

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: P934432

Luminaire Tested: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934432
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-92765-1D-UNV-STD-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

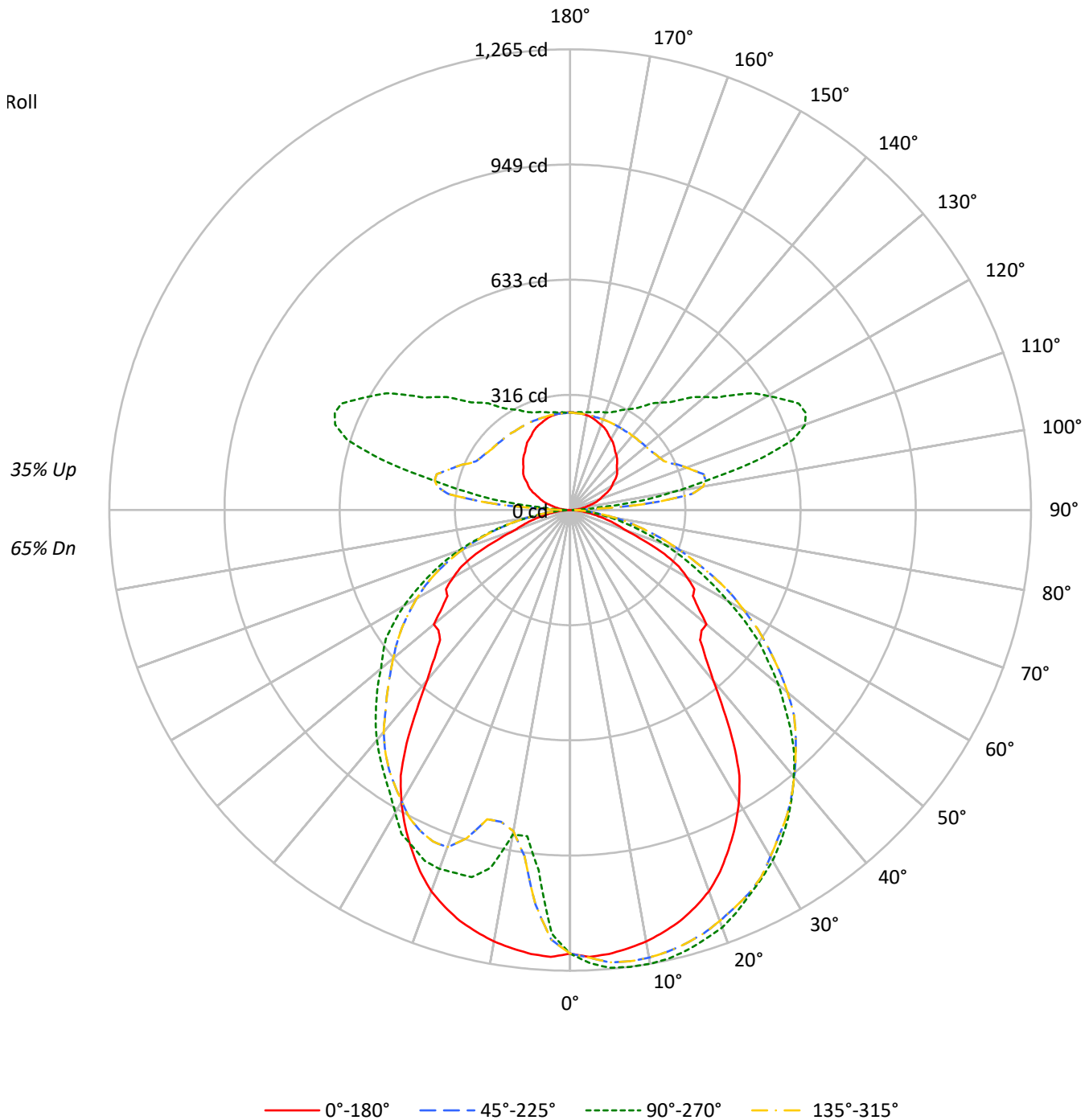
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4894.7 lumens
Efficiency: N/A
Efficacy: 108.3 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

TEST NUMBER: P934432
CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

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°	11300	11300	11300	11300
5°	11373	11408	11373	8970
10°	11284	11237	11284	8034
15°	11149	10993	11149	9179
20°	10902	10705	10902	9198
25°	10413	10284	10413	9004
30°	9785	9935	9785	8577
35°	8709	9493	8709	8105
40°	7246	8973	7246	7750
45°	6460	8365	6460	7342
50°	6848	7639	6848	6932
55°	6425	6857	6425	6695
60°	6599	5823	6599	6131
65°	5956	4813	5956	5381
70°	4095	3837	4095	4511
75°	3551	2836	3551	3396
80°	2803	1875	2803	2041
85°	1524	991	1524	845

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 9922 cd/sqm



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.9	2.2
10°-20°	312.1	6.4
20°-30°	482.5	9.9
30°-40°	576.0	11.8
40°-50°	579.4	11.8
50°-60°	504.1	10.3
60°-70°	357.4	7.3
70°-80°	189.1	3.9
80°-90°	48.1	1.0
90°-100°	130.5	2.7
100°-110°	343.2	7.0
110°-120°	355.9	7.3
120°-130°	285.4	5.8
130°-140°	224.0	4.6
140°-150°	171.9	3.5
150°-160°	123.8	2.5
160°-170°	75.7	1.5
170°-180°	25.6	0.5
0°-30°	904.5	18.5
0°-40°	1480.5	30.2
0°-60°	2564.0	52.4
0°-90°	3158.7	64.5
90°-120°	829.6	16.9
90°-150°	1510.9	30.9
90°-180°	1736.0	35.5
0°-180°	4894.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1218	1218	1218	1218	1218	
5°	1224	1262	1224	992	1224	116
15°	1168	1250	1168	1044	1168	329
25°	1029	1166	1029	1021	1029	472
35°	782	1040	782	888	782	484
45°	505	857	505	752	505	404
55°	411	633	411	618	411	378
65°	286	381	286	426	286	273
75°	108	181	108	217	108	114
85°	18	46	18	39	18	25
90°	2	7	2	7	2	2
95°	17	79	17	79	17	19
105°	62	537	62	537	62	66
115°	110	692	110	692	110	108
125°	153	551	153	551	153	136
135°	182	428	182	428	182	141
145°	211	347	211	347	211	132
155°	239	299	239	299	239	110
165°	258	278	258	278	258	73
175°	268	270	268	270	268	25
180°	268	268	268	268	268	



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8
2.5°	1228.2	1228.2	1235.1	1237.4	1237.4	1233.9	1230.5	1233.9	1244.3	1247.8	1246.7
5°	1223.6	1232.8	1245.5	1247.8	1250.1	1248.9	1246.7	1248.9	1260.4	1262.8	1263.9
7.5°	1214.4	1231.7	1247.8	1251.3	1254.7	1251.3	1250.1	1252.4	1263.9	1266.2	1266.2
10°	1202.9	1227.0	1245.5	1247.8	1251.3	1247.8	1247.8	1252.4	1263.9	1266.2	1267.4
12.5°	1186.8	1220.1	1237.4	1239.8	1244.3	1243.2	1242.0	1246.7	1258.2	1260.4	1260.4
15°	1168.3	1207.5	1223.6	1225.9	1233.9	1231.7	1231.7	1236.3	1248.9	1252.4	1251.3
17.5°	1143.0	1191.4	1209.8	1213.3	1219.0	1217.8	1219.0	1223.6	1235.1	1237.4	1238.5
20°	1114.1	1169.5	1191.4	1194.8	1200.5	1200.5	1200.5	1206.3	1217.8	1222.4	1222.4
22.5°	1075.0	1146.4	1169.5	1171.8	1178.6	1178.6	1181.0	1189.0	1199.4	1200.5	1200.5
25°	1028.9	1121.1	1140.6	1147.6	1154.5	1157.9	1161.4	1166.0	1169.5	1168.3	1169.5
27.5°	980.5	1088.8	1114.1	1118.7	1128.0	1131.5	1136.0	1137.2	1138.4	1141.8	1139.5
30°	926.4	1043.8	1081.8	1086.5	1101.5	1103.7	1099.2	1101.5	1107.2	1109.6	1111.8
32.5°	865.2	977.0	1048.4	1058.8	1072.7	1065.7	1064.6	1068.1	1077.3	1077.3	1079.6
35°	782.3	925.2	1017.4	1026.6	1036.9	1028.9	1033.4	1034.7	1040.4	1043.8	1042.7
37.5°	691.3	880.2	985.1	992.0	1000.0	989.7	996.6	1000.0	1004.7	1002.4	1002.4
40°	610.7	809.9	947.1	951.7	958.6	950.5	957.4	959.8	962.0	959.8	958.6
42.5°	550.8	732.8	906.7	912.5	907.9	913.6	916.0	920.6	917.1	912.5	912.5
45°	504.6	712.0	863.0	869.9	863.0	872.2	875.6	875.6	865.2	863.0	861.8
47.5°	489.6	670.6	819.2	819.2	815.7	827.2	833.1	824.9	814.6	811.2	811.2
50°	488.5	624.5	759.3	754.7	770.8	784.7	778.9	770.8	762.8	750.0	750.0
52.5°	443.6	568.0	682.1	699.4	724.7	732.8	723.5	715.5	701.6	695.9	691.3
55°	411.3	509.3	611.8	646.4	672.9	683.2	666.0	657.9	637.1	633.7	631.4
57.5°	404.4	424.0	547.3	591.1	623.3	622.2	611.8	596.8	579.6	576.1	574.9
60°	371.0	306.4	478.1	530.0	563.4	559.9	550.8	536.9	520.8	518.5	516.2
62.5°	336.4	222.4	399.8	458.6	505.8	504.6	496.6	475.9	464.4	458.6	454.0
65°	285.8	186.6	284.5	381.3	449.4	451.6	434.4	419.4	406.7	399.8	398.6
67.5°	217.7	152.1	192.4	318.0	395.2	392.9	371.0	364.1	347.9	344.5	337.6
70°	161.3	101.4	133.7	258.1	342.2	336.4	319.2	311.1	296.1	288.0	283.4
72.5°	133.7	81.8	97.9	200.5	288.0	281.1	266.1	256.9	244.3	237.4	232.7
75°	108.3	86.4	74.9	148.6	233.9	229.3	215.5	206.2	195.9	186.6	187.8
77.5°	79.5	80.7	59.9	109.4	185.5	178.6	170.5	159.0	154.4	145.2	145.2
80°	59.9	63.4	44.9	74.9	133.7	133.7	126.7	118.7	110.6	106.0	106.0
82.5°	40.3	40.3	33.4	47.3	91.0	87.6	82.9	80.7	76.0	73.8	73.8
85°	18.4	23.0	20.8	28.8	49.5	51.9	51.9	49.5	48.4	46.0	47.3
87.5°	5.8	10.4	12.6	16.1	25.4	26.5	27.6	27.6	27.6	28.8	28.8
90°	1.8	3.2	4.7	5.1	7.9	11.8	13.7	12.1	9.1	6.8	6.8
92.5°	7.2	19.4	31.7	34.7	48.7	67.5	76.9	67.4	48.4	34.2	32.8
95°	17.3	39.6	62.0	67.6	120.0	189.8	224.8	200.6	152.2	115.9	111.8
97.5°	29.8	49.5	69.2	74.2	161.6	278.2	336.4	321.2	290.6	267.6	259.8
100°	39.5	57.4	75.3	79.8	176.8	306.1	370.8	371.9	374.2	375.8	366.5
102.5°	47.8	64.5	81.2	85.4	183.7	314.9	380.5	400.0	439.0	468.2	460.2
105°	61.8	76.0	90.1	93.7	188.9	315.9	379.4	423.1	510.5	576.1	571.8
107.5°	76.2	89.4	102.6	105.9	189.8	301.9	357.9	418.8	540.7	632.1	633.2
110°	85.9	97.8	109.7	112.7	188.4	289.4	339.9	408.0	544.3	646.5	651.0



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	95.4	106.7	118.1	121.0	188.4	278.5	323.5	393.3	532.7	637.4	644.3
115°	109.8	120.3	130.7	133.3	190.2	266.0	303.9	371.1	505.4	606.2	615.7
117.5°	124.0	133.5	143.0	145.4	193.8	258.2	290.5	351.1	472.3	563.2	573.8
120°	132.3	141.3	150.2	152.4	196.6	255.6	285.1	340.4	451.3	534.4	544.7
122.5°	140.4	149.5	158.4	160.7	200.7	254.2	280.9	330.8	430.6	505.4	515.5
125°	152.8	161.0	169.2	171.3	206.3	253.1	276.4	318.8	403.6	467.1	476.5
127.5°	162.8	171.2	179.5	181.6	211.9	252.5	272.7	309.0	381.8	436.4	444.2
130°	168.2	177.2	186.1	188.4	216.0	252.8	271.2	303.6	368.4	417.0	424.2
132.5°	173.8	182.8	191.7	193.9	219.3	253.1	270.0	298.9	356.9	400.4	407.0
135°	182.1	190.2	198.4	200.4	222.9	252.8	267.8	292.0	340.6	377.1	382.6
137.5°	190.5	198.6	206.7	208.7	228.3	254.4	267.5	287.9	329.0	359.8	364.4
140°	197.5	204.9	212.4	214.3	231.5	254.6	266.1	283.9	319.4	346.0	350.3
142.5°	202.9	209.8	216.6	218.4	234.3	255.5	266.1	281.8	312.9	336.3	339.9
145°	211.2	217.1	223.2	224.6	237.9	255.6	264.4	277.1	302.6	321.7	324.5
147.5°	219.5	225.3	231.1	232.6	243.2	257.3	264.4	274.4	294.5	309.5	311.8
150°	224.8	230.0	235.4	236.7	245.9	258.2	264.4	272.9	289.8	302.5	304.4
152.5°	230.4	234.4	238.4	239.4	247.7	258.8	264.4	271.6	286.1	296.9	298.3
155°	238.7	241.6	244.6	245.3	251.7	260.1	264.4	270.2	281.7	290.3	291.3
157.5°	244.8	247.7	250.5	251.2	255.6	261.4	264.4	268.8	277.8	284.5	285.2
160°	249.0	251.1	253.4	253.9	257.4	262.0	264.4	268.2	275.9	281.7	282.0
162.5°	253.1	254.7	256.4	256.8	259.3	262.7	264.4	267.6	274.1	279.0	279.3
165°	257.6	259.1	260.7	261.0	262.1	263.6	264.4	266.7	271.3	274.8	275.1
167.5°	261.7	262.4	263.1	263.3	264.2	265.5	266.1	267.7	270.8	273.0	273.2
170°	264.4	265.1	265.8	266.0	266.1	266.1	266.1	267.7	270.8	273.0	273.0
172.5°	265.8	266.0	266.1	266.1	266.1	266.1	266.1	267.4	269.7	271.6	271.4
175°	267.8	267.8	267.8	267.8	267.3	266.5	266.1	266.9	268.5	269.6	269.6
177.5°	267.8	267.8	267.8	267.8	267.4	266.8	266.6	267.2	268.4	269.3	269.1
180°	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8
2.5°	1248.9	1245.5	1248.9	1246.7	1247.8	1244.3	1233.9	1230.5	1233.9	1237.4	1237.4
5°	1263.9	1261.7	1263.9	1263.9	1262.8	1260.4	1248.9	1246.7	1248.9	1250.1	1247.8
7.5°	1268.5	1265.1	1268.5	1266.2	1266.2	1263.9	1252.4	1250.1	1251.3	1254.7	1251.3
10°	1268.5	1265.1	1268.5	1267.4	1266.2	1263.9	1252.4	1247.8	1247.8	1251.3	1247.8
12.5°	1262.8	1260.4	1262.8	1260.4	1260.4	1258.2	1246.7	1242.0	1243.2	1244.3	1239.8
15°	1253.5	1250.1	1253.5	1251.3	1252.4	1248.9	1236.3	1231.7	1231.7	1233.9	1225.9
17.5°	1239.8	1235.1	1239.8	1238.5	1237.4	1235.1	1223.6	1219.0	1217.8	1219.0	1213.3
20°	1223.6	1220.1	1223.6	1222.4	1222.4	1217.8	1206.3	1200.5	1200.5	1200.5	1194.8
22.5°	1198.3	1194.8	1198.3	1200.5	1200.5	1199.4	1189.0	1181.0	1178.6	1178.6	1171.8
25°	1169.5	1166.0	1169.5	1169.5	1168.3	1169.5	1166.0	1161.4	1157.9	1154.5	1147.6
27.5°	1141.8	1139.5	1141.8	1139.5	1141.8	1138.4	1137.2	1136.0	1131.5	1128.0	1118.7
30°	1114.1	1111.8	1114.1	1111.8	1109.6	1107.2	1101.5	1099.2	1103.7	1101.5	1086.5
32.5°	1079.6	1077.3	1079.6	1079.6	1077.3	1077.3	1068.1	1064.6	1065.7	1072.7	1058.8
35°	1043.8	1040.4	1043.8	1042.7	1043.8	1040.4	1034.7	1033.4	1028.9	1036.9	1026.6
37.5°	1002.4	998.9	1002.4	1002.4	1002.4	1004.7	1000.0	996.6	989.7	1000.0	992.0
40°	959.8	955.1	959.8	958.6	959.8	962.0	959.8	957.4	950.5	958.6	951.7
42.5°	911.4	910.2	911.4	912.5	912.5	917.1	920.6	916.0	913.6	907.9	912.5
45°	859.5	857.2	859.5	861.8	863.0	865.2	875.6	875.6	872.2	863.0	869.9
47.5°	804.2	798.4	804.2	811.2	811.2	814.6	824.9	833.1	827.2	815.7	819.2
50°	745.4	746.6	745.4	750.0	750.0	762.8	770.8	778.9	784.7	770.8	754.7
52.5°	687.9	686.7	687.9	691.3	695.9	701.6	715.5	723.5	732.8	724.7	699.4
55°	630.2	632.6	630.2	631.4	633.7	637.1	657.9	666.0	683.2	672.9	646.4
57.5°	572.7	569.2	572.7	574.9	576.1	579.6	596.8	611.8	622.2	623.3	591.1
60°	505.8	501.2	505.8	516.2	518.5	520.8	536.9	550.8	559.9	563.4	530.0
62.5°	447.0	439.0	447.0	454.0	458.6	464.4	475.9	496.6	504.6	505.8	458.6
65°	384.8	381.3	384.8	398.6	399.8	406.7	419.4	434.4	451.6	449.4	381.3
67.5°	328.4	328.4	328.4	337.6	344.5	347.9	364.1	371.0	392.9	395.2	318.0
70°	276.5	275.4	276.5	283.4	288.0	296.1	311.1	319.2	336.4	342.2	258.1
72.5°	227.0	225.9	227.0	232.7	237.4	244.3	256.9	266.1	281.1	288.0	200.5
75°	183.2	180.9	183.2	187.8	186.6	195.9	206.2	215.5	229.3	233.9	148.6
77.5°	140.6	140.6	140.6	145.2	145.2	154.4	159.0	170.5	178.6	185.5	109.4
80°	104.8	103.7	104.8	106.0	106.0	110.6	118.7	126.7	133.7	133.7	74.9
82.5°	73.8	71.4	73.8	73.8	73.8	76.0	80.7	82.9	87.6	91.0	47.3
85°	46.0	46.0	46.0	47.3	46.0	48.4	49.5	51.9	51.9	49.5	28.8
87.5°	30.0	28.8	30.0	28.8	28.8	27.6	27.6	27.6	26.5	25.4	16.1
90°	6.8	6.8	6.8	6.8	6.8	9.1	12.1	13.7	11.8	7.9	5.1
92.5°	27.4	21.9	27.4	32.8	34.2	48.4	67.4	76.9	67.5	48.7	34.7
95°	95.3	78.9	95.3	111.8	115.9	152.2	200.6	224.8	189.8	120.0	67.6
97.5°	228.5	197.2	228.5	259.8	267.6	290.6	321.2	336.4	278.2	161.6	74.2
100°	329.2	291.9	329.2	366.5	375.8	374.2	371.9	370.8	306.1	176.8	79.8
102.5°	428.3	396.3	428.3	460.2	468.2	439.0	400.0	380.5	314.9	183.7	85.4
105°	554.6	537.4	554.6	571.8	576.1	510.5	423.1	379.4	315.9	188.9	93.7
107.5°	637.3	641.5	637.3	633.2	632.1	540.7	418.8	357.9	301.9	189.8	105.9
110°	668.9	686.7	668.9	651.0	646.5	544.3	408.0	339.9	289.4	188.4	112.7



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	671.7	699.2	671.7	644.3	637.4	532.7	393.3	323.5	278.5	188.4	121.0
115°	653.9	692.0	653.9	615.7	606.2	505.4	371.1	303.9	266.0	190.2	133.3
117.5°	616.1	658.4	616.1	573.8	563.2	472.3	351.1	290.5	258.2	193.8	145.4
120°	585.7	626.7	585.7	544.7	534.4	451.3	340.4	285.1	255.6	196.6	152.4
122.5°	556.1	596.6	556.1	515.5	505.4	430.6	330.8	280.9	254.2	200.7	160.7
125°	513.7	551.0	513.7	476.5	467.1	403.6	318.8	276.4	253.1	206.3	171.3
127.5°	475.7	507.2	475.7	444.2	436.4	381.8	309.0	272.7	252.5	211.9	181.6
130°	453.4	482.4	453.4	424.2	417.0	368.4	303.6	271.2	252.8	216.0	188.4
132.5°	433.0	459.0	433.0	407.0	400.4	356.9	298.9	270.0	253.1	219.3	193.9
135°	405.1	427.6	405.1	382.6	377.1	340.6	292.0	267.8	252.8	222.9	200.4
137.5°	382.7	401.1	382.7	364.4	359.8	329.0	287.9	267.5	254.4	228.3	208.7
140°	367.5	384.7	367.5	350.3	346.0	319.4	283.9	266.1	254.6	231.5	214.3
142.5°	354.7	369.6	354.7	339.9	336.3	312.9	281.8	266.1	255.5	234.3	218.4
145°	335.7	346.9	335.7	324.5	321.7	302.6	277.1	264.4	255.6	237.9	224.6
147.5°	321.1	330.3	321.1	311.8	309.5	294.5	274.4	264.4	257.3	243.2	232.6
150°	311.9	319.4	311.9	304.4	302.5	289.8	272.9	264.4	258.2	245.9	236.7
152.5°	304.0	309.7	304.0	298.3	296.9	286.1	271.6	264.4	258.8	247.7	239.4
155°	295.0	298.8	295.0	291.3	290.3	281.7	270.2	264.4	260.1	251.7	245.3
157.5°	287.9	290.5	287.9	285.2	284.5	277.8	268.8	264.4	261.4	255.6	251.2
160°	283.6	285.1	283.6	282.0	281.7	275.9	268.2	264.4	262.0	257.4	253.9
162.5°	280.8	282.2	280.8	279.3	279.0	274.1	267.6	264.4	262.7	259.3	256.8
165°	276.7	278.3	276.7	275.1	274.8	271.3	266.7	264.4	263.6	262.1	261.0
167.5°	273.8	274.4	273.8	273.2	273.0	270.8	267.7	266.1	265.5	264.2	263.3
170°	273.0	273.0	273.0	273.0	273.0	270.8	267.7	266.1	266.1	266.1	266.0
172.5°	270.9	270.3	270.9	271.4	271.6	269.7	267.4	266.1	266.1	266.1	266.1
175°	269.6	269.6	269.6	269.6	269.6	268.5	266.9	266.1	266.5	267.3	267.8
177.5°	268.5	267.8	268.5	269.1	269.3	268.4	267.2	266.6	266.8	267.4	267.8
180°	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8
2.5°	1235.1	1228.2	1228.2	1216.7	1212.0	1208.6	1202.9	1185.6	1181.0	1176.4	1183.3
5°	1245.5	1232.8	1223.6	1202.9	1185.6	1178.6	1156.8	1115.3	1087.6	1066.9	1055.4
7.5°	1247.8	1231.7	1214.4	1182.1	1140.6	1122.2	1055.4	979.4	958.6	940.1	928.6
10°	1245.5	1227.0	1202.9	1154.5	1056.6	1024.3	957.4	907.9	895.2	891.7	895.2
12.5°	1237.4	1220.1	1186.8	1106.1	969.0	947.1	907.9	879.1	876.8	882.6	913.6
15°	1223.6	1207.5	1168.3	1041.6	920.6	904.5	876.8	866.5	879.1	919.4	1012.8
17.5°	1209.8	1191.4	1143.0	978.2	883.7	872.2	852.6	873.3	944.8	998.9	1030.0
20°	1191.4	1169.5	1114.1	932.1	857.2	846.8	837.6	931.0	985.1	1004.7	1021.9
22.5°	1169.5	1146.4	1075.0	899.9	829.6	821.5	827.2	963.2	985.1	998.9	1013.9
25°	1140.6	1121.1	1028.9	874.5	807.7	798.4	820.3	959.8	972.4	975.9	1005.8
27.5°	1114.1	1088.8	980.5	851.5	781.2	777.7	826.1	944.8	954.0	957.4	989.7
30°	1081.8	1043.8	926.4	827.2	753.5	752.4	827.2	926.4	924.0	933.3	965.5
32.5°	1048.4	977.0	865.2	797.3	727.0	725.9	819.2	898.7	896.4	909.1	933.3
35°	1017.4	925.2	782.3	762.8	693.6	694.7	799.6	866.5	867.6	879.1	894.1
37.5°	985.1	880.2	691.3	724.7	661.4	661.4	773.1	836.5	834.2	837.6	858.3
40°	947.1	809.9	610.7	675.1	631.4	628.0	740.9	804.2	796.2	795.0	823.8
42.5°	906.7	732.8	550.8	609.5	596.8	592.2	701.6	765.0	750.0	753.5	790.4
45°	863.0	712.0	504.6	515.0	561.1	557.7	659.0	720.1	709.7	719.0	757.0
47.5°	819.2	670.6	489.6	427.5	523.0	521.9	611.8	676.3	670.6	679.8	720.1
50°	759.3	624.5	488.5	366.4	480.5	485.0	555.3	633.7	633.7	641.7	684.4
52.5°	682.1	568.0	443.6	331.8	430.9	444.7	505.8	596.8	599.1	607.2	645.2
55°	611.8	509.3	411.3	305.3	372.2	402.1	457.4	558.8	563.4	571.4	606.1
57.5°	547.3	424.0	404.4	274.3	318.0	346.8	414.7	521.9	524.3	531.2	564.6
60°	478.1	306.4	371.0	240.8	270.8	292.7	375.6	478.1	486.2	490.8	519.6
62.5°	399.8	222.4	336.4	217.7	247.7	252.4	343.3	436.6	447.0	450.5	467.8
65°	284.5	186.6	285.8	198.2	223.5	224.6	308.8	394.1	403.2	409.0	421.7
67.5°	192.4	152.1	217.7	179.7	205.1	206.2	275.4	344.5	357.2	361.8	369.8
70°	133.7	101.4	161.3	160.2	184.3	186.6	239.6	299.5	311.1	314.5	319.2
72.5°	97.9	81.8	133.7	144.1	162.5	164.7	202.7	248.9	260.4	263.9	266.1
75°	74.9	86.4	108.3	125.6	138.2	139.4	165.9	202.7	210.9	213.1	214.3
77.5°	59.9	80.7	79.5	101.4	112.9	110.6	130.2	156.7	163.6	163.6	163.6
80°	44.9	63.4	59.9	72.6	82.9	80.7	93.3	111.8	114.1	116.3	115.2
82.5°	33.4	40.3	40.3	46.0	55.3	53.0	62.2	72.6	72.6	72.6	74.9
85°	20.8	23.0	18.4	24.2	31.1	30.0	34.5	39.2	40.3	40.3	38.0
87.5°	12.6	10.4	5.8	9.2	13.9	13.9	16.1	17.3	16.1	16.1	16.1
90°	4.7	3.2	1.8	3.2	4.7	5.1	7.9	11.8	13.7	12.1	9.1
92.5°	31.7	19.4	7.2	19.4	31.7	34.7	48.7	67.5	76.9	67.4	48.4
95°	62.0	39.6	17.3	39.6	62.0	67.6	120.0	189.8	224.8	200.6	152.2
97.5°	69.2	49.5	29.8	49.5	69.2	74.2	161.6	278.2	336.4	321.2	290.6
100°	75.3	57.4	39.5	57.4	75.3	79.8	176.8	306.1	370.8	371.9	374.2
102.5°	81.2	64.5	47.8	64.5	81.2	85.4	183.7	314.9	380.5	400.0	439.0
105°	90.1	76.0	61.8	76.0	90.1	93.7	188.9	315.9	379.4	423.1	510.5
107.5°	102.6	89.4	76.2	89.4	102.6	105.9	189.8	301.9	357.9	418.8	540.7
110°	109.7	97.8	85.9	97.8	109.7	112.7	188.4	289.4	339.9	408.0	544.3



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	118.1	106.7	95.4	106.7	118.1	121.0	188.4	278.5	323.5	393.3	532.7
115°	130.7	120.3	109.8	120.3	130.7	133.3	190.2	266.0	303.9	371.1	505.4
117.5°	143.0	133.5	124.0	133.5	143.0	145.4	193.8	258.2	290.5	351.1	472.3
120°	150.2	141.3	132.3	141.3	150.2	152.4	196.6	255.6	285.1	340.4	451.3
122.5°	158.4	149.5	140.4	149.5	158.4	160.7	200.7	254.2	280.9	330.8	430.6
125°	169.2	161.0	152.8	161.0	169.2	171.3	206.3	253.1	276.4	318.8	403.6
127.5°	179.5	171.2	162.8	171.2	179.5	181.6	211.9	252.5	272.7	309.0	381.8
130°	186.1	177.2	168.2	177.2	186.1	188.4	216.0	252.8	271.2	303.6	368.4
132.5°	191.7	182.8	173.8	182.8	191.7	193.9	219.3	253.1	270.0	298.9	356.9
135°	198.4	190.2	182.1	190.2	198.4	200.4	222.9	252.8	267.8	292.0	340.6
137.5°	206.7	198.6	190.5	198.6	206.7	208.7	228.3	254.4	267.5	287.9	329.0
140°	212.4	204.9	197.5	204.9	212.4	214.3	231.5	254.6	266.1	283.9	319.4
142.5°	216.6	209.8	202.9	209.8	216.6	218.4	234.3	255.5	266.1	281.8	312.9
145°	223.2	217.1	211.2	217.1	223.2	224.6	237.9	255.6	264.4	277.1	302.6
147.5°	231.1	225.3	219.5	225.3	231.1	232.6	243.2	257.3	264.4	274.4	294.5
150°	235.4	230.0	224.8	230.0	235.4	236.7	245.9	258.2	264.4	272.9	289.8
152.5°	238.4	234.4	230.4	234.4	238.4	239.4	247.7	258.8	264.4	271.6	286.1
155°	244.6	241.6	238.7	241.6	244.6	245.3	251.7	260.1	264.4	270.2	281.7
157.5°	250.5	247.7	244.8	247.7	250.5	251.2	255.6	261.4	264.4	268.8	277.8
160°	253.4	251.1	249.0	251.1	253.4	253.9	257.4	262.0	264.4	268.2	275.9
162.5°	256.4	254.7	253.1	254.7	256.4	256.8	259.3	262.7	264.4	267.6	274.1
165°	260.7	259.1	257.6	259.1	260.7	261.0	262.1	263.6	264.4	266.7	271.3
167.5°	263.1	262.4	261.7	262.4	263.1	263.3	264.2	265.5	266.1	267.7	270.8
170°	265.8	265.1	264.4	265.1	265.8	266.0	266.1	266.1	266.1	267.7	270.8
172.5°	266.1	266.0	265.8	266.0	266.1	266.1	266.1	266.1	266.1	267.4	269.7
175°	267.8	267.8	267.8	267.8	267.8	267.8	267.3	266.5	266.1	266.9	268.5
177.5°	267.8	267.8	267.8	267.8	267.8	267.8	267.4	266.8	266.6	267.2	268.4
180°	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8	1217.8
2.5°	1175.2	1171.8	1176.4	1163.6	1176.4	1171.8	1175.2	1183.3	1176.4	1181.0	1185.6
5°	1031.2	1025.4	1007.0	992.0	1007.0	1025.4	1031.2	1055.4	1066.9	1087.6	1115.3
7.5°	921.7	917.1	912.5	903.3	912.5	917.1	921.7	928.6	940.1	958.6	979.4
10°	897.5	898.7	905.6	904.5	905.6	898.7	897.5	895.2	891.7	895.2	907.9
12.5°	959.8	970.1	1008.2	1005.8	1008.2	970.1	959.8	913.6	882.6	876.8	879.1
15°	1031.2	1034.7	1042.7	1043.8	1042.7	1034.7	1031.2	1012.8	919.4	879.1	866.5
17.5°	1038.1	1039.3	1045.0	1045.0	1045.0	1039.3	1038.1	1030.0	998.9	944.8	873.3
20°	1032.3	1034.7	1046.2	1048.4	1046.2	1034.7	1032.3	1021.9	1004.7	985.1	931.0
22.5°	1030.0	1034.7	1043.8	1042.7	1043.8	1034.7	1030.0	1013.9	998.9	985.1	963.2
25°	1018.5	1018.5	1019.7	1020.8	1019.7	1018.5	1018.5	1005.8	975.9	972.4	959.8
27.5°	994.3	996.6	1003.5	1002.4	1003.5	996.6	994.3	989.7	957.4	954.0	944.8
30°	972.4	970.1	964.4	959.8	964.4	970.1	972.4	965.5	933.3	924.0	926.4
32.5°	935.5	929.8	924.0	920.6	924.0	929.8	935.5	933.3	909.1	896.4	898.7
35°	891.7	893.0	891.7	888.3	891.7	893.0	891.7	894.1	879.1	867.6	866.5
37.5°	860.7	863.0	861.8	857.2	861.8	863.0	860.7	858.3	837.6	834.2	836.5
40°	828.4	829.6	828.4	824.9	828.4	829.6	828.4	823.8	795.0	796.2	804.2
42.5°	797.3	796.2	792.7	790.4	792.7	796.2	797.3	790.4	753.5	750.0	765.0
45°	761.5	762.8	755.8	752.4	755.8	762.8	761.5	757.0	719.0	709.7	720.1
47.5°	725.9	725.9	720.1	716.6	720.1	725.9	725.9	720.1	679.8	670.6	676.3
50°	687.9	686.7	678.6	677.5	678.6	686.7	687.9	684.4	641.7	633.7	633.7
52.5°	644.1	644.1	645.2	647.5	645.2	644.1	644.1	645.2	607.2	599.1	596.8
55°	606.1	607.2	615.2	617.6	615.2	607.2	606.1	606.1	571.4	563.4	558.8
57.5°	566.8	566.8	572.7	572.7	572.7	566.8	566.8	564.6	531.2	524.3	521.9
60°	521.9	524.3	528.8	527.7	528.8	524.3	521.9	519.6	490.8	486.2	478.1
62.5°	474.6	477.0	478.1	475.9	478.1	477.0	474.6	467.8	450.5	447.0	436.6
65°	425.1	427.5	428.6	426.3	428.6	427.5	425.1	421.7	409.0	403.2	394.1
67.5°	374.5	373.3	372.2	376.7	372.2	373.3	374.5	369.8	361.8	357.2	344.5
70°	322.6	322.6	321.4	323.8	321.4	322.6	322.6	319.2	314.5	311.1	299.5
72.5°	267.3	266.1	270.8	267.3	270.8	266.1	267.3	266.1	263.9	260.4	248.9
75°	213.1	215.5	213.1	216.6	213.1	215.5	213.1	214.3	213.1	210.9	202.7
77.5°	162.5	164.7	162.5	162.5	162.5	164.7	162.5	163.6	163.6	163.6	156.7
80°	115.2	114.1	114.1	112.9	114.1	114.1	115.2	115.2	116.3	114.1	111.8
82.5°	73.8	72.6	72.6	74.9	72.6	72.6	73.8	74.9	72.6	72.6	72.6
85°	40.3	41.5	39.2	39.2	39.2	41.5	40.3	38.0	40.3	40.3	39.2
87.5°	15.0	13.9	13.9	13.9	13.9	13.9	15.0	16.1	16.1	16.1	17.3
90°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	9.1	12.1	13.7	11.8
92.5°	34.2	32.8	27.4	21.9	27.4	32.8	34.2	48.4	67.4	76.9	67.5
95°	115.9	111.8	95.3	78.9	95.3	111.8	115.9	152.2	200.6	224.8	189.8
97.5°	267.6	259.8	228.5	197.2	228.5	259.8	267.6	290.6	321.2	336.4	278.2
100°	375.8	366.5	329.2	291.9	329.2	366.5	375.8	374.2	371.9	370.8	306.1
102.5°	468.2	460.2	428.3	396.3	428.3	460.2	468.2	439.0	400.0	380.5	314.9
105°	576.1	571.8	554.6	537.4	554.6	571.8	576.1	510.5	423.1	379.4	315.9
107.5°	632.1	633.2	637.3	641.5	637.3	633.2	632.1	540.7	418.8	357.9	301.9
110°	646.5	651.0	668.9	686.7	668.9	651.0	646.5	544.3	408.0	339.9	289.4



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	637.4	644.3	671.7	699.2	671.7	644.3	637.4	532.7	393.3	323.5	278.5
115°	606.2	615.7	653.9	692.0	653.9	615.7	606.2	505.4	371.1	303.9	266.0
117.5°	563.2	573.8	616.1	658.4	616.1	573.8	563.2	472.3	351.1	290.5	258.2
120°	534.4	544.7	585.7	626.7	585.7	544.7	534.4	451.3	340.4	285.1	255.6
122.5°	505.4	515.5	556.1	596.6	556.1	515.5	505.4	430.6	330.8	280.9	254.2
125°	467.1	476.5	513.7	551.0	513.7	476.5	467.1	403.6	318.8	276.4	253.1
127.5°	436.4	444.2	475.7	507.2	475.7	444.2	436.4	381.8	309.0	272.7	252.5
130°	417.0	424.2	453.4	482.4	453.4	424.2	417.0	368.4	303.6	271.2	252.8
132.5°	400.4	407.0	433.0	459.0	433.0	407.0	400.4	356.9	298.9	270.0	253.1
135°	377.1	382.6	405.1	427.6	405.1	382.6	377.1	340.6	292.0	267.8	252.8
137.5°	359.8	364.4	382.7	401.1	382.7	364.4	359.8	329.0	287.9	267.5	254.4
140°	346.0	350.3	367.5	384.7	367.5	350.3	346.0	319.4	283.9	266.1	254.6
142.5°	336.3	339.9	354.7	369.6	354.7	339.9	336.3	312.9	281.8	266.1	255.5
145°	321.7	324.5	335.7	346.9	335.7	324.5	321.7	302.6	277.1	264.4	255.6
147.5°	309.5	311.8	321.1	330.3	321.1	311.8	309.5	294.5	274.4	264.4	257.3
150°	302.5	304.4	311.9	319.4	311.9	304.4	302.5	289.8	272.9	264.4	258.2
152.5°	296.9	298.3	304.0	309.7	304.0	298.3	296.9	286.1	271.6	264.4	258.8
155°	290.3	291.3	295.0	298.8	295.0	291.3	290.3	281.7	270.2	264.4	260.1
157.5°	284.5	285.2	287.9	290.5	287.9	285.2	284.5	277.8	268.8	264.4	261.4
160°	281.7	282.0	283.6	285.1	283.6	282.0	281.7	275.9	268.2	264.4	262.0
162.5°	279.0	279.3	280.8	282.2	280.8	279.3	279.0	274.1	267.6	264.4	262.7
165°	274.8	275.1	276.7	278.3	276.7	275.1	274.8	271.3	266.7	264.4	263.6
167.5°	273.0	273.2	273.8	274.4	273.8	273.2	273.0	270.8	267.7	266.1	265.5
170°	273.0	273.0	273.0	273.0	273.0	273.0	273.0	270.8	267.7	266.1	266.1
172.5°	271.6	271.4	270.9	270.3	270.9	271.4	271.6	269.7	267.4	266.1	266.1
175°	269.6	269.6	269.6	269.6	269.6	269.6	269.6	268.5	266.9	266.1	266.5
177.5°	269.3	269.1	268.5	267.8	268.5	269.1	269.3	268.4	267.2	266.6	266.8
180°	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1217.8	1217.8	1217.8	1217.8	1217.8
2.5°	1202.9	1208.6	1212.0	1216.7	1228.2
5°	1156.8	1178.6	1185.6	1202.9	1223.6
7.5°	1055.4	1122.2	1140.6	1182.1	1214.4
10°	957.4	1024.3	1056.6	1154.5	1202.9
12.5°	907.9	947.1	969.0	1106.1	1186.8
15°	876.8	904.5	920.6	1041.6	1168.3
17.5°	852.6	872.2	883.7	978.2	1143.0
20°	837.6	846.8	857.2	932.1	1114.1
22.5°	827.2	821.5	829.6	899.9	1075.0
25°	820.3	798.4	807.7	874.5	1028.9
27.5°	826.1	777.7	781.2	851.5	980.5
30°	827.2	752.4	753.5	827.2	926.4
32.5°	819.2	725.9	727.0	797.3	865.2
35°	799.6	694.7	693.6	762.8	782.3
37.5°	773.1	661.4	661.4	724.7	691.3
40°	740.9	628.0	631.4	675.1	610.7
42.5°	701.6	592.2	596.8	609.5	550.8
45°	659.0	557.7	561.1	515.0	504.6
47.5°	611.8	521.9	523.0	427.5	489.6
50°	555.3	485.0	480.5	366.4	488.5
52.5°	505.8	444.7	430.9	331.8	443.6
55°	457.4	402.1	372.2	305.3	411.3
57.5°	414.7	346.8	318.0	274.3	404.4
60°	375.6	292.7	270.8	240.8	371.0
62.5°	343.3	252.4	247.7	217.7	336.4
65°	308.8	224.6	223.5	198.2	285.8
67.5°	275.4	206.2	205.1	179.7	217.7
70°	239.6	186.6	184.3	160.2	161.3
72.5°	202.7	164.7	162.5	144.1	133.7
75°	165.9	139.4	138.2	125.6	108.3
77.5°	130.2	110.6	112.9	101.4	79.5
80°	93.3	80.7	82.9	72.6	59.9
82.5°	62.2	53.0	55.3	46.0	40.3
85°	34.5	30.0	31.1	24.2	18.4
87.5°	16.1	13.9	13.9	9.2	5.8
90°	7.9	5.1	4.7	3.2	1.8
92.5°	48.7	34.7	31.7	19.4	7.2
95°	120.0	67.6	62.0	39.6	17.3
97.5°	161.6	74.2	69.2	49.5	29.8
100°	176.8	79.8	75.3	57.4	39.5
102.5°	183.7	85.4	81.2	64.5	47.8
105°	188.9	93.7	90.1	76.0	61.8
107.5°	189.8	105.9	102.6	89.4	76.2
110°	188.4	112.7	109.7	97.8	85.9



TEST NUMBER: P934432

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	188.4	121.0	118.1	106.7	95.4
115°	190.2	133.3	130.7	120.3	109.8
117.5°	193.8	145.4	143.0	133.5	124.0
120°	196.6	152.4	150.2	141.3	132.3
122.5°	200.7	160.7	158.4	149.5	140.4
125°	206.3	171.3	169.2	161.0	152.8
127.5°	211.9	181.6	179.5	171.2	162.8
130°	216.0	188.4	186.1	177.2	168.2
132.5°	219.3	193.9	191.7	182.8	173.8
135°	222.9	200.4	198.4	190.2	182.1
137.5°	228.3	208.7	206.7	198.6	190.5
140°	231.5	214.3	212.4	204.9	197.5
142.5°	234.3	218.4	216.6	209.8	202.9
145°	237.9	224.6	223.2	217.1	211.2
147.5°	243.2	232.6	231.1	225.3	219.5
150°	245.9	236.7	235.4	230.0	224.8
152.5°	247.7	239.4	238.4	234.4	230.4
155°	251.7	245.3	244.6	241.6	238.7
157.5°	255.6	251.2	250.5	247.7	244.8
160°	257.4	253.9	253.4	251.1	249.0
162.5°	259.3	256.8	256.4	254.7	253.1
165°	262.1	261.0	260.7	259.1	257.6
167.5°	264.2	263.3	263.1	262.4	261.7
170°	266.1	266.0	265.8	265.1	264.4
172.5°	266.1	266.1	266.1	266.0	265.8
175°	267.3	267.8	267.8	267.8	267.8
177.5°	267.4	267.8	267.8	267.8	267.8
180°	267.8	267.8	267.8	267.8	267.8



TEST NUMBER: P934432
 CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-3000K

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	14.46	15.47	15.28	16.31	17.36	17.26	18.27	18.08	19.11	20.16
	3H	14.95	15.85	15.78	16.71	17.78	18.61	19.51	19.44	20.36	21.44
	4H	15.15	16.00	16.00	16.86	17.95	19.05	19.90	19.90	20.77	21.85
	6H	15.27	16.06	16.14	16.93	18.03	19.33	20.12	20.20	20.99	22.09
	8H	15.28	16.03	16.15	16.92	18.02	19.41	20.16	20.28	21.05	22.15
	12H	15.26	15.97	16.13	16.85	17.98	19.45	20.16	20.33	21.04	22.17
4H	2H	15.50	16.36	16.36	17.22	18.31	17.69	18.54	18.54	19.40	20.49
	3H	16.54	17.26	17.41	18.15	19.25	19.20	19.91	20.06	20.80	21.90
	4H	16.83	17.48	17.71	18.37	19.49	19.72	20.37	20.60	21.26	22.39
	6H	16.96	17.52	17.86	18.44	19.57	20.09	20.65	20.99	21.57	22.70
	8H	16.97	17.49	17.87	18.40	19.55	20.20	20.72	21.09	21.63	22.77
	12H	16.94	17.42	17.86	18.34	19.49	20.25	20.73	21.17	21.65	22.80
8H	4H	17.29	17.81	18.19	18.72	19.86	19.86	20.39	20.76	21.29	22.44
	6H	17.55	17.99	18.48	18.94	20.08	20.30	20.73	21.22	21.68	22.82
	8H	17.60	17.98	18.53	18.93	20.09	20.45	20.83	21.38	21.77	22.93
	12H	17.59	17.93	18.53	18.86	20.07	20.54	20.88	21.48	21.82	23.03
12H	4H	17.30	17.77	18.22	18.70	19.85	19.83	20.31	20.75	21.23	22.38
	6H	17.62	18.00	18.55	18.94	20.10	20.29	20.68	21.23	21.62	22.78
	8H	17.69	18.03	18.63	18.96	20.17	20.46	20.80	21.40	21.73	22.94