

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: P934474

Luminaire Tested: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934474
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-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

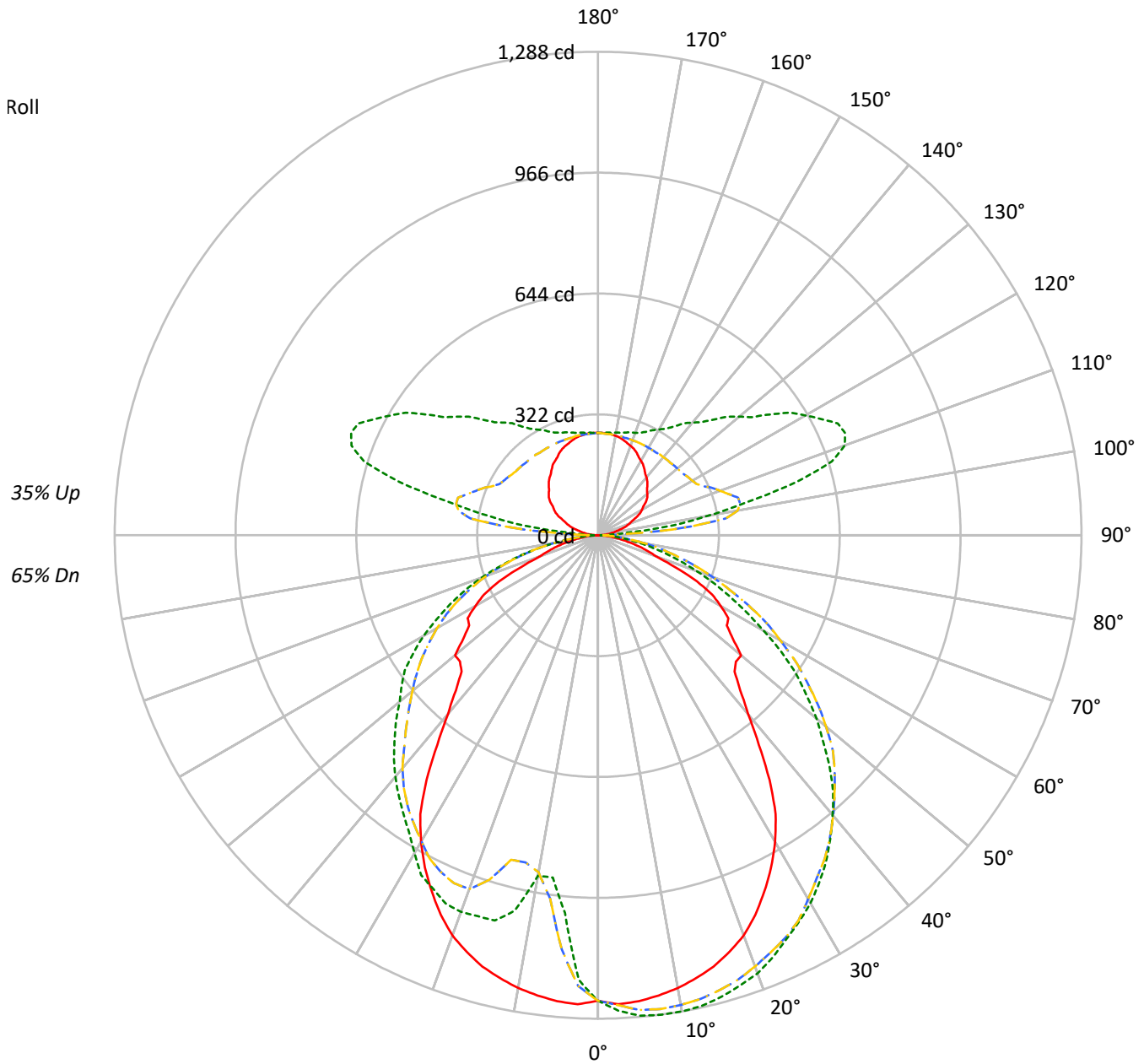
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4984.3 lumens
Efficiency: N/A
Efficacy: 110.3 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: P934474
CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



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



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	69	69	69	69
1	101	97	93	89	95	91	88	84	80	78	75	71	69	67	62	60	59	59	59	59	55
2	92	85	78	73	86	80	74	69	70	66	63	62	59	56	54	52	50	50	50	50	46
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	42	42	42	42	39
4	77	66	58	52	72	62	55	49	55	49	45	49	44	41	43	39	36	36	36	36	33
5	71	59	50	44	66	56	48	42	49	43	39	44	39	35	39	35	32	32	32	32	29
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	28	28	28	25
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25	25	25	25	22
8	56	43	35	30	52	41	34	29	37	31	27	33	28	24	29	25	22	22	22	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	20	20	20	18
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11507	11507	11507	11507
5°	11581	11617	11581	9134
10°	11491	11442	11491	8181
15°	11353	11194	11353	9347
20°	11102	10901	11102	9367
25°	10604	10472	10604	9169
30°	9963	10117	9963	8733
35°	8869	9668	8869	8254
40°	7378	9137	7378	7892
45°	6579	8518	6579	7477
50°	6974	7779	6974	7059
55°	6543	6983	6543	6817
60°	6720	5929	6720	6243
65°	6064	4901	6064	5479
70°	4171	3906	4171	4593
75°	3617	2888	3617	3458
80°	2855	1909	2855	2079
85°	1548	1011	1548	860

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 10103 cd/sqm



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.9	2.2
10°-20°	317.8	6.4
20°-30°	491.3	9.9
30°-40°	586.5	11.8
40°-50°	590.0	11.8
50°-60°	513.3	10.3
60°-70°	364.0	7.3
70°-80°	192.6	3.9
80°-90°	49.0	1.0
90°-100°	132.9	2.7
100°-110°	349.5	7.0
110°-120°	362.4	7.3
120°-130°	290.7	5.8
130°-140°	228.1	4.6
140°-150°	175.1	3.5
150°-160°	126.1	2.5
160°-170°	77.1	1.5
170°-180°	26.1	0.5
0°-30°	921.1	18.5
0°-40°	1507.6	30.2
0°-60°	2611.0	52.4
0°-90°	3216.5	64.5
90°-120°	844.8	16.9
90°-150°	1538.5	30.9
90°-180°	1768.0	35.5
0°-180°	4984.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1240	1240	1240	1240	1240	
5°	1246	1285	1246	1010	1246	118
15°	1190	1273	1190	1063	1190	335
25°	1048	1187	1048	1040	1048	481
35°	797	1060	797	905	797	493
45°	514	873	514	766	514	412
55°	419	644	419	629	419	385
65°	291	388	291	434	291	278
75°	110	184	110	221	110	116
85°	19	47	19	40	19	25
90°	2	7	2	7	2	2
95°	18	80	18	80	18	20
105°	63	547	63	547	63	67
115°	112	705	112	705	112	110
125°	156	561	156	561	156	138
135°	185	435	185	435	185	143
145°	215	353	215	353	215	135
155°	243	304	243	304	243	112
165°	262	283	262	283	262	74
175°	273	275	273	275	273	26
180°	273	273	273	273	273	



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1
2.5°	1250.7	1250.7	1257.8	1260.1	1260.1	1256.5	1253.1	1256.5	1267.1	1270.6	1269.5
5°	1246.0	1255.4	1268.3	1270.6	1272.9	1271.8	1269.5	1271.8	1283.5	1285.9	1287.1
7.5°	1236.6	1254.2	1270.6	1274.2	1277.7	1274.2	1272.9	1275.3	1287.1	1289.4	1289.4
10°	1224.9	1249.5	1268.3	1270.6	1274.2	1270.6	1270.6	1275.3	1287.1	1289.4	1290.6
12.5°	1208.5	1242.5	1260.1	1262.5	1267.1	1265.9	1264.8	1269.5	1281.2	1283.5	1283.5
15°	1189.7	1229.6	1246.0	1248.4	1256.5	1254.2	1254.2	1258.9	1271.8	1275.3	1274.2
17.5°	1163.9	1213.2	1231.9	1235.5	1241.3	1240.1	1241.3	1246.0	1257.8	1260.1	1261.2
20°	1134.5	1190.9	1213.2	1216.6	1222.5	1222.5	1222.5	1228.4	1240.1	1244.8	1244.8
22.5°	1094.6	1167.4	1190.9	1193.2	1200.2	1200.2	1202.6	1210.8	1221.4	1222.5	1222.5
25°	1047.8	1141.6	1161.5	1168.6	1175.6	1179.1	1182.6	1187.3	1190.9	1189.7	1190.9
27.5°	998.5	1108.8	1134.5	1139.2	1148.6	1152.2	1156.8	1158.0	1159.2	1162.7	1160.3
30°	943.3	1062.9	1101.7	1106.4	1121.6	1123.9	1119.3	1121.6	1127.5	1129.9	1132.2
32.5°	881.1	994.9	1067.6	1078.2	1092.3	1085.2	1084.1	1087.6	1097.0	1097.0	1099.3
35°	796.6	942.2	1036.0	1045.4	1055.9	1047.8	1052.4	1053.6	1059.5	1062.9	1061.8
37.5°	703.9	896.3	1003.2	1010.2	1018.4	1007.8	1014.9	1018.4	1023.1	1020.8	1020.8
40°	621.9	824.8	964.5	969.1	976.2	967.9	974.9	977.3	979.6	977.3	976.2
42.5°	560.9	746.2	923.3	929.2	924.5	930.4	932.8	937.5	933.9	929.2	929.2
45°	513.9	725.1	878.8	885.8	878.8	888.2	891.6	891.6	881.1	878.8	877.6
47.5°	498.6	682.9	834.2	834.2	830.6	842.4	848.3	840.0	829.5	826.0	826.0
50°	497.5	635.9	773.2	768.5	784.9	799.0	793.2	784.9	776.7	763.8	763.8
52.5°	451.7	578.4	694.6	712.2	738.0	746.2	736.8	728.6	714.5	708.6	703.9
55°	418.9	518.6	623.0	658.2	685.2	695.7	678.2	669.9	648.8	645.3	642.9
57.5°	411.9	431.7	557.3	601.9	634.7	633.6	623.0	607.7	590.2	586.6	585.5
60°	377.8	312.0	486.9	539.7	573.7	570.2	560.9	546.7	530.3	528.0	525.6
62.5°	342.6	226.4	407.1	467.0	515.0	513.9	505.7	484.6	472.9	467.0	462.3
65°	291.0	190.0	289.8	388.3	457.6	459.9	442.3	427.0	414.2	407.1	405.9
67.5°	221.7	154.9	195.9	323.9	402.4	400.0	377.8	370.7	354.3	350.8	343.7
70°	164.3	103.3	136.1	262.8	348.5	342.6	325.0	316.7	301.6	293.3	288.6
72.5°	136.1	83.3	99.7	204.2	293.3	286.3	271.0	261.6	248.7	241.7	237.0
75°	110.3	88.0	76.3	151.3	238.2	233.5	219.4	210.0	199.4	190.0	191.3
77.5°	81.0	82.1	61.0	111.4	188.9	181.9	173.6	161.9	157.2	147.9	147.9
80°	61.0	64.6	45.7	76.3	136.1	136.1	129.0	120.9	112.6	108.0	108.0
82.5°	41.0	41.0	34.0	48.1	92.7	89.2	84.4	82.1	77.4	75.1	75.1
85°	18.7	23.4	21.1	29.3	50.4	52.8	52.8	50.4	49.3	46.9	48.1
87.5°	5.9	10.6	12.9	16.4	25.8	27.0	28.1	28.1	28.1	29.3	29.3
90°	1.9	3.3	4.8	5.2	8.1	12.0	13.9	12.3	9.2	6.9	6.9
92.5°	7.3	19.7	32.2	35.3	49.6	68.7	78.3	68.6	49.3	34.8	33.4
95°	17.6	40.3	63.1	68.8	122.2	193.3	228.9	204.2	155.0	118.0	113.8
97.5°	30.4	50.4	70.5	75.6	164.5	283.3	342.6	327.1	295.9	272.5	264.5
100°	40.2	58.4	76.7	81.3	180.0	311.7	377.6	378.7	381.0	382.7	373.2
102.5°	48.7	65.7	82.7	86.9	187.1	320.7	387.4	407.3	447.0	476.8	468.6
105°	63.0	77.3	91.7	95.4	192.3	321.7	386.4	430.9	519.8	586.6	582.3
107.5°	77.6	91.0	104.4	107.8	193.3	307.4	364.4	426.5	550.6	643.7	644.8
110°	87.5	99.5	111.7	114.7	191.9	294.7	346.1	415.5	554.3	658.4	662.9



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	97.1	108.7	120.2	123.2	191.9	283.6	329.4	400.5	542.5	649.0	656.1
115°	111.8	122.5	133.1	135.8	193.7	270.8	309.5	377.8	514.7	617.3	627.0
117.5°	126.3	136.0	145.6	148.0	197.3	262.9	295.8	357.5	480.9	573.6	584.3
120°	134.7	143.9	152.9	155.2	200.2	260.3	290.3	346.7	459.5	544.2	554.6
122.5°	143.0	152.2	161.3	163.7	204.4	258.9	286.0	336.8	438.5	514.7	525.0
125°	155.6	163.9	172.3	174.4	210.1	257.7	281.5	324.7	411.0	475.7	485.2
127.5°	165.8	174.3	182.8	184.9	215.8	257.1	277.7	314.7	388.8	444.4	452.3
130°	171.3	180.4	189.5	191.8	220.0	257.4	276.2	309.2	375.2	424.6	432.0
132.5°	177.0	186.1	195.2	197.5	223.3	257.7	274.9	304.4	363.5	407.8	414.4
135°	185.4	193.7	202.0	204.1	227.0	257.4	272.7	297.4	346.9	384.0	389.7
137.5°	194.0	202.2	210.5	212.5	232.5	259.0	272.3	293.2	335.0	366.4	371.1
140°	201.1	208.7	216.3	218.2	235.8	259.3	271.0	289.1	325.3	352.4	356.7
142.5°	206.6	213.7	220.6	222.4	238.6	260.2	271.0	286.9	318.6	342.4	346.1
145°	215.1	221.1	227.2	228.7	242.2	260.3	269.2	282.2	308.1	327.6	330.4
147.5°	223.5	229.5	235.3	236.8	247.7	262.0	269.2	279.5	299.9	315.2	317.5
150°	228.9	234.3	239.7	241.0	250.4	262.9	269.2	277.9	295.1	308.0	310.0
152.5°	234.6	238.7	242.8	243.8	252.3	263.6	269.2	276.6	291.4	302.4	303.8
155°	243.0	246.1	249.1	249.8	256.3	264.9	269.2	275.1	286.8	295.6	296.6
157.5°	249.3	252.2	255.1	255.8	260.3	266.2	269.2	273.8	282.9	289.8	290.5
160°	253.5	255.7	258.1	258.6	262.1	266.8	269.2	273.1	281.0	286.8	287.2
162.5°	257.7	259.4	261.1	261.5	264.1	267.6	269.2	272.5	279.1	284.1	284.4
165°	262.3	263.8	265.4	265.8	266.9	268.4	269.2	271.6	276.3	279.8	280.2
167.5°	266.5	267.2	267.9	268.1	269.1	270.4	271.0	272.6	275.7	278.0	278.2
170°	269.2	270.0	270.7	270.8	270.9	271.0	271.0	272.6	275.7	278.0	278.0
172.5°	270.7	270.8	271.0	271.0	271.0	271.0	271.0	272.3	274.7	276.5	276.3
175°	272.7	272.7	272.7	272.7	272.2	271.4	271.0	271.8	273.4	274.6	274.6
177.5°	272.7	272.7	272.7	272.7	272.3	271.7	271.5	272.1	273.3	274.2	274.0
180°	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1
2.5°	1271.8	1268.3	1271.8	1269.5	1270.6	1267.1	1256.5	1253.1	1256.5	1260.1	1260.1
5°	1287.1	1284.8	1287.1	1287.1	1285.9	1283.5	1271.8	1269.5	1271.8	1272.9	1270.6
7.5°	1291.8	1288.2	1291.8	1289.4	1289.4	1287.1	1275.3	1272.9	1274.2	1277.7	1274.2
10°	1291.8	1288.2	1291.8	1290.6	1289.4	1287.1	1275.3	1270.6	1270.6	1274.2	1270.6
12.5°	1285.9	1283.5	1285.9	1283.5	1283.5	1281.2	1269.5	1264.8	1265.9	1267.1	1262.5
15°	1276.5	1272.9	1276.5	1274.2	1275.3	1271.8	1258.9	1254.2	1254.2	1256.5	1248.4
17.5°	1262.5	1257.8	1262.5	1261.2	1260.1	1257.8	1246.0	1241.3	1240.1	1241.3	1235.5
20°	1246.0	1242.5	1246.0	1244.8	1244.8	1240.1	1228.4	1222.5	1222.5	1222.5	1216.6
22.5°	1220.2	1216.6	1220.2	1222.5	1222.5	1221.4	1210.8	1202.6	1200.2	1200.2	1193.2
25°	1190.9	1187.3	1190.9	1190.9	1189.7	1190.9	1187.3	1182.6	1179.1	1175.6	1168.6
27.5°	1162.7	1160.3	1162.7	1160.3	1162.7	1159.2	1158.0	1156.8	1152.2	1148.6	1139.2
30°	1134.5	1132.2	1134.5	1132.2	1129.9	1127.5	1121.6	1119.3	1123.9	1121.6	1106.4
32.5°	1099.3	1097.0	1099.3	1099.3	1097.0	1097.0	1087.6	1084.1	1085.2	1092.3	1078.2
35°	1062.9	1059.5	1062.9	1061.8	1062.9	1059.5	1053.6	1052.4	1047.8	1055.9	1045.4
37.5°	1020.8	1017.2	1020.8	1020.8	1020.8	1023.1	1018.4	1014.9	1007.8	1018.4	1010.2
40°	977.3	972.6	977.3	976.2	977.3	979.6	977.3	974.9	967.9	976.2	969.1
42.5°	928.0	926.9	928.0	929.2	929.2	933.9	937.5	932.8	930.4	924.5	929.2
45°	875.2	872.9	875.2	877.6	878.8	881.1	891.6	891.6	888.2	878.8	885.8
47.5°	818.9	813.1	818.9	826.0	826.0	829.5	840.0	848.3	842.4	830.6	834.2
50°	759.1	760.3	759.1	763.8	763.8	776.7	784.9	793.2	799.0	784.9	768.5
52.5°	700.5	699.3	700.5	703.9	708.6	714.5	728.6	736.8	746.2	738.0	712.2
55°	641.8	644.2	641.8	642.9	645.3	648.8	669.9	678.2	695.7	685.2	658.2
57.5°	583.1	579.6	583.1	585.5	586.6	590.2	607.7	623.0	633.6	634.7	601.9
60°	515.0	510.3	515.0	525.6	528.0	530.3	546.7	560.9	570.2	573.7	539.7
62.5°	455.2	447.0	455.2	462.3	467.0	472.9	484.6	505.7	513.9	515.0	467.0
65°	391.9	388.3	391.9	405.9	407.1	414.2	427.0	442.3	459.9	457.6	388.3
67.5°	334.4	334.4	334.4	343.7	350.8	354.3	370.7	377.8	400.0	402.4	323.9
70°	281.6	280.4	281.6	288.6	293.3	301.6	316.7	325.0	342.6	348.5	262.8
72.5°	231.1	230.0	231.1	237.0	241.7	248.7	261.6	271.0	286.3	293.3	204.2
75°	186.6	184.2	186.6	191.3	190.0	199.4	210.0	219.4	233.5	238.2	151.3
77.5°	143.1	143.1	143.1	147.9	147.9	157.2	161.9	173.6	181.9	188.9	111.4
80°	106.7	105.6	106.7	108.0	108.0	112.6	120.9	129.0	136.1	136.1	76.3
82.5°	75.1	72.7	75.1	75.1	75.1	77.4	82.1	84.4	89.2	92.7	48.1
85°	46.9	46.9	46.9	48.1	46.9	49.3	50.4	52.8	52.8	50.4	29.3
87.5°	30.5	29.3	30.5	29.3	29.3	28.1	28.1	28.1	27.0	25.8	16.4
90°	6.9	6.9	6.9	6.9	6.9	9.2	12.3	13.9	12.0	8.1	5.2
92.5°	27.9	22.3	27.9	33.4	34.8	49.3	68.6	78.3	68.7	49.6	35.3
95°	97.1	80.4	97.1	113.8	118.0	155.0	204.2	228.9	193.3	122.2	68.8
97.5°	232.7	200.8	232.7	264.5	272.5	295.9	327.1	342.6	283.3	164.5	75.6
100°	335.2	297.2	335.2	373.2	382.7	381.0	378.7	377.6	311.7	180.0	81.3
102.5°	436.1	403.6	436.1	468.6	476.8	447.0	407.3	387.4	320.7	187.1	86.9
105°	564.8	547.3	564.8	582.3	586.6	519.8	430.9	386.4	321.7	192.3	95.4
107.5°	649.0	653.2	649.0	644.8	643.7	550.6	426.5	364.4	307.4	193.3	107.8
110°	681.1	699.3	681.1	662.9	658.4	554.3	415.5	346.1	294.7	191.9	114.7



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	684.0	712.0	684.0	656.1	649.0	542.5	400.5	329.4	283.6	191.9	123.2
115°	665.8	704.6	665.8	627.0	617.3	514.7	377.8	309.5	270.8	193.7	135.8
117.5°	627.4	670.4	627.4	584.3	573.6	480.9	357.5	295.8	262.9	197.3	148.0
120°	596.4	638.2	596.4	554.6	544.2	459.5	346.7	290.3	260.3	200.2	155.2
122.5°	566.3	607.5	566.3	525.0	514.7	438.5	336.8	286.0	258.9	204.4	163.7
125°	523.1	561.1	523.1	485.2	475.7	411.0	324.7	281.5	257.7	210.1	174.4
127.5°	484.4	516.5	484.4	452.3	444.4	388.8	314.7	277.7	257.1	215.8	184.9
130°	461.7	491.2	461.7	432.0	424.6	375.2	309.2	276.2	257.4	220.0	191.8
132.5°	440.9	467.4	440.9	414.4	407.8	363.5	304.4	274.9	257.7	223.3	197.5
135°	412.6	435.4	412.6	389.7	384.0	346.9	297.4	272.7	257.4	227.0	204.1
137.5°	389.7	408.5	389.7	371.1	366.4	335.0	293.2	272.3	259.0	232.5	212.5
140°	374.2	391.7	374.2	356.7	352.4	325.3	289.1	271.0	259.3	235.8	218.2
142.5°	361.2	376.3	361.2	346.1	342.4	318.6	286.9	271.0	260.2	238.6	222.4
145°	341.9	353.2	341.9	330.4	327.6	308.1	282.2	269.2	260.3	242.2	228.7
147.5°	327.0	336.4	327.0	317.5	315.2	299.9	279.5	269.2	262.0	247.7	236.8
150°	317.6	325.3	317.6	310.0	308.0	295.1	277.9	269.2	262.9	250.4	241.0
152.5°	309.6	315.3	309.6	303.8	302.4	291.4	276.6	269.2	263.6	252.3	243.8
155°	300.4	304.2	300.4	296.6	295.6	286.8	275.1	269.2	264.9	256.3	249.8
157.5°	293.1	295.8	293.1	290.5	289.8	282.9	273.8	269.2	266.2	260.3	255.8
160°	288.8	290.3	288.8	287.2	286.8	281.0	273.1	269.2	266.8	262.1	258.6
162.5°	285.9	287.4	285.9	284.4	284.1	279.1	272.5	269.2	267.6	264.1	261.5
165°	281.8	283.4	281.8	280.2	279.8	276.3	271.6	269.2	268.4	266.9	265.8
167.5°	278.8	279.5	278.8	278.2	278.0	275.7	272.6	271.0	270.4	269.1	268.1
170°	278.0	278.0	278.0	278.0	278.0	275.7	272.6	271.0	271.0	270.9	270.8
172.5°	275.8	275.3	275.8	276.3	276.5	274.7	272.3	271.0	271.0	271.0	271.0
175°	274.6	274.6	274.6	274.6	274.6	273.4	271.8	271.0	271.4	272.2	272.7
177.5°	273.4	272.7	273.4	274.0	274.2	273.3	272.1	271.5	271.7	272.3	272.7
180°	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1
2.5°	1257.8	1250.7	1250.7	1238.9	1234.2	1230.8	1224.9	1207.3	1202.6	1197.9	1204.9
5°	1268.3	1255.4	1246.0	1224.9	1207.3	1200.2	1177.9	1135.8	1107.5	1086.5	1074.7
7.5°	1270.6	1254.2	1236.6	1203.8	1161.5	1142.8	1074.7	997.3	976.2	957.4	945.6
10°	1268.3	1249.5	1224.9	1175.6	1075.9	1043.0	974.9	924.5	911.6	908.1	911.6
12.5°	1260.1	1242.5	1208.5	1126.3	986.7	964.5	924.5	895.2	892.9	898.7	930.4
15°	1246.0	1229.6	1189.7	1060.6	937.5	921.0	892.9	882.3	895.2	936.2	1031.3
17.5°	1231.9	1213.2	1163.9	996.1	899.9	888.2	868.2	889.3	962.1	1017.2	1048.9
20°	1213.2	1190.9	1134.5	949.2	872.9	862.3	852.9	948.0	1003.2	1023.1	1040.6
22.5°	1190.9	1167.4	1094.6	916.3	844.8	836.5	842.4	980.9	1003.2	1017.2	1032.5
25°	1161.5	1141.6	1047.8	890.5	822.5	813.1	835.3	977.3	990.2	993.8	1024.2
27.5°	1134.5	1108.8	998.5	867.0	795.5	791.9	841.2	962.1	971.5	974.9	1007.8
30°	1101.7	1062.9	943.3	842.4	767.3	766.2	842.4	943.3	940.9	950.3	983.2
32.5°	1067.6	994.9	881.1	811.9	740.3	739.2	834.2	915.2	912.8	925.7	950.3
35°	1036.0	942.2	796.6	776.7	706.3	707.5	814.2	882.3	883.5	895.2	910.5
37.5°	1003.2	896.3	703.9	738.0	673.5	673.5	787.2	851.8	849.5	852.9	874.1
40°	964.5	824.8	621.9	687.5	642.9	639.4	754.4	818.9	810.7	809.6	838.9
42.5°	923.3	746.2	560.9	620.6	607.7	603.0	714.5	779.0	763.8	767.3	804.9
45°	878.8	725.1	513.9	524.5	571.3	567.9	671.1	733.3	722.7	732.2	770.9
47.5°	834.2	682.9	498.6	435.3	532.6	531.5	623.0	688.7	682.9	692.2	733.3
50°	773.2	635.9	497.5	373.1	489.3	493.9	565.5	645.3	645.3	653.5	696.9
52.5°	694.6	578.4	451.7	337.9	438.8	452.9	515.0	607.7	610.1	618.3	657.0
55°	623.0	518.6	418.9	310.9	379.0	409.5	465.8	569.0	573.7	581.9	617.2
57.5°	557.3	431.7	411.9	279.3	323.9	353.2	422.3	531.5	533.9	540.9	574.9
60°	486.9	312.0	377.8	245.2	275.7	298.0	382.5	486.9	495.1	499.8	529.2
62.5°	407.1	226.4	342.6	221.7	252.3	257.0	349.6	444.6	455.2	458.7	476.3
65°	289.8	190.0	291.0	201.8	227.6	228.7	314.4	401.3	410.6	416.5	429.4
67.5°	195.9	154.9	221.7	183.0	208.9	210.0	280.4	350.8	363.7	368.4	376.6
70°	136.1	103.3	164.3	163.1	187.7	190.0	244.0	305.0	316.7	320.3	325.0
72.5°	99.7	83.3	136.1	146.7	165.4	167.7	206.5	253.4	265.2	268.7	271.0
75°	76.3	88.0	110.3	127.9	140.7	142.0	169.0	206.5	214.7	217.0	218.2
77.5°	61.0	82.1	81.0	103.3	115.0	112.6	132.6	159.6	166.6	166.6	166.6
80°	45.7	64.6	61.0	73.9	84.4	82.1	95.0	113.8	116.2	118.5	117.3
82.5°	34.0	41.0	41.0	46.9	56.3	54.0	63.3	73.9	73.9	73.9	76.3
85°	21.1	23.4	18.7	24.6	31.7	30.5	35.2	39.9	41.0	41.0	38.7
87.5°	12.9	10.6	5.9	9.4	14.1	14.1	16.4	17.6	16.4	16.4	16.4
90°	4.8	3.3	1.9	3.3	4.8	5.2	8.1	12.0	13.9	12.3	9.2
92.5°	32.2	19.7	7.3	19.7	32.2	35.3	49.6	68.7	78.3	68.6	49.3
95°	63.1	40.3	17.6	40.3	63.1	68.8	122.2	193.3	228.9	204.2	155.0
97.5°	70.5	50.4	30.4	50.4	70.5	75.6	164.5	283.3	342.6	327.1	295.9
100°	76.7	58.4	40.2	58.4	76.7	81.3	180.0	311.7	377.6	378.7	381.0
102.5°	82.7	65.7	48.7	65.7	82.7	86.9	187.1	320.7	387.4	407.3	447.0
105°	91.7	77.3	63.0	77.3	91.7	95.4	192.3	321.7	386.4	430.9	519.8
107.5°	104.4	91.0	77.6	91.0	104.4	107.8	193.3	307.4	364.4	426.5	550.6
110°	111.7	99.5	87.5	99.5	111.7	114.7	191.9	294.7	346.1	415.5	554.3



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	120.2	108.7	97.1	108.7	120.2	123.2	191.9	283.6	329.4	400.5	542.5
115°	133.1	122.5	111.8	122.5	133.1	135.8	193.7	270.8	309.5	377.8	514.7
117.5°	145.6	136.0	126.3	136.0	145.6	148.0	197.3	262.9	295.8	357.5	480.9
120°	152.9	143.9	134.7	143.9	152.9	155.2	200.2	260.3	290.3	346.7	459.5
122.5°	161.3	152.2	143.0	152.2	161.3	163.7	204.4	258.9	286.0	336.8	438.5
125°	172.3	163.9	155.6	163.9	172.3	174.4	210.1	257.7	281.5	324.7	411.0
127.5°	182.8	174.3	165.8	174.3	182.8	184.9	215.8	257.1	277.7	314.7	388.8
130°	189.5	180.4	171.3	180.4	189.5	191.8	220.0	257.4	276.2	309.2	375.2
132.5°	195.2	186.1	177.0	186.1	195.2	197.5	223.3	257.7	274.9	304.4	363.5
135°	202.0	193.7	185.4	193.7	202.0	204.1	227.0	257.4	272.7	297.4	346.9
137.5°	210.5	202.2	194.0	202.2	210.5	212.5	232.5	259.0	272.3	293.2	335.0
140°	216.3	208.7	201.1	208.7	216.3	218.2	235.8	259.3	271.0	289.1	325.3
142.5°	220.6	213.7	206.6	213.7	220.6	222.4	238.6	260.2	271.0	286.9	318.6
145°	227.2	221.1	215.1	221.1	227.2	228.7	242.2	260.3	269.2	282.2	308.1
147.5°	235.3	229.5	223.5	229.5	235.3	236.8	247.7	262.0	269.2	279.5	299.9
150°	239.7	234.3	228.9	234.3	239.7	241.0	250.4	262.9	269.2	277.9	295.1
152.5°	242.8	238.7	234.6	238.7	242.8	243.8	252.3	263.6	269.2	276.6	291.4
155°	249.1	246.1	243.0	246.1	249.1	249.8	256.3	264.9	269.2	275.1	286.8
157.5°	255.1	252.2	249.3	252.2	255.1	255.8	260.3	266.2	269.2	273.8	282.9
160°	258.1	255.7	253.5	255.7	258.1	258.6	262.1	266.8	269.2	273.1	281.0
162.5°	261.1	259.4	257.7	259.4	261.1	261.5	264.1	267.6	269.2	272.5	279.1
165°	265.4	263.8	262.3	263.8	265.4	265.8	266.9	268.4	269.2	271.6	276.3
167.5°	267.9	267.2	266.5	267.2	267.9	268.1	269.1	270.4	271.0	272.6	275.7
170°	270.7	270.0	269.2	270.0	270.7	270.8	270.9	271.0	271.0	272.6	275.7
172.5°	271.0	270.8	270.7	270.8	271.0	271.0	271.0	271.0	271.0	272.3	274.7
175°	272.7	272.7	272.7	272.7	272.7	272.7	272.2	271.4	271.0	271.8	273.4
177.5°	272.7	272.7	272.7	272.7	272.7	272.7	272.3	271.7	271.5	272.1	273.3
180°	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1
2.5°	1196.8	1193.2	1197.9	1184.9	1197.9	1193.2	1196.8	1204.9	1197.9	1202.6	1207.3
5°	1050.1	1044.2	1025.5	1010.2	1025.5	1044.2	1050.1	1074.7	1086.5	1107.5	1135.8
7.5°	938.6	933.9	929.2	919.8	929.2	933.9	938.6	945.6	957.4	976.2	997.3
10°	913.9	915.2	922.2	921.0	922.2	915.2	913.9	911.6	908.1	911.6	924.5
12.5°	977.3	987.9	1026.6	1024.2	1026.6	987.9	977.3	930.4	898.7	892.9	895.2
15°	1050.1	1053.6	1061.8	1062.9	1061.8	1053.6	1050.1	1031.3	936.2	895.2	882.3
17.5°	1057.1	1058.3	1064.2	1064.2	1064.2	1058.3	1057.1	1048.9	1017.2	962.1	889.3
20°	1051.2	1053.6	1065.3	1067.6	1065.3	1053.6	1051.2	1040.6	1023.1	1003.2	948.0
22.5°	1048.9	1053.6	1062.9	1061.8	1062.9	1053.6	1048.9	1032.5	1017.2	1003.2	980.9
25°	1037.2	1037.2	1038.3	1039.5	1038.3	1037.2	1037.2	1024.2	993.8	990.2	977.3
27.5°	1012.5	1014.9	1021.9	1020.8	1021.9	1014.9	1012.5	1007.8	974.9	971.5	962.1
30°	990.2	987.9	982.0	977.3	982.0	987.9	990.2	983.2	950.3	940.9	943.3
32.5°	952.6	946.8	940.9	937.5	940.9	946.8	952.6	950.3	925.7	912.8	915.2
35°	908.1	909.3	908.1	904.6	908.1	909.3	908.1	910.5	895.2	883.5	882.3
37.5°	876.5	878.8	877.6	872.9	877.6	878.8	876.5	874.1	852.9	849.5	851.8
40°	843.6	844.8	843.6	840.0	843.6	844.8	843.6	838.9	809.6	810.7	818.9
42.5°	811.9	810.7	807.2	804.9	807.2	810.7	811.9	804.9	767.3	763.8	779.0
45°	775.5	776.7	769.6	766.2	769.6	776.7	775.5	770.9	732.2	722.7	733.3
47.5°	739.2	739.2	733.3	729.8	733.3	739.2	739.2	733.3	692.2	682.9	688.7
50°	700.5	699.3	691.0	689.9	691.0	699.3	700.5	696.9	653.5	645.3	645.3
52.5°	655.9	655.9	657.0	659.3	657.0	655.9	655.9	657.0	618.3	610.1	607.7
55°	617.2	618.3	626.5	628.9	626.5	618.3	617.2	617.2	581.9	573.7	569.0
57.5°	577.2	577.2	583.1	583.1	583.1	577.2	577.2	574.9	540.9	533.9	531.5
60°	531.5	533.9	538.5	537.3	538.5	533.9	531.5	529.2	499.8	495.1	486.9
62.5°	483.3	485.7	486.9	484.6	486.9	485.7	483.3	476.3	458.7	455.2	444.6
65°	432.9	435.3	436.5	434.1	436.5	435.3	432.9	429.4	416.5	410.6	401.3
67.5°	381.3	380.2	379.0	383.6	379.0	380.2	381.3	376.6	368.4	363.7	350.8
70°	328.5	328.5	327.3	329.7	327.3	328.5	328.5	325.0	320.3	316.7	305.0
72.5°	272.2	271.0	275.7	272.2	275.7	271.0	272.2	271.0	268.7	265.2	253.4
75°	217.0	219.4	217.0	220.6	217.0	219.4	217.0	218.2	217.0	214.7	206.5
77.5°	165.4	167.7	165.4	165.4	165.4	167.7	165.4	166.6	166.6	166.6	159.6
80°	117.3	116.2	116.2	115.0	116.2	116.2	117.3	117.3	118.5	116.2	113.8
82.5°	75.1	73.9	73.9	76.3	73.9	73.9	75.1	76.3	73.9	73.9	73.9
85°	41.0	42.3	39.9	39.9	39.9	42.3	41.0	38.7	41.0	41.0	39.9
87.5°	15.3	14.1	14.1	14.1	14.1	14.1	15.3	16.4	16.4	16.4	17.6
90°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	9.2	12.3	13.9	12.0
92.5°	34.8	33.4	27.9	22.3	27.9	33.4	34.8	49.3	68.6	78.3	68.7
95°	118.0	113.8	97.1	80.4	97.1	113.8	118.0	155.0	204.2	228.9	193.3
97.5°	272.5	264.5	232.7	200.8	232.7	264.5	272.5	295.9	327.1	342.6	283.3
100°	382.7	373.2	335.2	297.2	335.2	373.2	382.7	381.0	378.7	377.6	311.7
102.5°	476.8	468.6	436.1	403.6	436.1	468.6	476.8	447.0	407.3	387.4	320.7
105°	586.6	582.3	564.8	547.3	564.8	582.3	586.6	519.8	430.9	386.4	321.7
107.5°	643.7	644.8	649.0	653.2	649.0	644.8	643.7	550.6	426.5	364.4	307.4
110°	658.4	662.9	681.1	699.3	681.1	662.9	658.4	554.3	415.5	346.1	294.7



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	649.0	656.1	684.0	712.0	684.0	656.1	649.0	542.5	400.5	329.4	283.6
115°	617.3	627.0	665.8	704.6	665.8	627.0	617.3	514.7	377.8	309.5	270.8
117.5°	573.6	584.3	627.4	670.4	627.4	584.3	573.6	480.9	357.5	295.8	262.9
120°	544.2	554.6	596.4	638.2	596.4	554.6	544.2	459.5	346.7	290.3	260.3
122.5°	514.7	525.0	566.3	607.5	566.3	525.0	514.7	438.5	336.8	286.0	258.9
125°	475.7	485.2	523.1	561.1	523.1	485.2	475.7	411.0	324.7	281.5	257.7
127.5°	444.4	452.3	484.4	516.5	484.4	452.3	444.4	388.8	314.7	277.7	257.1
130°	424.6	432.0	461.7	491.2	461.7	432.0	424.6	375.2	309.2	276.2	257.4
132.5°	407.8	414.4	440.9	467.4	440.9	414.4	407.8	363.5	304.4	274.9	257.7
135°	384.0	389.7	412.6	435.4	412.6	389.7	384.0	346.9	297.4	272.7	257.4
137.5°	366.4	371.1	389.7	408.5	389.7	371.1	366.4	335.0	293.2	272.3	259.0
140°	352.4	356.7	374.2	391.7	374.2	356.7	352.4	325.3	289.1	271.0	259.3
142.5°	342.4	346.1	361.2	376.3	361.2	346.1	342.4	318.6	286.9	271.0	260.2
145°	327.6	330.4	341.9	353.2	341.9	330.4	327.6	308.1	282.2	269.2	260.3
147.5°	315.2	317.5	327.0	336.4	327.0	317.5	315.2	299.9	279.5	269.2	262.0
150°	308.0	310.0	317.6	325.3	317.6	310.0	308.0	295.1	277.9	269.2	262.9
152.5°	302.4	303.8	309.6	315.3	309.6	303.8	302.4	291.4	276.6	269.2	263.6
155°	295.6	296.6	300.4	304.2	300.4	296.6	295.6	286.8	275.1	269.2	264.9
157.5°	289.8	290.5	293.1	295.8	293.1	290.5	289.8	282.9	273.8	269.2	266.2
160°	286.8	287.2	288.8	290.3	288.8	287.2	286.8	281.0	273.1	269.2	266.8
162.5°	284.1	284.4	285.9	287.4	285.9	284.4	284.1	279.1	272.5	269.2	267.6
165°	279.8	280.2	281.8	283.4	281.8	280.2	279.8	276.3	271.6	269.2	268.4
167.5°	278.0	278.2	278.8	279.5	278.8	278.2	278.0	275.7	272.6	271.0	270.4
170°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	275.7	272.6	271.0	271.0
172.5°	276.5	276.3	275.8	275.3	275.8	276.3	276.5	274.7	272.3	271.0	271.0
175°	274.6	274.6	274.6	274.6	274.6	274.6	274.6	273.4	271.8	271.0	271.4
177.5°	274.2	274.0	273.4	272.7	273.4	274.0	274.2	273.3	272.1	271.5	271.7
180°	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1240.1	1240.1	1240.1	1240.1	1240.1
2.5°	1224.9	1230.8	1234.2	1238.9	1250.7
5°	1177.9	1200.2	1207.3	1224.9	1246.0
7.5°	1074.7	1142.8	1161.5	1203.8	1236.6
10°	974.9	1043.0	1075.9	1175.6	1224.9
12.5°	924.5	964.5	986.7	1126.3	1208.5
15°	892.9	921.0	937.5	1060.6	1189.7
17.5°	868.2	888.2	899.9	996.1	1163.9
20°	852.9	862.3	872.9	949.2	1134.5
22.5°	842.4	836.5	844.8	916.3	1094.6
25°	835.3	813.1	822.5	890.5	1047.8
27.5°	841.2	791.9	795.5	867.0	998.5
30°	842.4	766.2	767.3	842.4	943.3
32.5°	834.2	739.2	740.3	811.9	881.1
35°	814.2	707.5	706.3	776.7	796.6
37.5°	787.2	673.5	673.5	738.0	703.9
40°	754.4	639.4	642.9	687.5	621.9
42.5°	714.5	603.0	607.7	620.6	560.9
45°	671.1	567.9	571.3	524.5	513.9
47.5°	623.0	531.5	532.6	435.3	498.6
50°	565.5	493.9	489.3	373.1	497.5
52.5°	515.0	452.9	438.8	337.9	451.7
55°	465.8	409.5	379.0	310.9	418.9
57.5°	422.3	353.2	323.9	279.3	411.9
60°	382.5	298.0	275.7	245.2	377.8
62.5°	349.6	257.0	252.3	221.7	342.6
65°	314.4	228.7	227.6	201.8	291.0
67.5°	280.4	210.0	208.9	183.0	221.7
70°	244.0	190.0	187.7	163.1	164.3
72.5°	206.5	167.7	165.4	146.7	136.1
75°	169.0	142.0	140.7	127.9	110.3
77.5°	132.6	112.6	115.0	103.3	81.0
80°	95.0	82.1	84.4	73.9	61.0
82.5°	63.3	54.0	56.3	46.9	41.0
85°	35.2	30.5	31.7	24.6	18.7
87.5°	16.4	14.1	14.1	9.4	5.9
90°	8.1	5.2	4.8	3.3	1.9
92.5°	49.6	35.3	32.2	19.7	7.3
95°	122.2	68.8	63.1	40.3	17.6
97.5°	164.5	75.6	70.5	50.4	30.4
100°	180.0	81.3	76.7	58.4	40.2
102.5°	187.1	86.9	82.7	65.7	48.7
105°	192.3	95.4	91.7	77.3	63.0
107.5°	193.3	107.8	104.4	91.0	77.6
110°	191.9	114.7	111.7	99.5	87.5



TEST NUMBER: P934474

CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	191.9	123.2	120.2	108.7	97.1
115°	193.7	135.8	133.1	122.5	111.8
117.5°	197.3	148.0	145.6	136.0	126.3
120°	200.2	155.2	152.9	143.9	134.7
122.5°	204.4	163.7	161.3	152.2	143.0
125°	210.1	174.4	172.3	163.9	155.6
127.5°	215.8	184.9	182.8	174.3	165.8
130°	220.0	191.8	189.5	180.4	171.3
132.5°	223.3	197.5	195.2	186.1	177.0
135°	227.0	204.1	202.0	193.7	185.4
137.5°	232.5	212.5	210.5	202.2	194.0
140°	235.8	218.2	216.3	208.7	201.1
142.5°	238.6	222.4	220.6	213.7	206.6
145°	242.2	228.7	227.2	221.1	215.1
147.5°	247.7	236.8	235.3	229.5	223.5
150°	250.4	241.0	239.7	234.3	228.9
152.5°	252.3	243.8	242.8	238.7	234.6
155°	256.3	249.8	249.1	246.1	243.0
157.5°	260.3	255.8	255.1	252.2	249.3
160°	262.1	258.6	258.1	255.7	253.5
162.5°	264.1	261.5	261.1	259.4	257.7
165°	266.9	265.8	265.4	263.8	262.3
167.5°	269.1	268.1	267.9	267.2	266.5
170°	270.9	270.8	270.7	270.0	269.2
172.5°	271.0	271.0	271.0	270.8	270.7
175°	272.2	272.7	272.7	272.7	272.7
177.5°	272.3	272.7	272.7	272.7	272.7
180°	272.7	272.7	272.7	272.7	272.7



TEST NUMBER: P934474
 CATALOG NUMBER: SQ4-FA-050U-100D-940-1D-UNV-STD-W-4

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	14.52	15.53	15.35	16.38	17.42	17.32	18.33	18.14	19.17	20.22
	3H	15.01	15.92	15.85	16.77	17.85	18.67	19.57	19.50	20.43	21.50
	4H	15.21	16.07	16.06	16.93	18.01	19.11	19.97	19.96	20.83	21.91
	6H	15.34	16.13	16.20	16.99	18.09	19.40	20.19	20.26	21.05	22.15
	8H	15.34	16.09	16.22	16.98	18.08	19.47	20.22	20.34	21.11	22.21
	12H	15.32	16.03	16.20	16.91	18.04	19.51	20.23	20.39	21.11	22.23
4H	2H	15.57	16.42	16.42	17.28	18.37	17.75	18.61	18.61	19.47	20.55
	3H	16.61	17.32	17.47	18.21	19.31	19.26	19.97	20.13	20.87	21.97
	4H	16.89	17.54	17.77	18.43	19.56	19.79	20.44	20.67	21.33	22.46
	6H	17.02	17.58	17.92	18.50	19.63	20.15	20.71	21.05	21.63	22.76
	8H	17.03	17.56	17.93	18.47	19.61	20.26	20.78	21.16	21.69	22.84
	12H	17.01	17.48	17.93	18.41	19.56	20.32	20.79	21.24	21.72	22.87
8H	4H	17.35	17.87	18.25	18.78	19.93	19.93	20.45	20.82	21.36	22.50
	6H	17.62	18.05	18.54	19.00	20.15	20.36	20.79	21.28	21.74	22.89
	8H	17.66	18.05	18.60	18.99	20.15	20.51	20.89	21.44	21.83	23.00
	12H	17.65	17.99	18.59	18.93	20.14	20.61	20.95	21.55	21.88	23.09
12H	4H	17.36	17.83	18.28	18.76	19.91	19.90	20.37	20.81	21.30	22.45
	6H	17.68	18.06	18.61	19.01	20.17	20.36	20.74	21.29	21.68	22.85
	8H	17.75	18.09	18.69	19.02	20.24	20.52	20.86	21.46	21.79	23.01