.3	486.5	489.6	511.9	541.7	556.6	577.7	619.9	651.6	656.5
150°	473.3	484.4	495.5	498.3	517.8	543.7	556.6	574.4	610.0	636.7	640.7
152.5°	485.0	493.4	501.8	503.9	521.5	544.9	556.6	571.8	602.2	625.0	628.0
155°	502.5	508.7	514.9	516.5	529.9	547.7	556.6	568.7	592.9	611.0	613.0
157.5°	515.3	521.4	527.4	529.0	538.1	550.4	556.6	566.0	584.8	598.9	600.3
160°	524.0	528.8	533.4	534.6	542.0	551.7	556.6	564.7	580.8	592.9	593.7
162.5°	532.7	536.2	539.8	540.7	546.0	553.1	556.6	563.4	577.0	587.2	587.9
165°	542.1	545.3	548.5	549.3	551.8	555.0	556.6	561.5	571.3	578.5	579.3
167.5°	550.9	552.4	554.0	554.3	556.3	559.0	560.3	563.5	569.9	574.7	575.1
170°	556.6	558.1	559.6	560.0	560.1	560.2	560.3	563.5	569.9	574.7	574.7
172.5°	559.6	560.0	560.2	560.3	560.3	560.3	560.3	562.9	567.9	571.7	571.4
175°	563.8	563.8	563.8	563.8	562.6	561.1	560.3	562.0	565.2	567.5	567.5
177.5°	563.8	563.8	563.8	563.8	562.9	561.7	561.1	562.3	564.9	566.8	566.4
180°	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3
2.5°	1302.8	1299.2	1302.8	1300.4	1301.6	1298.0	1287.1	1283.6	1287.1	1290.8	1290.8
5°	1318.4	1316.1	1318.4	1318.4	1317.2	1314.8	1302.8	1300.4	1302.8	1304.0	1301.6
7.5°	1323.2	1319.6	1323.2	1320.8	1320.8	1318.4	1306.4	1304.0	1305.2	1308.8	1305.2
10°	1323.2	1319.6	1323.2	1322.1	1320.8	1318.4	1306.4	1301.6	1301.6	1305.2	1301.6
12.5°	1317.2	1314.8	1317.2	1314.8	1314.8	1312.4	1300.4	1295.6	1296.8	1298.0	1293.2
15°	1307.6	1304.0	1307.6	1305.2	1306.4	1302.8	1289.6	1284.8	1284.8	1287.1	1278.8
17.5°	1293.2	1288.4	1293.2	1292.0	1290.8	1288.4	1276.4	1271.6	1270.3	1271.6	1265.6
20°	1276.4	1272.8	1276.4	1275.1	1275.1	1270.3	1258.3	1252.3	1252.3	1252.3	1246.3
22.5°	1249.9	1246.3	1249.9	1252.3	1252.3	1251.1	1240.3	1231.9	1229.5	1229.5	1222.3
25°	1219.9	1216.3	1219.9	1219.9	1218.6	1219.9	1216.3	1211.5	1207.8	1204.3	1197.1
27.5°	1191.0	1188.6	1191.0	1188.6	1191.0	1187.4	1186.3	1185.0	1180.3	1176.6	1167.0
30°	1162.2	1159.8	1162.2	1159.8	1157.4	1155.0	1149.0	1146.6	1151.3	1149.0	1133.3
32.5°	1126.1	1123.8	1126.1	1126.1	1123.8	1123.8	1114.1	1110.5	1111.7	1118.9	1104.5
35°	1088.8	1085.3	1088.8	1087.7	1088.8	1085.3	1079.3	1078.0	1073.3	1081.6	1070.8
37.5°	1045.6	1042.0	1045.6	1045.6	1045.6	1048.0	1043.2	1039.6	1032.3	1043.2	1034.8
40°	1001.1	996.3	1001.1	1000.0	1001.1	1003.5	1001.1	998.7	991.5	1000.0	992.7
42.5°	950.7	949.5	950.7	951.8	951.8	956.7	960.3	955.5	953.0	947.0	951.8
45°	896.5	894.2	896.5	899.0	900.2	902.5	913.4	913.4	909.8	900.2	907.4
47.5°	838.9	832.9	838.9	846.1	846.1	849.7	860.5	869.0	862.9	850.9	854.5
50°	777.6	778.8	777.6	782.4	782.4	795.7	804.0	812.5	818.5	804.0	787.2
52.5°	717.5	716.3	717.5	721.1	725.9	731.9	746.4	754.7	764.4	756.0	729.5
55°	657.4	659.9	657.4	658.6	661.0	664.6	686.2	694.7	712.7	701.9	674.2
57.5°	597.4	593.7	597.4	599.7	600.9	604.5	622.6	638.2	649.0	650.2	616.6
60°	527.6	522.8	527.6	538.4	540.9	543.2	560.1	574.5	584.1	587.7	552.9
62.5°	466.3	457.9	466.3	473.6	478.4	484.4	496.4	518.0	526.4	527.6	478.4
65°	401.4	397.8	401.4	415.8	417.1	424.3	437.4	453.1	471.1	468.7	397.8
67.5°	342.6	342.6	342.6	352.1	359.3	362.9	379.8	387.0	409.8	412.2	331.7
70°	288.4	287.3	288.4	295.6	300.5	308.9	324.5	332.9	350.9	356.9	269.3
72.5°	236.8	235.6	236.8	242.8	247.6	254.8	268.0	277.6	293.3	300.5	209.1
75°	191.1	188.7	191.1	195.9	194.7	204.3	215.1	224.8	239.1	244.0	155.0
77.5°	146.6	146.6	146.6	151.5	151.5	161.0	165.8	177.8	186.3	193.5	114.2
80°	109.3	108.2	109.3	110.6	110.6	115.3	123.8	132.2	139.4	139.4	78.1
82.5°	77.0	74.5	77.0	77.0	77.0	79.3	84.1	86.5	91.3	95.0	49.3
85°	48.0	48.0	48.0	49.3	48.0	50.5	51.7	54.1	54.1	51.7	30.0
87.5°	31.3	30.0	31.3	30.0	30.0	28.8	28.8	28.8	27.7	26.5	16.8
90°	14.4	14.4	14.4	14.4	14.4	19.2	25.6	28.7	24.7	16.6	10.6
92.5°	57.6	46.1	57.6	69.0	71.9	101.9	141.9	161.9	142.2	102.7	73.0
95°	200.8	166.1	200.8	235.4	244.1	320.5	422.3	473.3	399.7	252.6	142.3
97.5°	480.9	415.1	480.9	546.9	563.3	611.6	676.0	708.2	585.6	340.3	156.3
100°	693.0	614.5	693.0	771.5	791.1	787.6	782.9	780.6	644.5	372.2	168.0
102.5°	901.5	834.3	901.5	968.8	985.6	924.1	842.1	801.0	662.9	386.9	179.7
105°	1167.4	1131.3	1167.4	1203.6	1212.6	1074.6	890.7	798.8	665.0	397.7	197.1
107.5°	1341.6	1350.4	1341.6	1332.9	1330.7	1138.2	881.6	753.3	635.4	399.7	222.9
110°	1408.0	1445.7	1408.0	1370.4	1360.9	1145.8	858.9	715.4	609.2	396.6	237.2



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1413.9	1471.8	1413.9	1356.1	1341.6	1121.4	827.9	681.0	586.3	396.8	254.6
115°	1376.5	1456.7	1376.5	1296.2	1276.2	1064.1	781.3	639.8	560.1	400.4	280.7
117.5°	1297.0	1385.9	1297.0	1208.0	1185.8	994.3	739.1	611.5	543.6	407.9	306.1
120°	1232.9	1319.3	1232.9	1146.5	1124.9	949.9	716.7	600.1	538.1	413.9	320.8
122.5°	1170.5	1255.8	1170.5	1085.2	1063.9	906.4	696.3	591.4	535.1	422.6	338.3
125°	1081.5	1160.1	1081.5	1003.0	983.3	849.5	671.1	581.9	532.7	434.4	360.6
127.5°	1001.5	1067.7	1001.5	935.2	918.6	803.8	650.6	574.0	531.3	446.1	382.1
130°	954.3	1015.5	954.3	893.1	877.8	775.6	639.2	571.0	532.2	454.6	396.5
132.5°	911.5	966.3	911.5	856.7	843.0	751.4	629.3	568.3	532.7	461.5	408.2
135°	852.8	900.1	852.8	805.6	793.7	717.1	614.9	563.8	532.2	469.2	421.9
137.5°	805.8	844.5	805.8	767.1	757.5	692.6	606.2	563.0	535.5	480.5	439.3
140°	773.6	809.7	773.6	737.4	728.3	672.3	597.6	560.3	536.0	487.5	451.0
142.5°	746.8	777.9	746.8	715.7	707.9	658.7	593.1	560.3	538.0	493.3	459.7
145°	706.7	730.3	706.7	683.1	677.2	637.0	583.4	556.6	538.1	500.8	472.9
147.5°	676.0	695.4	676.0	656.5	651.6	619.9	577.7	556.6	541.7	511.9	489.6
150°	656.5	672.3	656.5	640.7	636.7	610.0	574.4	556.6	543.7	517.8	498.3
152.5°	639.9	651.9	639.9	628.0	625.0	602.2	571.8	556.6	544.9	521.5	503.9
155°	620.9	628.8	620.9	613.0	611.0	592.9	568.7	556.6	547.7	529.9	516.5
157.5°	605.9	611.5	605.9	600.3	598.9	584.8	566.0	556.6	550.4	538.1	529.0
160°	596.9	600.1	596.9	593.7	592.9	580.8	564.7	556.6	551.7	542.0	534.6
162.5°	591.0	594.0	591.0	587.9	587.2	577.0	563.4	556.6	553.1	546.0	540.7
165°	582.5	585.7	582.5	579.3	578.5	571.3	561.5	556.6	555.0	551.8	549.3
167.5°	576.3	577.7	576.3	575.1	574.7	569.9	563.5	560.3	559.0	556.3	554.3
170°	574.7	574.7	574.7	574.7	574.7	569.9	563.5	560.3	560.2	560.1	560.0
172.5°	570.3	569.1	570.3	571.4	571.7	567.9	562.9	560.3	560.3	560.3	560.3
175°	567.5	567.5	567.5	567.5	567.5	565.2	562.0	560.3	561.1	562.6	563.8
177.5°	565.2	563.8	565.2	566.4	566.8	564.9	562.3	561.1	561.7	562.9	563.8
180°	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3
2.5°	1288.4	1281.1	1281.1	1269.1	1264.3	1260.8	1254.8	1236.7	1231.9	1227.1	1234.3
5°	1299.2	1286.0	1276.4	1254.8	1236.7	1229.5	1206.6	1163.4	1134.5	1112.9	1100.9
7.5°	1301.6	1284.8	1266.8	1233.1	1189.8	1170.6	1100.9	1021.6	1000.0	980.7	968.7
10°	1299.2	1280.0	1254.8	1204.3	1102.1	1068.5	998.7	947.0	933.8	930.2	933.8
12.5°	1290.8	1272.8	1237.9	1153.8	1010.8	988.0	947.0	917.0	914.6	920.6	953.0
15°	1276.4	1259.6	1218.6	1086.5	960.3	943.5	914.6	903.8	917.0	959.0	1056.5
17.5°	1261.9	1242.7	1192.3	1020.3	921.8	909.8	889.4	911.0	985.5	1042.0	1074.5
20°	1242.7	1219.9	1162.2	972.3	894.2	883.3	873.7	971.1	1027.6	1048.0	1066.0
22.5°	1219.9	1195.8	1121.3	938.7	865.3	856.9	862.9	1004.8	1027.6	1042.0	1057.6
25°	1189.8	1169.4	1073.3	912.2	842.5	832.9	855.7	1001.1	1014.3	1018.0	1049.2
27.5°	1162.2	1135.8	1022.8	888.2	814.9	811.2	861.7	985.5	995.1	998.7	1032.3
30°	1128.5	1088.8	966.3	862.9	786.0	784.8	862.9	966.3	963.9	973.5	1007.2
32.5°	1093.7	1019.2	902.5	831.7	758.4	757.2	854.5	937.5	935.0	948.3	973.5
35°	1061.3	965.1	816.0	795.7	723.5	724.7	834.0	903.8	905.0	917.0	932.7
37.5°	1027.6	918.2	721.1	756.0	689.9	689.9	806.4	872.5	870.2	873.7	895.4
40°	988.0	844.9	637.0	704.2	658.6	655.0	772.8	838.9	830.5	829.3	859.3
42.5°	945.8	764.4	574.5	635.7	622.6	617.7	731.9	798.0	782.4	786.0	824.5
45°	900.2	742.7	526.4	537.2	585.3	581.7	687.4	751.2	740.4	750.0	789.7
47.5°	854.5	699.5	510.8	445.9	545.6	544.4	638.2	705.5	699.5	709.1	751.2
50°	792.0	651.4	509.6	382.2	501.2	505.9	579.3	661.0	661.0	669.4	713.9
52.5°	711.5	592.5	462.7	346.1	449.5	463.9	527.6	622.6	624.9	633.4	673.0
55°	638.2	531.2	429.1	318.5	388.2	419.4	477.1	582.9	587.7	596.1	632.2
57.5°	570.9	442.3	421.9	286.1	331.7	361.8	432.6	544.4	546.9	554.1	588.9
60°	498.8	319.6	387.0	251.2	282.4	305.3	391.8	498.8	507.2	511.9	542.1
62.5°	417.1	232.0	350.9	227.1	258.4	263.2	358.1	455.5	466.3	469.9	487.9
65°	296.8	194.7	298.1	206.8	233.1	234.3	322.1	411.1	420.6	426.6	439.9
67.5°	200.7	158.6	227.1	187.5	213.9	215.1	287.3	359.3	372.6	377.4	385.8
70°	139.4	105.8	168.3	167.1	192.3	194.7	250.0	312.5	324.5	328.1	332.9
72.5°	102.2	85.3	139.4	150.3	169.5	171.8	211.5	259.6	271.6	275.3	277.6
75°	78.1	90.1	113.0	131.0	144.2	145.5	173.1	211.5	220.0	222.3	223.5
77.5°	62.5	84.1	83.0	105.8	117.8	115.3	135.8	163.5	170.6	170.6	170.6
80°	46.8	66.1	62.5	75.7	86.5	84.1	97.3	116.6	119.0	121.3	120.2
82.5°	34.8	42.0	42.0	48.0	57.7	55.3	64.9	75.7	75.7	75.7	78.1
85°	21.6	24.0	19.2	25.2	32.5	31.3	36.0	40.8	42.0	42.0	39.7
87.5°	13.2	10.8	6.0	9.6	14.5	14.5	16.8	18.0	16.8	16.8	16.8
90°	9.8	6.8	3.8	6.8	9.8	10.6	16.6	24.7	28.7	25.6	19.2
92.5°	66.6	40.8	15.1	40.8	66.6	73.0	102.7	142.2	161.9	141.9	101.9
95°	130.5	83.4	36.3	83.4	130.5	142.3	252.6	399.7	473.3	422.3	320.5
97.5°	145.9	104.3	62.8	104.3	145.9	156.3	340.3	585.6	708.2	676.0	611.6
100°	158.5	120.9	83.2	120.9	158.5	168.0	372.2	644.5	780.6	782.9	787.6
102.5°	170.9	135.8	100.6	135.8	170.9	179.7	386.9	662.9	801.0	842.1	924.1
105°	189.7	159.9	130.2	159.9	189.7	197.1	397.7	665.0	798.8	890.7	1074.6
107.5°	215.9	188.2	160.5	188.2	215.9	222.9	399.7	635.4	753.3	881.6	1138.2
110°	231.0	205.9	180.8	205.9	231.0	237.2	396.6	609.2	715.4	858.9	1145.8



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	248.6	224.8	200.9	224.8	248.6	254.6	396.8	586.3	681.0	827.9	1121.4
115°	275.2	253.2	231.1	253.2	275.2	280.7	400.4	560.1	639.8	781.3	1064.1
117.5°	301.1	281.1	261.1	281.1	301.1	306.1	407.9	543.6	611.5	739.1	994.3
120°	316.1	297.3	278.4	297.3	316.1	320.8	413.9	538.1	600.1	716.7	949.9
122.5°	333.6	314.6	295.5	314.6	333.6	338.3	422.6	535.1	591.4	696.3	906.4
125°	356.2	338.9	321.6	338.9	356.2	360.6	434.4	532.7	581.9	671.1	849.5
127.5°	377.8	360.2	342.8	360.2	377.8	382.1	446.1	531.3	574.0	650.6	803.8
130°	391.8	373.0	354.1	373.0	391.8	396.5	454.6	532.2	571.0	639.2	775.6
132.5°	403.5	384.7	365.9	384.7	403.5	408.2	461.5	532.7	568.3	629.3	751.4
135°	417.6	400.4	383.3	400.4	417.6	421.9	469.2	532.2	563.8	614.9	717.1
137.5°	435.0	418.1	401.1	418.1	435.0	439.3	480.5	535.5	563.0	606.2	692.6
140°	447.1	431.4	415.8	431.4	447.1	451.0	487.5	536.0	560.3	597.6	672.3
142.5°	456.1	441.6	427.2	441.6	456.1	459.7	493.3	538.0	560.3	593.1	658.7
145°	469.7	457.2	444.5	457.2	469.7	472.9	500.8	538.1	556.6	583.4	637.0
147.5°	486.5	474.3	462.0	474.3	486.5	489.6	511.9	541.7	556.6	577.7	619.9
150°	495.5	484.4	473.3	484.4	495.5	498.3	517.8	543.7	556.6	574.4	610.0
152.5°	501.8	493.4	485.0	493.4	501.8	503.9	521.5	544.9	556.6	571.8	602.2
155°	514.9	508.7	502.5	508.7	514.9	516.5	529.9	547.7	556.6	568.7	592.9
157.5°	527.4	521.4	515.3	521.4	527.4	529.0	538.1	550.4	556.6	566.0	584.8
160°	533.4	528.8	524.0	528.8	533.4	534.6	542.0	551.7	556.6	564.7	580.8
162.5°	539.8	536.2	532.7	536.2	539.8	540.7	546.0	553.1	556.6	563.4	577.0
165°	548.5	545.3	542.1	545.3	548.5	549.3	551.8	555.0	556.6	561.5	571.3
167.5°	554.0	552.4	550.9	552.4	554.0	554.3	556.3	559.0	560.3	563.5	569.9
170°	559.6	558.1	556.6	558.1	559.6	560.0	560.1	560.2	560.3	563.5	569.9
172.5°	560.2	560.0	559.6	560.0	560.2	560.3	560.3	560.3	560.3	562.9	567.9
175°	563.8	563.8	563.8	563.8	563.8	563.8	562.6	561.1	560.3	562.0	565.2
177.5°	563.8	563.8	563.8	563.8	563.8	563.8	562.9	561.7	561.1	562.3	564.9
180°	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3
2.5°	1225.9	1222.3	1227.1	1213.8	1227.1	1222.3	1225.9	1234.3	1227.1	1231.9	1236.7
5°	1075.6	1069.6	1050.4	1034.8	1050.4	1069.6	1075.6	1100.9	1112.9	1134.5	1163.4
7.5°	961.5	956.7	951.8	942.2	951.8	956.7	961.5	968.7	980.7	1000.0	1021.6
10°	936.2	937.5	944.7	943.5	944.7	937.5	936.2	933.8	930.2	933.8	947.0
12.5°	1001.1	1012.0	1051.6	1049.2	1051.6	1012.0	1001.1	953.0	920.6	914.6	917.0
15°	1075.6	1079.3	1087.7	1088.8	1087.7	1079.3	1075.6	1056.5	959.0	917.0	903.8
17.5°	1082.8	1084.1	1090.1	1090.1	1090.1	1084.1	1082.8	1074.5	1042.0	985.5	911.0
20°	1076.8	1079.3	1091.3	1093.7	1091.3	1079.3	1076.8	1066.0	1048.0	1027.6	971.1
22.5°	1074.5	1079.3	1088.8	1087.7	1088.8	1079.3	1074.5	1057.6	1042.0	1027.6	1004.8
25°	1062.5	1062.5	1063.6	1064.8	1063.6	1062.5	1062.5	1049.2	1018.0	1014.3	1001.1
27.5°	1037.2	1039.6	1046.8	1045.6	1046.8	1039.6	1037.2	1032.3	998.7	995.1	985.5
30°	1014.3	1012.0	1006.0	1001.1	1006.0	1012.0	1014.3	1007.2	973.5	963.9	966.3
32.5°	975.9	969.9	963.9	960.3	963.9	969.9	975.9	973.5	948.3	935.0	937.5
35°	930.2	931.5	930.2	926.6	930.2	931.5	930.2	932.7	917.0	905.0	903.8
37.5°	897.8	900.2	899.0	894.2	899.0	900.2	897.8	895.4	873.7	870.2	872.5
40°	864.2	865.3	864.2	860.5	864.2	865.3	864.2	859.3	829.3	830.5	838.9
42.5°	831.7	830.5	826.9	824.5	826.9	830.5	831.7	824.5	786.0	782.4	798.0
45°	794.4	795.7	788.4	784.8	788.4	795.7	794.4	789.7	750.0	740.4	751.2
47.5°	757.2	757.2	751.2	747.5	751.2	757.2	757.2	751.2	709.1	699.5	705.5
50°	717.5	716.3	707.9	706.7	707.9	716.3	717.5	713.9	669.4	661.0	661.0
52.5°	671.9	671.9	673.0	675.4	673.0	671.9	671.9	673.0	633.4	624.9	622.6
55°	632.2	633.4	641.7	644.2	641.7	633.4	632.2	632.2	596.1	587.7	582.9
57.5°	591.3	591.3	597.4	597.4	597.4	591.3	591.3	588.9	554.1	546.9	544.4
60°	544.4	546.9	551.6	550.4	551.6	546.9	544.4	542.1	511.9	507.2	498.8
62.5°	495.1	497.6	498.8	496.4	498.8	497.6	495.1	487.9	469.9	466.3	455.5
65°	443.4	445.9	447.1	444.7	447.1	445.9	443.4	439.9	426.6	420.6	411.1
67.5°	390.6	389.4	388.2	393.0	388.2	389.4	390.6	385.8	377.4	372.6	359.3
70°	336.5	336.5	335.3	337.7	335.3	336.5	336.5	332.9	328.1	324.5	312.5
72.5°	278.8	277.6	282.4	278.8	282.4	277.6	278.8	277.6	275.3	271.6	259.6
75°	222.3	224.8	222.3	226.0	222.3	224.8	222.3	223.5	222.3	220.0	211.5
77.5°	169.5	171.8	169.5	169.5	169.5	171.8	169.5	170.6	170.6	170.6	163.5
80°	120.2	119.0	119.0	117.8	119.0	119.0	120.2	120.2	121.3	119.0	116.6
82.5°	77.0	75.7	75.7	78.1	75.7	75.7	77.0	78.1	75.7	75.7	75.7
85°	42.0	43.3	40.8	40.8	40.8	43.3	42.0	39.7	42.0	42.0	40.8
87.5°	15.6	14.5	14.5	14.5	14.5	14.5	15.6	16.8	16.8	16.8	18.0
90°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	19.2	25.6	28.7	24.7
92.5°	71.9	69.0	57.6	46.1	57.6	69.0	71.9	101.9	141.9	161.9	142.2
95°	244.1	235.4	200.8	166.1	200.8	235.4	244.1	320.5	422.3	473.3	399.7
97.5°	563.3	546.9	480.9	415.1	480.9	546.9	563.3	611.6	676.0	708.2	585.6
100°	791.1	771.5	693.0	614.5	693.0	771.5	791.1	787.6	782.9	780.6	644.5
102.5°	985.6	968.8	901.5	834.3	901.5	968.8	985.6	924.1	842.1	801.0	662.9
105°	1212.6	1203.6	1167.4	1131.3	1167.4	1203.6	1212.6	1074.6	890.7	798.8	665.0
107.5°	1330.7	1332.9	1341.6	1350.4	1341.6	1332.9	1330.7	1138.2	881.6	753.3	635.4
110°	1360.9	1370.4	1408.0	1445.7	1408.0	1370.4	1360.9	1145.8	858.9	715.4	609.2



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1341.6	1356.1	1413.9	1471.8	1413.9	1356.1	1341.6	1121.4	827.9	681.0	586.3
115°	1276.2	1296.2	1376.5	1456.7	1376.5	1296.2	1276.2	1064.1	781.3	639.8	560.1
117.5°	1185.8	1208.0	1297.0	1385.9	1297.0	1208.0	1185.8	994.3	739.1	611.5	543.6
120°	1124.9	1146.5	1232.9	1319.3	1232.9	1146.5	1124.9	949.9	716.7	600.1	538.1
122.5°	1063.9	1085.2	1170.5	1255.8	1170.5	1085.2	1063.9	906.4	696.3	591.4	535.1
125°	983.3	1003.0	1081.5	1160.1	1081.5	1003.0	983.3	849.5	671.1	581.9	532.7
127.5°	918.6	935.2	1001.5	1067.7	1001.5	935.2	918.6	803.8	650.6	574.0	531.3
130°	877.8	893.1	954.3	1015.5	954.3	893.1	877.8	775.6	639.2	571.0	532.2
132.5°	843.0	856.7	911.5	966.3	911.5	856.7	843.0	751.4	629.3	568.3	532.7
135°	793.7	805.6	852.8	900.1	852.8	805.6	793.7	717.1	614.9	563.8	532.2
137.5°	757.5	767.1	805.8	844.5	805.8	767.1	757.5	692.6	606.2	563.0	535.5
140°	728.3	737.4	773.6	809.7	773.6	737.4	728.3	672.3	597.6	560.3	536.0
142.5°	707.9	715.7	746.8	777.9	746.8	715.7	707.9	658.7	593.1	560.3	538.0
145°	677.2	683.1	706.7	730.3	706.7	683.1	677.2	637.0	583.4	556.6	538.1
147.5°	651.6	656.5	676.0	695.4	676.0	656.5	651.6	619.9	577.7	556.6	541.7
150°	636.7	640.7	656.5	672.3	656.5	640.7	636.7	610.0	574.4	556.6	543.7
152.5°	625.0	628.0	639.9	651.9	639.9	628.0	625.0	602.2	571.8	556.6	544.9
155°	611.0	613.0	620.9	628.8	620.9	613.0	611.0	592.9	568.7	556.6	547.7
157.5°	598.9	600.3	605.9	611.5	605.9	600.3	598.9	584.8	566.0	556.6	550.4
160°	592.9	593.7	596.9	600.1	596.9	593.7	592.9	580.8	564.7	556.6	551.7
162.5°	587.2	587.9	591.0	594.0	591.0	587.9	587.2	577.0	563.4	556.6	553.1
165°	578.5	579.3	582.5	585.7	582.5	579.3	578.5	571.3	561.5	556.6	555.0
167.5°	574.7	575.1	576.3	577.7	576.3	575.1	574.7	569.9	563.5	560.3	559.0
170°	574.7	574.7	574.7	574.7	574.7	574.7	574.7	569.9	563.5	560.3	560.2
172.5°	571.7	571.4	570.3	569.1	570.3	571.4	571.7	567.9	562.9	560.3	560.3
175°	567.5	567.5	567.5	567.5	567.5	567.5	567.5	565.2	562.0	560.3	561.1
177.5°	566.8	566.4	565.2	563.8	565.2	566.4	566.8	564.9	562.3	561.1	561.7
180°	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1270.3	1270.3	1270.3	1270.3	1270.3
2.5°	1254.8	1260.8	1264.3	1269.1	1281.1
5°	1206.6	1229.5	1236.7	1254.8	1276.4
7.5°	1100.9	1170.6	1189.8	1233.1	1266.8
10°	998.7	1068.5	1102.1	1204.3	1254.8
12.5°	947.0	988.0	1010.8	1153.8	1237.9
15°	914.6	943.5	960.3	1086.5	1218.6
17.5°	889.4	909.8	921.8	1020.3	1192.3
20°	873.7	883.3	894.2	972.3	1162.2
22.5°	862.9	856.9	865.3	938.7	1121.3
25°	855.7	832.9	842.5	912.2	1073.3
27.5°	861.7	811.2	814.9	888.2	1022.8
30°	862.9	784.8	786.0	862.9	966.3
32.5°	854.5	757.2	758.4	831.7	902.5
35°	834.0	724.7	723.5	795.7	816.0
37.5°	806.4	689.9	689.9	756.0	721.1
40°	772.8	655.0	658.6	704.2	637.0
42.5°	731.9	617.7	622.6	635.7	574.5
45°	687.4	581.7	585.3	537.2	526.4
47.5°	638.2	544.4	545.6	445.9	510.8
50°	579.3	505.9	501.2	382.2	509.6
52.5°	527.6	463.9	449.5	346.1	462.7
55°	477.1	419.4	388.2	318.5	429.1
57.5°	432.6	361.8	331.7	286.1	421.9
60°	391.8	305.3	282.4	251.2	387.0
62.5°	358.1	263.2	258.4	227.1	350.9
65°	322.1	234.3	233.1	206.8	298.1
67.5°	287.3	215.1	213.9	187.5	227.1
70°	250.0	194.7	192.3	167.1	168.3
72.5°	211.5	171.8	169.5	150.3	139.4
75°	173.1	145.5	144.2	131.0	113.0
77.5°	135.8	115.3	117.8	105.8	83.0
80°	97.3	84.1	86.5	75.7	62.5
82.5°	64.9	55.3	57.7	48.0	42.0
85°	36.0	31.3	32.5	25.2	19.2
87.5°	16.8	14.5	14.5	9.6	6.0
90°	16.6	10.6	9.8	6.8	3.8
92.5°	102.7	73.0	66.6	40.8	15.1
95°	252.6	142.3	130.5	83.4	36.3
97.5°	340.3	156.3	145.9	104.3	62.8
100°	372.2	168.0	158.5	120.9	83.2
102.5°	386.9	179.7	170.9	135.8	100.6
105°	397.7	197.1	189.7	159.9	130.2
107.5°	399.7	222.9	215.9	188.2	160.5
110°	396.6	237.2	231.0	205.9	180.8



TEST NUMBER: P935234

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	396.8	254.6	248.6	224.8	200.9
115°	400.4	280.7	275.2	253.2	231.1
117.5°	407.9	306.1	301.1	281.1	261.1
120°	413.9	320.8	316.1	297.3	278.4
122.5°	422.6	338.3	333.6	314.6	295.5
125°	434.4	360.6	356.2	338.9	321.6
127.5°	446.1	382.1	377.8	360.2	342.8
130°	454.6	396.5	391.8	373.0	354.1
132.5°	461.5	408.2	403.5	384.7	365.9
135°	469.2	421.9	417.6	400.4	383.3
137.5°	480.5	439.3	435.0	418.1	401.1
140°	487.5	451.0	447.1	431.4	415.8
142.5°	493.3	459.7	456.1	441.6	427.2
145°	500.8	472.9	469.7	457.2	444.5
147.5°	511.9	489.6	486.5	474.3	462.0
150°	517.8	498.3	495.5	484.4	473.3
152.5°	521.5	503.9	501.8	493.4	485.0
155°	529.9	516.5	514.9	508.7	502.5
157.5°	538.1	529.0	527.4	521.4	515.3
160°	542.0	534.6	533.4	528.8	524.0
162.5°	546.0	540.7	539.8	536.2	532.7
165°	551.8	549.3	548.5	545.3	542.1
167.5°	556.3	554.3	554.0	552.4	550.9
170°	560.1	560.0	559.6	558.1	556.6
172.5°	560.3	560.3	560.2	560.0	559.6
175°	562.6	563.8	563.8	563.8	563.8
177.5°	562.9	563.8	563.8	563.8	563.8
180°	563.8	563.8	563.8	563.8	563.8



TEST NUMBER: P935234
 CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-4000K

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	13.12	13.96	14.10	14.95	16.26	15.92	16.76	16.90	17.75	19.06
	3H	13.60	14.35	14.59	15.35	16.68	17.25	18.00	18.24	19.01	20.33
	4H	13.79	14.50	14.79	15.50	16.84	17.69	18.40	18.69	19.41	20.74
	6H	13.91	14.56	14.92	15.57	16.92	17.97	18.62	18.98	19.63	20.98
	8H	13.91	14.53	14.93	15.56	16.90	18.03	18.66	19.05	19.68	21.03
	12H	13.88	14.47	14.90	15.49	16.86	18.07	18.66	19.09	19.68	21.05
4H	2H	14.14	14.86	15.15	15.86	17.20	16.33	17.04	17.34	18.04	19.38
	3H	15.17	15.76	16.19	16.79	18.14	17.82	18.41	18.84	19.45	20.80
	4H	15.44	15.99	16.47	17.01	18.39	18.34	18.88	19.37	19.91	21.28
	6H	15.57	16.03	16.60	17.08	18.45	18.70	19.16	19.73	20.21	21.58
	8H	15.57	16.01	16.61	17.05	18.44	18.80	19.23	19.84	20.28	21.66
	12H	15.54	15.93	16.59	16.99	18.38	18.85	19.24	19.91	20.30	21.69
8H	4H	15.89	16.33	16.93	17.37	18.75	18.47	18.90	19.50	19.94	21.33
	6H	16.15	16.51	17.21	17.59	18.98	18.89	19.25	19.95	20.34	21.72
	8H	16.19	16.51	17.26	17.58	18.98	19.04	19.36	20.11	20.42	21.83
	12H	16.18	16.45	17.25	17.52	18.96	19.13	19.41	20.20	20.47	21.92
12H	4H	15.89	16.29	16.95	17.34	18.73	18.43	18.82	19.48	19.88	21.27
	6H	16.21	16.53	17.28	17.59	19.00	18.89	19.21	19.96	20.27	21.68
	8H	16.28	16.55	17.35	17.62	19.06	19.04	19.32	20.12	20.39	21.83