

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: P935107

Luminaire Tested: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

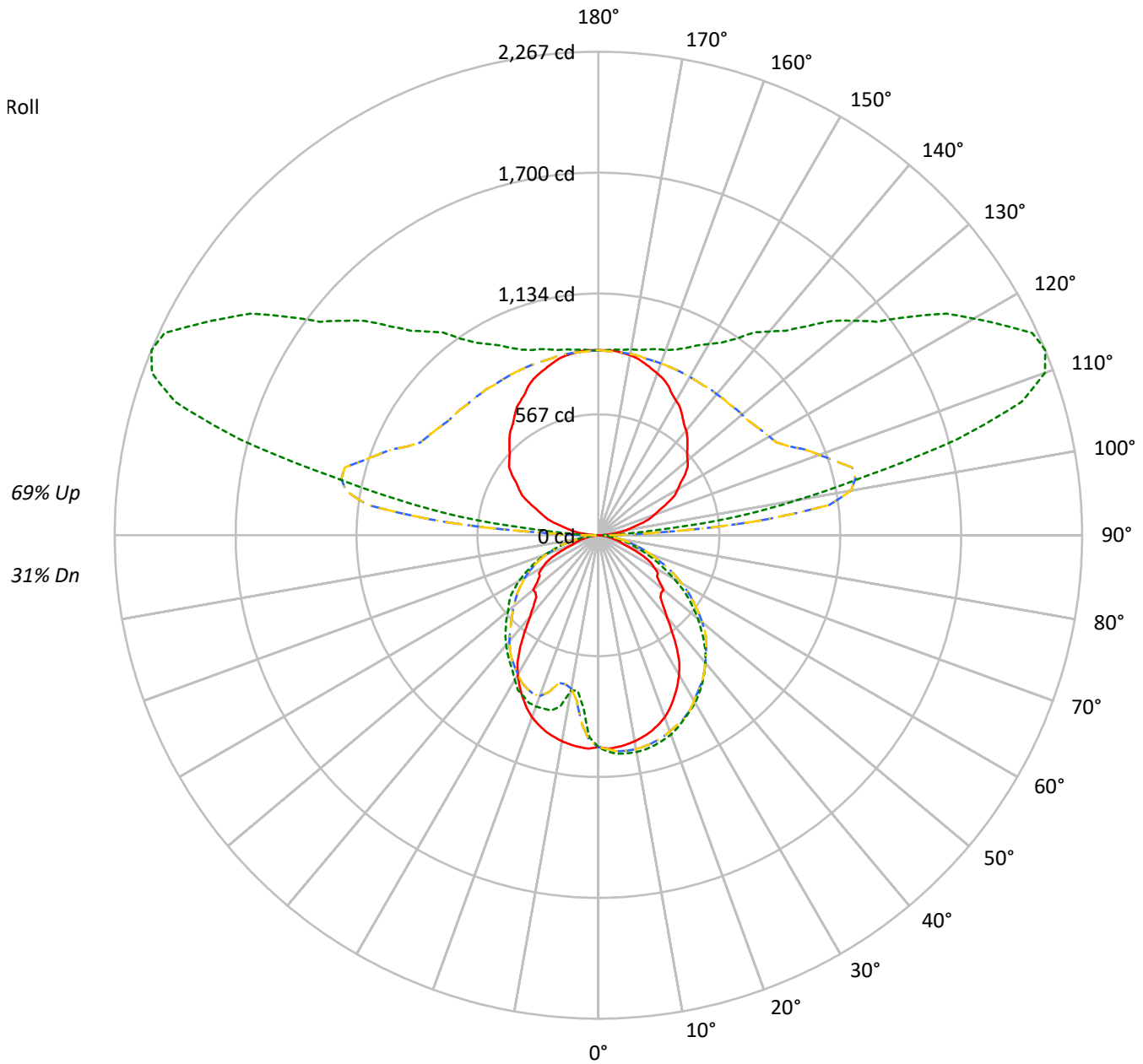
Test Method: LM-79-2019  
Report Number: P935107  
REPORT IS A COMBINATION OF REPORTS P933739 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8207.0 lumens  
Efficiency: N/A  
Efficacy: 132.8 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 61.8  
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: P935107  
CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot



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



TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	39	39	39	31
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	35	34	33	27
2	85	78	72	67	76	70	65	61	56	53	50	43	40	38	30	29	28	30	29	28	22
3	78	69	62	56	70	62	56	51	49	45	42	38	35	32	27	25	24	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	22	19	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	15	20	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	25	21	18	18	15	14	18	15	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	16	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	20	17	15	15	13	11	15	13	11	9
10	44	33	26	21	40	30	23	19	24	19	16	19	15	13	14	12	10	14	12	10	8

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	6143	6143	6143	6143
5°	6187	6202	6187	4876
10°	6144	6109	6144	4368
15°	6075	5977	6075	4990
20°	5945	5820	5945	5001
25°	5683	5591	5683	4895
30°	5345	5401	5345	4663
35°	4763	5161	4763	4407
40°	3966	4879	3966	4214
45°	3541	4547	3541	3991
50°	3760	4153	3760	3769
55°	3533	3727	3533	3639
60°	3638	3166	3638	3333
65°	3293	2617	3293	2925
70°	2274	2085	2274	2452
75°	1989	1542	1989	1846
80°	1588	1018	1588	1110
85°	894	539	894	458

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 5432 cd/sqm



TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.6	1.1
10°-20°	254.5	3.1
20°-30°	393.5	4.8
30°-40°	469.7	5.7
40°-50°	472.5	5.8
50°-60°	411.1	5.0
60°-70°	291.5	3.6
70°-80°	154.2	1.9
80°-90°	41.7	0.5
90°-100°	423.2	5.2
100°-110°	1112.7	13.6
110°-120°	1153.8	14.1
120°-130°	925.5	11.3
130°-140°	726.2	8.8
140°-150°	557.4	6.8
150°-160°	401.4	4.9
160°-170°	245.6	3.0
170°-180°	83.0	1.0
0°-30°	737.7	9.0
0°-40°	1207.4	14.7
0°-60°	2090.9	25.5
0°-90°	2578.3	31.4
90°-120°	2689.7	32.8
90°-150°	4898.7	59.7
90°-180°	5629.0	68.6
0°-180°	8207.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	993	993	993	993	993	
5°	998	1029	998	809	998	95
15°	953	1020	953	851	953	268
25°	839	951	839	832	839	385
35°	638	848	638	724	638	395
45°	412	699	412	614	412	330
55°	335	516	335	504	335	308
65°	233	311	233	348	233	223
75°	88	148	88	177	88	93
85°	15	38	15	32	15	20
90°	6	22	6	22	6	5
95°	56	256	56	256	56	62
105°	200	1742	200	1742	200	212
115°	356	2244	356	2244	356	352
125°	495	1787	495	1787	495	440
135°	590	1386	590	1386	590	457
145°	685	1125	685	1125	685	429
155°	774	968	774	968	774	356
165°	835	902	835	902	835	236
175°	868	874	868	874	868	82
180°	868	868	868	868	868	



TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1
2.5°	1001.6	1001.6	1007.2	1009.1	1009.1	1006.3	1003.5	1006.3	1014.8	1017.6	1016.7
5°	997.8	1005.4	1015.7	1017.6	1019.5	1018.5	1016.7	1018.5	1027.9	1029.8	1030.8
7.5°	990.3	1004.4	1017.6	1020.4	1023.2	1020.4	1019.5	1021.3	1030.8	1032.6	1032.6
10°	980.9	1000.7	1015.7	1017.6	1020.4	1017.6	1017.6	1021.3	1030.8	1032.6	1033.6
12.5°	967.8	995.0	1009.1	1011.0	1014.8	1013.9	1012.8	1016.7	1026.0	1027.9	1027.9
15°	952.8	984.7	997.8	999.8	1006.3	1004.4	1004.4	1008.2	1018.5	1021.3	1020.4
17.5°	932.0	971.5	986.6	989.4	994.1	993.1	994.1	997.8	1007.2	1009.1	1010.0
20°	908.6	953.7	971.5	974.3	979.0	979.0	979.0	983.8	993.1	996.9	996.9
22.5°	876.7	934.8	953.7	955.6	961.2	961.2	963.0	969.7	978.1	979.0	979.0
25°	839.0	914.2	930.2	935.9	941.5	944.3	947.1	950.9	953.7	952.8	953.7
27.5°	799.6	887.9	908.6	912.3	919.9	922.7	926.4	927.4	928.3	931.1	929.2
30°	755.4	851.2	882.3	886.0	898.2	900.1	896.4	898.2	902.9	904.9	906.7
32.5°	705.6	796.8	855.0	863.5	874.8	869.1	868.2	871.0	878.5	878.5	880.4
35°	638.0	754.5	829.7	837.1	845.6	839.0	842.8	843.8	848.4	851.2	850.3
37.5°	563.8	717.9	803.3	808.9	815.6	807.1	812.8	815.6	819.3	817.4	817.4
40°	498.0	660.5	772.3	776.1	781.8	775.1	780.8	782.7	784.6	782.7	781.8
42.5°	449.2	597.6	739.4	744.1	740.4	745.1	747.0	750.7	747.9	744.1	744.1
45°	411.5	580.7	703.8	709.4	703.8	711.2	714.0	714.0	705.6	703.8	702.8
47.5°	399.3	546.9	668.1	668.1	665.2	674.6	679.3	672.8	664.3	661.5	661.5
50°	398.4	509.2	619.1	615.4	628.6	639.9	635.1	628.6	622.0	611.7	611.7
52.5°	361.7	463.2	556.2	570.3	591.0	597.6	590.1	583.5	572.2	567.5	563.8
55°	335.4	415.3	498.9	527.1	548.7	557.1	543.1	536.5	519.6	516.8	514.9
57.5°	329.8	345.8	446.3	482.0	508.3	507.3	498.9	486.7	472.6	469.8	468.9
60°	302.5	249.9	389.9	432.3	459.4	456.6	449.2	437.9	424.7	422.8	421.0
62.5°	274.3	181.4	326.1	374.0	412.5	411.5	405.0	388.1	378.6	374.0	370.2
65°	233.0	152.2	232.1	311.0	366.4	368.3	354.3	342.0	331.7	326.1	325.1
67.5°	177.6	124.0	156.9	259.4	322.3	320.4	302.5	296.9	283.7	280.9	275.3
70°	131.5	82.7	109.0	210.4	279.1	274.3	260.3	253.7	241.4	234.9	231.2
72.5°	109.0	66.7	79.9	163.5	234.9	229.3	217.1	209.5	199.2	193.5	189.8
75°	88.4	70.4	61.1	121.2	190.7	187.0	175.7	168.2	159.7	152.2	153.2
77.5°	64.8	65.8	48.8	89.3	151.3	145.6	139.1	129.6	125.9	118.4	118.4
80°	48.8	51.7	36.6	61.1	109.0	109.0	103.4	96.8	90.2	86.5	86.5
82.5°	32.9	32.9	27.3	38.5	74.3	71.5	67.6	65.8	62.0	60.1	60.1
85°	15.0	18.8	16.9	23.4	40.4	42.3	42.3	40.4	39.5	37.5	38.5
87.5°	4.7	8.5	10.4	13.2	20.6	21.6	22.5	22.5	22.5	23.4	23.4
90°	5.8	10.5	15.1	16.3	25.7	38.1	44.3	39.3	29.5	22.1	22.1
92.5°	23.4	63.0	102.6	112.5	158.1	218.9	249.4	218.6	156.9	110.7	106.3
95°	55.9	128.4	201.0	219.1	389.1	615.7	729.0	650.5	493.5	375.8	362.5
97.5°	96.8	160.7	224.7	240.7	524.1	902.0	1090.9	1041.3	942.1	867.7	842.3
100°	128.2	186.2	244.2	258.7	573.2	992.5	1202.2	1205.8	1213.1	1218.5	1188.2
102.5°	155.0	209.2	263.3	276.8	595.8	1021.0	1233.6	1296.9	1423.2	1518.0	1492.2
105°	200.4	246.3	292.2	303.6	612.5	1024.3	1230.2	1371.9	1655.1	1867.6	1853.7
107.5°	247.0	289.8	332.6	343.2	615.6	978.6	1160.2	1357.8	1753.0	2049.5	2052.8
110°	278.5	317.1	355.8	365.4	610.9	938.3	1101.9	1322.8	1764.7	2096.1	2110.6



TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.4	346.2	383.0	392.2	611.1	903.0	1048.9	1275.0	1727.2	2066.4	2088.6
115°	356.0	389.9	423.8	432.3	616.7	862.5	985.4	1203.2	1638.9	1965.6	1996.5
117.5°	402.1	432.9	463.7	471.4	628.1	837.1	941.7	1138.3	1531.4	1826.3	1860.5
120°	428.9	457.9	486.9	494.2	637.5	828.6	924.2	1103.8	1463.0	1732.5	1765.7
122.5°	455.1	484.4	513.7	521.0	650.9	824.2	910.8	1072.6	1396.0	1638.6	1671.5
125°	495.3	522.0	548.7	555.4	669.0	820.5	896.3	1033.7	1308.4	1514.6	1544.8
127.5°	528.0	554.9	581.9	588.6	687.1	818.4	884.0	1002.0	1237.9	1414.9	1440.4
130°	545.5	574.5	603.5	610.7	700.3	819.7	879.4	984.3	1194.4	1352.0	1375.5
132.5°	563.5	592.5	621.5	628.8	711.0	820.5	875.3	969.3	1157.3	1298.4	1319.5
135°	590.3	616.7	643.2	649.8	722.6	819.7	868.2	947.0	1104.5	1222.6	1240.8
137.5°	617.7	643.8	670.1	676.6	740.1	824.8	867.1	933.7	1066.8	1166.7	1181.5
140°	640.4	664.5	688.6	694.6	750.7	825.6	863.0	920.6	1035.5	1121.7	1135.7
142.5°	657.9	680.2	702.5	708.1	759.7	828.6	863.0	913.5	1014.5	1090.3	1102.2
145°	684.7	704.1	723.6	728.4	771.4	828.6	857.2	898.5	981.2	1043.1	1052.2
147.5°	711.5	730.4	749.3	754.0	788.4	834.2	857.2	889.7	954.7	1003.5	1011.0
150°	729.0	746.1	763.2	767.5	797.4	837.2	857.2	884.7	939.5	980.7	986.8
152.5°	747.1	760.1	773.0	776.2	803.2	839.2	857.2	880.7	927.6	962.7	967.3
155°	773.9	783.4	793.0	795.4	816.0	843.5	857.2	875.9	913.2	941.1	944.2
157.5°	793.7	803.1	812.3	814.6	828.8	847.8	857.2	871.7	900.7	922.5	924.7
160°	807.1	814.4	821.6	823.4	834.7	849.8	857.2	869.6	894.5	913.2	914.4
162.5°	820.5	825.9	831.4	832.8	840.9	851.8	857.2	867.7	888.7	904.4	905.5
165°	835.1	839.9	844.9	846.1	849.8	854.8	857.2	864.7	879.7	891.0	892.3
167.5°	848.4	850.8	853.1	853.7	856.8	861.0	863.0	868.0	877.8	885.2	885.7
170°	857.2	859.6	861.9	862.5	862.6	862.9	863.0	868.0	877.8	885.2	885.2
172.5°	861.9	862.4	862.9	863.0	863.0	863.0	863.0	866.9	874.7	880.5	880.0
175°	868.2	868.2	868.2	868.2	866.5	864.1	863.0	865.4	870.4	874.1	874.1
177.5°	868.2	868.2	868.2	868.2	866.9	865.2	864.2	866.2	870.0	872.9	872.4
180°	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2



TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1
2.5°	1018.5	1015.7	1018.5	1016.7	1017.6	1014.8	1006.3	1003.5	1006.3	1009.1	1009.1
5°	1030.8	1028.8	1030.8	1030.8	1029.8	1027.9	1018.5	1016.7	1018.5	1019.5	1017.6
7.5°	1034.5	1031.7	1034.5	1032.6	1032.6	1030.8	1021.3	1019.5	1020.4	1023.2	1020.4
10°	1034.5	1031.7	1034.5	1033.6	1032.6	1030.8	1021.3	1017.6	1017.6	1020.4	1017.6
12.5°	1029.8	1027.9	1029.8	1027.9	1027.9	1026.0	1016.7	1012.8	1013.9	1014.8	1011.0
15°	1022.3	1019.5	1022.3	1020.4	1021.3	1018.5	1008.2	1004.4	1004.4	1006.3	999.8
17.5°	1011.0	1007.2	1011.0	1010.0	1009.1	1007.2	997.8	994.1	993.1	994.1	989.4
20°	997.8	995.0	997.8	996.9	996.9	993.1	983.8	979.0	979.0	979.0	974.3
22.5°	977.2	974.3	977.2	979.0	979.0	978.1	969.7	963.0	961.2	961.2	955.6
25°	953.7	950.9	953.7	953.7	952.8	953.7	950.9	947.1	944.3	941.5	935.9
27.5°	931.1	929.2	931.1	929.2	931.1	928.3	927.4	926.4	922.7	919.9	912.3
30°	908.6	906.7	908.6	906.7	904.9	902.9	898.2	896.4	900.1	898.2	886.0
32.5°	880.4	878.5	880.4	880.4	878.5	878.5	871.0	868.2	869.1	874.8	863.5
35°	851.2	848.4	851.2	850.3	851.2	848.4	843.8	842.8	839.0	845.6	837.1
37.5°	817.4	814.6	817.4	817.4	817.4	819.3	815.6	812.8	807.1	815.6	808.9
40°	782.7	779.0	782.7	781.8	782.7	784.6	782.7	780.8	775.1	781.8	776.1
42.5°	743.2	742.2	743.2	744.1	744.1	747.9	750.7	747.0	745.1	740.4	744.1
45°	701.0	699.0	701.0	702.8	703.8	705.6	714.0	714.0	711.2	703.8	709.4
47.5°	655.9	651.1	655.9	661.5	661.5	664.3	672.8	679.3	674.6	665.2	668.1
50°	607.9	608.9	607.9	611.7	611.7	622.0	628.6	635.1	639.9	628.6	615.4
52.5°	561.0	560.0	561.0	563.8	567.5	572.2	583.5	590.1	597.6	591.0	570.3
55°	514.0	515.8	514.0	514.9	516.8	519.6	536.5	543.1	557.1	548.7	527.1
57.5°	467.0	464.2	467.0	468.9	469.8	472.6	486.7	498.9	507.3	508.3	482.0
60°	412.5	408.7	412.5	421.0	422.8	424.7	437.9	449.2	456.6	459.4	432.3
62.5°	364.5	358.0	364.5	370.2	374.0	378.6	388.1	405.0	411.5	412.5	374.0
65°	313.8	311.0	313.8	325.1	326.1	331.7	342.0	354.3	368.3	366.4	311.0
67.5°	267.8	267.8	267.8	275.3	280.9	283.7	296.9	302.5	320.4	322.3	259.4
70°	225.5	224.5	225.5	231.2	234.9	241.4	253.7	260.3	274.3	279.1	210.4
72.5°	185.1	184.2	185.1	189.8	193.5	199.2	209.5	217.1	229.3	234.9	163.5
75°	149.4	147.5	149.4	153.2	152.2	159.7	168.2	175.7	187.0	190.7	121.2
77.5°	114.6	114.6	114.6	118.4	118.4	125.9	129.6	139.1	145.6	151.3	89.3
80°	85.5	84.5	85.5	86.5	86.5	90.2	96.8	103.4	109.0	109.0	61.1
82.5°	60.1	58.3	60.1	60.1	60.1	62.0	65.8	67.6	71.5	74.3	38.5
85°	37.5	37.5	37.5	38.5	37.5	39.5	40.4	42.3	42.3	40.4	23.4
87.5°	24.5	23.4	24.5	23.4	23.4	22.5	22.5	22.5	21.6	20.6	13.2
90°	22.1	22.1	22.1	22.1	22.1	29.5	39.3	44.3	38.1	25.7	16.3
92.5°	88.6	71.1	88.6	106.3	110.7	156.9	218.6	249.4	218.9	158.1	112.5
95°	309.2	255.8	309.2	362.5	375.8	493.5	650.5	729.0	615.7	389.1	219.1
97.5°	740.8	639.2	740.8	842.3	867.7	942.1	1041.3	1090.9	902.0	524.1	240.7
100°	1067.3	946.3	1067.3	1188.2	1218.5	1213.1	1205.8	1202.2	992.5	573.2	258.7
102.5°	1388.5	1284.9	1388.5	1492.2	1518.0	1423.2	1296.9	1233.6	1021.0	595.8	276.8
105°	1798.0	1742.4	1798.0	1853.7	1867.6	1655.1	1371.9	1230.2	1024.3	612.5	303.6
107.5°	2066.4	2079.8	2066.4	2052.8	2049.5	1753.0	1357.8	1160.2	978.6	615.6	343.2
110°	2168.7	2226.7	2168.7	2110.6	2096.1	1764.7	1322.8	1101.9	938.3	610.9	365.4





TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2177.7	2266.8	2177.7	2088.6	2066.4	1727.2	1275.0	1048.9	903.0	611.1	392.2
115°	2120.0	2243.6	2120.0	1996.5	1965.6	1638.9	1203.2	985.4	862.5	616.7	432.3
117.5°	1997.5	2134.6	1997.5	1860.5	1826.3	1531.4	1138.3	941.7	837.1	628.1	471.4
120°	1898.9	2032.0	1898.9	1765.7	1732.5	1463.0	1103.8	924.2	828.6	637.5	494.2
122.5°	1802.8	1934.1	1802.8	1671.5	1638.6	1396.0	1072.6	910.8	824.2	650.9	521.0
125°	1665.7	1786.6	1665.7	1544.8	1514.6	1308.4	1033.7	896.3	820.5	669.0	555.4
127.5°	1542.5	1644.5	1542.5	1440.4	1414.9	1237.9	1002.0	884.0	818.4	687.1	588.6
130°	1469.8	1564.1	1469.8	1375.5	1352.0	1194.4	984.3	879.4	819.7	700.3	610.7
132.5°	1403.9	1488.3	1403.9	1319.5	1298.4	1157.3	969.3	875.3	820.5	711.0	628.8
135°	1313.6	1386.3	1313.6	1240.8	1222.6	1104.5	947.0	868.2	819.7	722.6	649.8
137.5°	1241.1	1300.7	1241.1	1181.5	1166.7	1066.8	933.7	867.1	824.8	740.1	676.6
140°	1191.4	1247.1	1191.4	1135.7	1121.7	1035.5	920.6	863.0	825.6	750.7	694.6
142.5°	1150.2	1198.1	1150.2	1102.2	1090.3	1014.5	913.5	863.0	828.6	759.7	708.1
145°	1088.5	1124.7	1088.5	1052.2	1043.1	981.2	898.5	857.2	828.6	771.4	728.4
147.5°	1041.0	1071.1	1041.0	1011.0	1003.5	954.7	889.7	857.2	834.2	788.4	754.0
150°	1011.1	1035.5	1011.1	986.8	980.7	939.5	884.7	857.2	837.2	797.4	767.5
152.5°	985.7	1004.0	985.7	967.3	962.7	927.6	880.7	857.2	839.2	803.2	776.2
155°	956.3	968.5	956.3	944.2	941.1	913.2	875.9	857.2	843.5	816.0	795.4
157.5°	933.2	941.7	933.2	924.7	922.5	900.7	871.7	857.2	847.8	828.8	814.6
160°	919.3	924.2	919.3	914.4	913.2	894.5	869.6	857.2	849.8	834.7	823.4
162.5°	910.2	914.9	910.2	905.5	904.4	888.7	867.7	857.2	851.8	840.9	832.8
165°	897.2	902.1	897.2	892.3	891.0	879.7	864.7	857.2	854.8	849.8	846.1
167.5°	887.8	889.8	887.8	885.7	885.2	877.8	868.0	863.0	861.0	856.8	853.7
170°	885.2	885.2	885.2	885.2	885.2	877.8	868.0	863.0	862.9	862.6	862.5
172.5°	878.2	876.5	878.2	880.0	880.5	874.7	866.9	863.0	863.0	863.0	863.0
175°	874.1	874.1	874.1	874.1	874.1	870.4	865.4	863.0	864.1	866.5	868.2
177.5°	870.3	868.2	870.3	872.4	872.9	870.0	866.2	864.2	865.2	866.9	868.2
180°	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2



TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1
2.5°	1007.2	1001.6	1001.6	992.2	988.5	985.7	980.9	966.9	963.0	959.3	964.9
5°	1015.7	1005.4	997.8	980.9	966.9	961.2	943.3	909.5	886.9	870.0	860.7
7.5°	1017.6	1004.4	990.3	964.0	930.2	915.1	860.7	798.7	781.8	766.7	757.3
10°	1015.7	1000.7	980.9	941.5	861.6	835.3	780.8	740.4	730.0	727.2	730.0
12.5°	1009.1	995.0	967.8	902.0	790.2	772.3	740.4	716.9	715.0	719.7	745.1
15°	997.8	984.7	952.8	849.4	750.7	737.6	715.0	706.6	716.9	749.8	825.9
17.5°	986.6	971.5	932.0	797.7	720.7	711.2	695.3	712.2	770.5	814.6	839.9
20°	971.5	953.7	908.6	760.1	699.0	690.6	683.0	759.2	803.3	819.3	833.4
22.5°	953.7	934.8	876.7	733.8	676.5	670.0	674.6	785.5	803.3	814.6	826.9
25°	930.2	914.2	839.0	713.1	658.7	651.1	669.0	782.7	793.0	795.9	820.2
27.5°	908.6	887.9	799.6	694.3	637.1	634.2	673.7	770.5	778.0	780.8	807.1
30°	882.3	851.2	755.4	674.6	614.5	613.5	674.6	755.4	753.6	761.0	787.4
32.5°	855.0	796.8	705.6	650.2	592.9	592.0	668.1	732.9	731.0	741.3	761.0
35°	829.7	754.5	638.0	622.0	565.6	566.6	652.0	706.6	707.5	716.9	729.1
37.5°	803.3	717.9	563.8	591.0	539.3	539.3	630.4	682.1	680.2	683.0	700.0
40°	772.3	660.5	498.0	550.6	514.9	512.1	604.1	655.9	649.2	648.3	671.8
42.5°	739.4	597.6	449.2	497.1	486.7	483.0	572.2	623.9	611.7	614.5	644.6
45°	703.8	580.7	411.5	420.0	457.6	454.8	537.4	587.2	578.8	586.3	617.3
47.5°	668.1	546.9	399.3	348.6	426.6	425.6	498.9	551.5	546.9	554.3	587.2
50°	619.1	509.2	398.4	298.8	391.8	395.5	452.9	516.8	516.8	523.3	558.2
52.5°	556.2	463.2	361.7	270.6	351.4	362.7	412.5	486.7	488.6	495.2	526.1
55°	498.9	415.3	335.4	249.0	303.5	327.9	373.0	455.7	459.4	466.1	494.2
57.5°	446.3	345.8	329.8	223.6	259.4	282.8	338.3	425.6	427.5	433.2	460.4
60°	389.9	249.9	302.5	196.3	220.8	238.6	306.3	389.9	396.5	400.2	423.8
62.5°	326.1	181.4	274.3	177.6	202.0	205.8	280.0	356.1	364.5	367.3	381.4
65°	232.1	152.2	233.0	161.6	182.3	183.3	251.8	321.3	328.9	333.5	343.9
67.5°	156.9	124.0	177.6	146.5	167.3	168.2	224.5	280.9	291.3	295.1	301.6
70°	109.0	82.7	131.5	130.6	150.4	152.2	195.4	244.3	253.7	256.5	260.3
72.5°	79.9	66.7	109.0	117.4	132.4	134.4	165.4	203.0	212.4	215.2	217.1
75°	61.1	70.4	88.4	102.5	112.7	113.7	135.3	165.4	171.9	173.8	174.8
77.5°	48.8	65.8	64.8	82.7	92.1	90.2	106.2	127.8	133.4	133.4	133.4
80°	36.6	51.7	48.8	59.2	67.6	65.8	76.1	91.2	93.0	94.9	94.0
82.5°	27.3	32.9	32.9	37.5	45.1	43.2	50.7	59.2	59.2	59.2	61.1
85°	16.9	18.8	15.0	19.7	25.4	24.5	28.2	31.9	32.9	32.9	31.0
87.5°	10.4	8.5	4.7	7.5	11.3	11.3	13.2	14.1	13.2	13.2	13.2
90°	15.1	10.5	5.8	10.5	15.1	16.3	25.7	38.1	44.3	39.3	29.5
92.5°	102.6	63.0	23.4	63.0	102.6	112.5	158.1	218.9	249.4	218.6	156.9
95°	201.0	128.4	55.9	128.4	201.0	219.1	389.1	615.7	729.0	650.5	493.5
97.5°	224.7	160.7	96.8	160.7	224.7	240.7	524.1	902.0	1090.9	1041.3	942.1
100°	244.2	186.2	128.2	186.2	244.2	258.7	573.2	992.5	1202.2	1205.8	1213.1
102.5°	263.3	209.2	155.0	209.2	263.3	276.8	595.8	1021.0	1233.6	1296.9	1423.2
105°	292.2	246.3	200.4	246.3	292.2	303.6	612.5	1024.3	1230.2	1371.9	1655.1
107.5°	332.6	289.8	247.0	289.8	332.6	343.2	615.6	978.6	1160.2	1357.8	1753.0
110°	355.8	317.1	278.5	317.1	355.8	365.4	610.9	938.3	1101.9	1322.8	1764.7



TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	383.0	346.2	309.4	346.2	383.0	392.2	611.1	903.0	1048.9	1275.0	1727.2
115°	423.8	389.9	356.0	389.9	423.8	432.3	616.7	862.5	985.4	1203.2	1638.9
117.5°	463.7	432.9	402.1	432.9	463.7	471.4	628.1	837.1	941.7	1138.3	1531.4
120°	486.9	457.9	428.9	457.9	486.9	494.2	637.5	828.6	924.2	1103.8	1463.0
122.5°	513.7	484.4	455.1	484.4	513.7	521.0	650.9	824.2	910.8	1072.6	1396.0
125°	548.7	522.0	495.3	522.0	548.7	555.4	669.0	820.5	896.3	1033.7	1308.4
127.5°	581.9	554.9	528.0	554.9	581.9	588.6	687.1	818.4	884.0	1002.0	1237.9
130°	603.5	574.5	545.5	574.5	603.5	610.7	700.3	819.7	879.4	984.3	1194.4
132.5°	621.5	592.5	563.5	592.5	621.5	628.8	711.0	820.5	875.3	969.3	1157.3
135°	643.2	616.7	590.3	616.7	643.2	649.8	722.6	819.7	868.2	947.0	1104.5
137.5°	670.1	643.8	617.7	643.8	670.1	676.6	740.1	824.8	867.1	933.7	1066.8
140°	688.6	664.5	640.4	664.5	688.6	694.6	750.7	825.6	863.0	920.6	1035.5
142.5°	702.5	680.2	657.9	680.2	702.5	708.1	759.7	828.6	863.0	913.5	1014.5
145°	723.6	704.1	684.7	704.1	723.6	728.4	771.4	828.6	857.2	898.5	981.2
147.5°	749.3	730.4	711.5	730.4	749.3	754.0	788.4	834.2	857.2	889.7	954.7
150°	763.2	746.1	729.0	746.1	763.2	767.5	797.4	837.2	857.2	884.7	939.5
152.5°	773.0	760.1	747.1	760.1	773.0	776.2	803.2	839.2	857.2	880.7	927.6
155°	793.0	783.4	773.9	783.4	793.0	795.4	816.0	843.5	857.2	875.9	913.2
157.5°	812.3	803.1	793.7	803.1	812.3	814.6	828.8	847.8	857.2	871.7	900.7
160°	821.6	814.4	807.1	814.4	821.6	823.4	834.7	849.8	857.2	869.6	894.5
162.5°	831.4	825.9	820.5	825.9	831.4	832.8	840.9	851.8	857.2	867.7	888.7
165°	844.9	839.9	835.1	839.9	844.9	846.1	849.8	854.8	857.2	864.7	879.7
167.5°	853.1	850.8	848.4	850.8	853.1	853.7	856.8	861.0	863.0	868.0	877.8
170°	861.9	859.6	857.2	859.6	861.9	862.5	862.6	862.9	863.0	868.0	877.8
172.5°	862.9	862.4	861.9	862.4	862.9	863.0	863.0	863.0	863.0	866.9	874.7
175°	868.2	868.2	868.2	868.2	868.2	868.2	866.5	864.1	863.0	865.4	870.4
177.5°	868.2	868.2	868.2	868.2	868.2	868.2	866.9	865.2	864.2	866.2	870.0
180°	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2



TEST NUMBER: P935107  
 CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1
2.5°	958.4	955.6	959.3	948.9	959.3	955.6	958.4	964.9	959.3	963.0	966.9
5°	841.0	836.2	821.2	808.9	821.2	836.2	841.0	860.7	870.0	886.9	909.5
7.5°	751.7	747.9	744.1	736.6	744.1	747.9	751.7	757.3	766.7	781.8	798.7
10°	732.0	732.9	738.5	737.6	738.5	732.9	732.0	730.0	727.2	730.0	740.4
12.5°	782.7	791.1	822.1	820.2	822.1	791.1	782.7	745.1	719.7	715.0	716.9
15°	841.0	843.8	850.3	851.2	850.3	843.8	841.0	825.9	749.8	716.9	706.6
17.5°	846.6	847.5	852.2	852.2	852.2	847.5	846.6	839.9	814.6	770.5	712.2
20°	841.9	843.8	853.1	855.0	853.1	843.8	841.9	833.4	819.3	803.3	759.2
22.5°	839.9	843.8	851.2	850.3	851.2	843.8	839.9	826.9	814.6	803.3	785.5
25°	830.6	830.6	831.5	832.5	831.5	830.6	830.6	820.2	795.9	793.0	782.7
27.5°	810.9	812.8	818.4	817.4	818.4	812.8	810.9	807.1	780.8	778.0	770.5
30°	793.0	791.1	786.4	782.7	786.4	791.1	793.0	787.4	761.0	753.6	755.4
32.5°	763.0	758.2	753.6	750.7	753.6	758.2	763.0	761.0	741.3	731.0	732.9
35°	727.2	728.1	727.2	724.4	727.2	728.1	727.2	729.1	716.9	707.5	706.6
37.5°	701.9	703.8	702.8	699.0	702.8	703.8	701.9	700.0	683.0	680.2	682.1
40°	675.6	676.5	675.6	672.8	675.6	676.5	675.6	671.8	648.3	649.2	655.9
42.5°	650.2	649.2	646.4	644.6	646.4	649.2	650.2	644.6	614.5	611.7	623.9
45°	621.1	622.0	616.3	613.5	616.3	622.0	621.1	617.3	586.3	578.8	587.2
47.5°	592.0	592.0	587.2	584.4	587.2	592.0	592.0	587.2	554.3	546.9	551.5
50°	561.0	560.0	553.4	552.5	553.4	560.0	561.0	558.2	523.3	516.8	516.8
52.5°	525.2	525.2	526.1	528.1	526.1	525.2	525.2	526.1	495.2	488.6	486.7
55°	494.2	495.2	501.7	503.6	501.7	495.2	494.2	494.2	466.1	459.4	455.7
57.5°	462.2	462.2	467.0	467.0	467.0	462.2	462.2	460.4	433.2	427.5	425.6
60°	425.6	427.5	431.2	430.3	431.2	427.5	425.6	423.8	400.2	396.5	389.9
62.5°	387.1	389.0	389.9	388.1	389.9	389.0	387.1	381.4	367.3	364.5	356.1
65°	346.7	348.6	349.5	347.6	349.5	348.6	346.7	343.9	333.5	328.9	321.3
67.5°	305.3	304.4	303.5	307.3	303.5	304.4	305.3	301.6	295.1	291.3	280.9
70°	263.1	263.1	262.2	264.0	262.2	263.1	263.1	260.3	256.5	253.7	244.3
72.5°	218.0	217.1	220.8	218.0	220.8	217.1	218.0	217.1	215.2	212.4	203.0
75°	173.8	175.7	173.8	176.6	173.8	175.7	173.8	174.8	173.8	171.9	165.4
77.5°	132.4	134.4	132.4	132.4	132.4	134.4	132.4	133.4	133.4	133.4	127.8
80°	94.0	93.0	93.0	92.1	93.0	93.0	94.0	94.0	94.9	93.0	91.2
82.5°	60.1	59.2	59.2	61.1	59.2	59.2	60.1	61.1	59.2	59.2	59.2
85°	32.9	33.8	31.9	31.9	31.9	33.8	32.9	31.0	32.9	32.9	31.9
87.5°	12.2	11.3	11.3	11.3	11.3	11.3	12.2	13.2	13.2	13.2	14.1
90°	22.1	22.1	22.1	22.1	22.1	22.1	22.1	29.5	39.3	44.3	38.1
92.5°	110.7	106.3	88.6	71.1	88.6	106.3	110.7	156.9	218.6	249.4	218.9
95°	375.8	362.5	309.2	255.8	309.2	362.5	375.8	493.5	650.5	729.0	615.7
97.5°	867.7	842.3	740.8	639.2	740.8	842.3	867.7	942.1	1041.3	1090.9	902.0
100°	1218.5	1188.2	1067.3	946.3	1067.3	1188.2	1218.5	1213.1	1205.8	1202.2	992.5
102.5°	1518.0	1492.2	1388.5	1284.9	1388.5	1492.2	1518.0	1423.2	1296.9	1233.6	1021.0
105°	1867.6	1853.7	1798.0	1742.4	1798.0	1853.7	1867.6	1655.1	1371.9	1230.2	1024.3
107.5°	2049.5	2052.8	2066.4	2079.8	2066.4	2052.8	2049.5	1753.0	1357.8	1160.2	978.6
110°	2096.1	2110.6	2168.7	2226.7	2168.7	2110.6	2096.1	1764.7	1322.8	1101.9	938.3



TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	2066.4	2088.6	2177.7	2266.8	2177.7	2088.6	2066.4	1727.2	1275.0	1048.9	903.0
115°	1965.6	1996.5	2120.0	2243.6	2120.0	1996.5	1965.6	1638.9	1203.2	985.4	862.5
117.5°	1826.3	1860.5	1997.5	2134.6	1997.5	1860.5	1826.3	1531.4	1138.3	941.7	837.1
120°	1732.5	1765.7	1898.9	2032.0	1898.9	1765.7	1732.5	1463.0	1103.8	924.2	828.6
122.5°	1638.6	1671.5	1802.8	1934.1	1802.8	1671.5	1638.6	1396.0	1072.6	910.8	824.2
125°	1514.6	1544.8	1665.7	1786.6	1665.7	1544.8	1514.6	1308.4	1033.7	896.3	820.5
127.5°	1414.9	1440.4	1542.5	1644.5	1542.5	1440.4	1414.9	1237.9	1002.0	884.0	818.4
130°	1352.0	1375.5	1469.8	1564.1	1469.8	1375.5	1352.0	1194.4	984.3	879.4	819.7
132.5°	1298.4	1319.5	1403.9	1488.3	1403.9	1319.5	1298.4	1157.3	969.3	875.3	820.5
135°	1222.6	1240.8	1313.6	1386.3	1313.6	1240.8	1222.6	1104.5	947.0	868.2	819.7
137.5°	1166.7	1181.5	1241.1	1300.7	1241.1	1181.5	1166.7	1066.8	933.7	867.1	824.8
140°	1121.7	1135.7	1191.4	1247.1	1191.4	1135.7	1121.7	1035.5	920.6	863.0	825.6
142.5°	1090.3	1102.2	1150.2	1198.1	1150.2	1102.2	1090.3	1014.5	913.5	863.0	828.6
145°	1043.1	1052.2	1088.5	1124.7	1088.5	1052.2	1043.1	981.2	898.5	857.2	828.6
147.5°	1003.5	1011.0	1041.0	1071.1	1041.0	1011.0	1003.5	954.7	889.7	857.2	834.2
150°	980.7	986.8	1011.1	1035.5	1011.1	986.8	980.7	939.5	884.7	857.2	837.2
152.5°	962.7	967.3	985.7	1004.0	985.7	967.3	962.7	927.6	880.7	857.2	839.2
155°	941.1	944.2	956.3	968.5	956.3	944.2	941.1	913.2	875.9	857.2	843.5
157.5°	922.5	924.7	933.2	941.7	933.2	924.7	922.5	900.7	871.7	857.2	847.8
160°	913.2	914.4	919.3	924.2	919.3	914.4	913.2	894.5	869.6	857.2	849.8
162.5°	904.4	905.5	910.2	914.9	910.2	905.5	904.4	888.7	867.7	857.2	851.8
165°	891.0	892.3	897.2	902.1	897.2	892.3	891.0	879.7	864.7	857.2	854.8
167.5°	885.2	885.7	887.8	889.8	887.8	885.7	885.2	877.8	868.0	863.0	861.0
170°	885.2	885.2	885.2	885.2	885.2	885.2	885.2	877.8	868.0	863.0	862.9
172.5°	880.5	880.0	878.2	876.5	878.2	880.0	880.5	874.7	866.9	863.0	863.0
175°	874.1	874.1	874.1	874.1	874.1	874.1	874.1	870.4	865.4	863.0	864.1
177.5°	872.9	872.4	870.3	868.2	870.3	872.4	872.9	870.0	866.2	864.2	865.2
180°	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2



TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	993.1	993.1	993.1	993.1	993.1
2.5°	980.9	985.7	988.5	992.2	1001.6
5°	943.3	961.2	966.9	980.9	997.8
7.5°	860.7	915.1	930.2	964.0	990.3
10°	780.8	835.3	861.6	941.5	980.9
12.5°	740.4	772.3	790.2	902.0	967.8
15°	715.0	737.6	750.7	849.4	952.8
17.5°	695.3	711.2	720.7	797.7	932.0
20°	683.0	690.6	699.0	760.1	908.6
22.5°	674.6	670.0	676.5	733.8	876.7
25°	669.0	651.1	658.7	713.1	839.0
27.5°	673.7	634.2	637.1	694.3	799.6
30°	674.6	613.5	614.5	674.6	755.4
32.5°	668.1	592.0	592.9	650.2	705.6
35°	652.0	566.6	565.6	622.0	638.0
37.5°	630.4	539.3	539.3	591.0	563.8
40°	604.1	512.1	514.9	550.6	498.0
42.5°	572.2	483.0	486.7	497.1	449.2
45°	537.4	454.8	457.6	420.0	411.5
47.5°	498.9	425.6	426.6	348.6	399.3
50°	452.9	395.5	391.8	298.8	398.4
52.5°	412.5	362.7	351.4	270.6	361.7
55°	373.0	327.9	303.5	249.0	335.4
57.5°	338.3	282.8	259.4	223.6	329.8
60°	306.3	238.6	220.8	196.3	302.5
62.5°	280.0	205.8	202.0	177.6	274.3
65°	251.8	183.3	182.3	161.6	233.0
67.5°	224.5	168.2	167.3	146.5	177.6
70°	195.4	152.2	150.4	130.6	131.5
72.5°	165.4	134.4	132.4	117.4	109.0
75°	135.3	113.7	112.7	102.5	88.4
77.5°	106.2	90.2	92.1	82.7	64.8
80°	76.1	65.8	67.6	59.2	48.8
82.5°	50.7	43.2	45.1	37.5	32.9
85°	28.2	24.5	25.4	19.7	15.0
87.5°	13.2	11.3	11.3	7.5	4.7
90°	25.7	16.3	15.1	10.5	5.8
92.5°	158.1	112.5	102.6	63.0	23.4
95°	389.1	219.1	201.0	128.4	55.9
97.5°	524.1	240.7	224.7	160.7	96.8
100°	573.2	258.7	244.2	186.2	128.2
102.5°	595.8	276.8	263.3	209.2	155.0
105°	612.5	303.6	292.2	246.3	200.4
107.5°	615.6	343.2	332.6	289.8	247.0
110°	610.9	365.4	355.8	317.1	278.5



TEST NUMBER: P935107

CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	611.1	392.2	383.0	346.2	309.4
115°	616.7	432.3	423.8	389.9	356.0
117.5°	628.1	471.4	463.7	432.9	402.1
120°	637.5	494.2	486.9	457.9	428.9
122.5°	650.9	521.0	513.7	484.4	455.1
125°	669.0	555.4	548.7	522.0	495.3
127.5°	687.1	588.6	581.9	554.9	528.0
130°	700.3	610.7	603.5	574.5	545.5
132.5°	711.0	628.8	621.5	592.5	563.5
135°	722.6	649.8	643.2	616.7	590.3
137.5°	740.1	676.6	670.1	643.8	617.7
140°	750.7	694.6	688.6	664.5	640.4
142.5°	759.7	708.1	702.5	680.2	657.9
145°	771.4	728.4	723.6	704.1	684.7
147.5°	788.4	754.0	749.3	730.4	711.5
150°	797.4	767.5	763.2	746.1	729.0
152.5°	803.2	776.2	773.0	760.1	747.1
155°	816.0	795.4	793.0	783.4	773.9
157.5°	828.8	814.6	812.3	803.1	793.7
160°	834.7	823.4	821.6	814.4	807.1
162.5°	840.9	832.8	831.4	825.9	820.5
165°	849.8	846.1	844.9	839.9	835.1
167.5°	856.8	853.7	853.1	850.8	848.4
170°	862.6	862.5	861.9	859.6	857.2
172.5°	863.0	863.0	862.9	862.4	861.9
175°	866.5	868.2	868.2	868.2	868.2
177.5°	866.9	868.2	868.2	868.2	868.2
180°	868.2	868.2	868.2	868.2	868.2



TEST NUMBER: P935107  
 CATALOG NUMBER: SQ4-FA-100U-050D-B50-1D-UNV-STD-W-6

**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	9.09	9.80	10.19	10.90	12.42	11.91	12.63	13.01	13.73	15.24
	3H	9.55	10.19	10.66	11.30	12.83	13.24	13.88	14.35	14.99	16.52
	4H	9.74	10.34	10.86	11.45	12.99	13.68	14.29	14.80	15.40	16.93
	6H	9.85	10.41	10.98	11.52	13.07	13.95	14.51	15.08	15.63	17.17
	8H	9.84	10.38	10.98	11.50	13.04	14.02	14.56	15.16	15.68	17.22
	12H	9.81	10.32	10.95	11.44	13.00	14.06	14.56	15.19	15.68	17.25
4H	2H	10.10	10.71	11.23	11.82	13.35	12.30	12.91	13.43	14.02	15.56
	3H	11.11	11.62	12.25	12.75	14.30	13.79	14.30	14.93	15.43	16.98
	4H	11.38	11.85	12.52	12.97	14.54	14.31	14.78	15.45	15.90	17.47
	6H	11.50	11.90	12.64	13.05	14.61	14.67	15.07	15.81	16.21	17.77
	8H	11.50	11.87	12.65	13.01	14.59	14.77	15.14	15.91	16.28	17.86
	12H	11.46	11.80	12.62	12.95	14.53	14.82	15.16	15.98	16.31	17.89
8H	4H	11.82	12.20	12.97	13.33	14.91	14.43	14.80	15.57	15.94	17.51
	6H	12.08	12.39	13.24	13.57	15.14	14.85	15.16	16.02	16.34	17.92
	8H	12.12	12.39	13.29	13.55	15.14	15.00	15.27	16.17	16.43	18.03
	12H	12.10	12.33	13.27	13.49	15.12	15.09	15.33	16.27	16.49	18.11
12H	4H	11.82	12.16	12.98	13.31	14.89	14.38	14.72	15.54	15.87	17.45
	6H	12.14	12.41	13.31	13.57	15.16	14.85	15.12	16.02	16.28	17.87
	8H	12.20	12.43	13.37	13.59	15.22	15.00	15.24	16.18	16.40	18.02