

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: P935950

Luminaire Tested: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

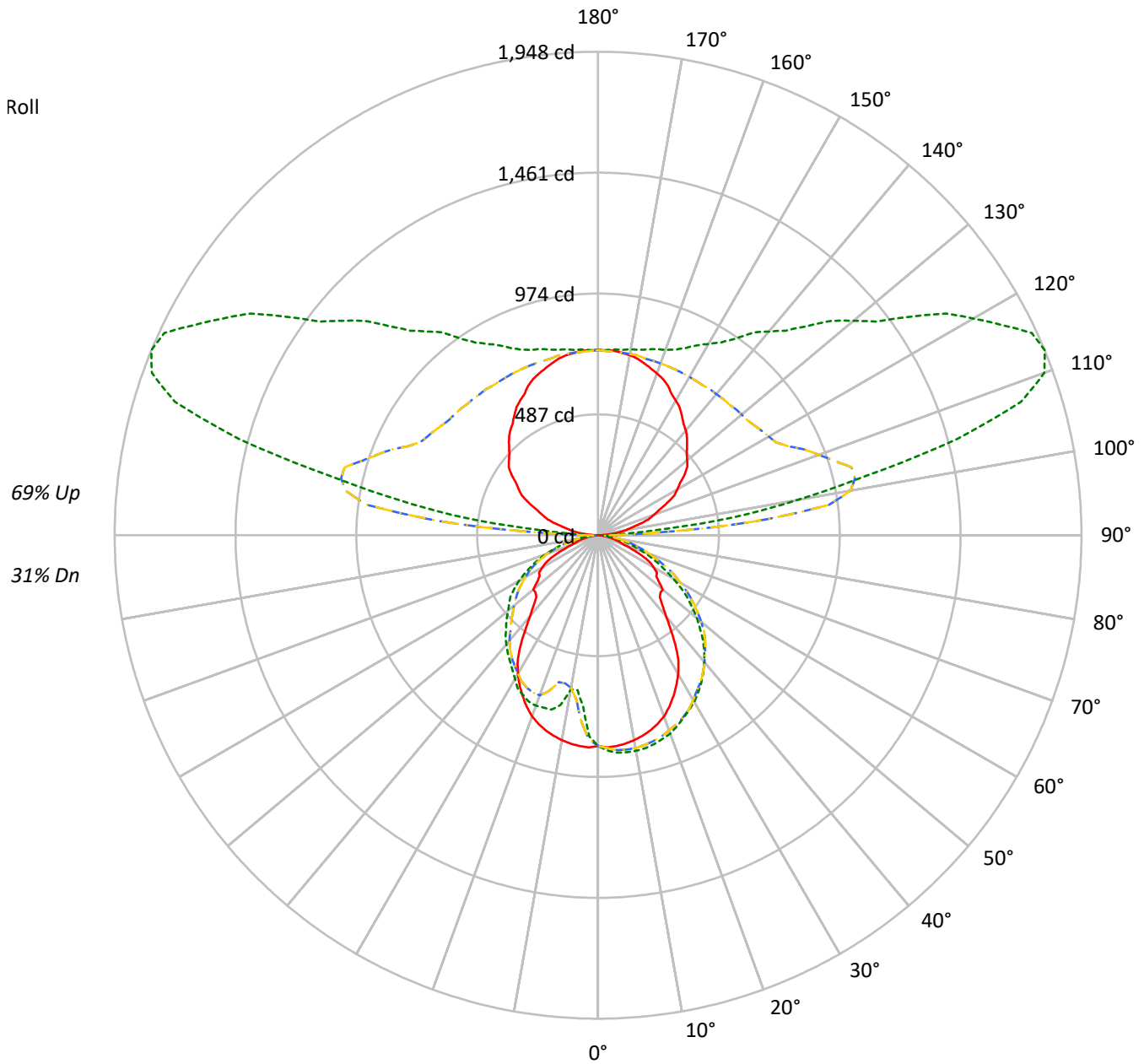
Test Method: LM-79-2019  
Report Number: P935950  
REPORT IS A COMBINATION OF REPORTS P933774 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7041.5 lumens  
Efficiency: N/A  
Efficacy: 110.7 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-Indirect  
  
Input Watts (W): 63.6  
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: P935950  
CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot



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



TEST NUMBER: P935950

CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	34	34	33	26
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	30	29	28	22
3	78	69	61	56	70	62	56	51	49	45	42	38	35	32	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	33	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	23	21	19	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	24	21	18	18	15	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	20	17	14	15	13	11	9
10	44	33	26	21	40	30	23	19	24	19	16	19	15	13	14	12	10	8

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

	0°	90°	180°	270°
0°	7877	7877	7877	7877
5°	7927	7951	7927	6252
10°	7865	7833	7865	5599
15°	7771	7663	7771	6399
20°	7600	7462	7600	6412
25°	7258	7168	7258	6276
30°	6820	6925	6820	5978
35°	6071	6617	6071	5650
40°	5051	6255	5051	5402
45°	4504	5830	4504	5117
50°	4775	5324	4775	4831
55°	4480	4779	4480	4666
60°	4600	4060	4600	4275
65°	4149	3355	4149	3751
70°	2853	2673	2853	3143
75°	2476	1977	2476	2367
80°	1956	1307	1956	1423
85°	1060	692	1060	588

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 6915 cd/sqm



TEST NUMBER: P935950

CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.6	1.1
10°-20°	217.6	3.1
20°-30°	336.3	4.8
30°-40°	401.5	5.7
40°-50°	403.9	5.7
50°-60°	351.4	5.0
60°-70°	249.1	3.5
70°-80°	131.8	1.9
80°-90°	35.7	0.5
90°-100°	363.8	5.2
100°-110°	956.4	13.6
110°-120°	991.6	14.1
120°-130°	795.4	11.3
130°-140°	624.1	8.9
140°-150°	479.0	6.8
150°-160°	345.0	4.9
160°-170°	211.1	3.0
170°-180°	71.3	1.0
0°-30°	630.5	9.0
0°-40°	1032.0	14.7
0°-60°	1787.3	25.4
0°-90°	2203.8	31.3
90°-120°	2311.7	32.8
90°-150°	4210.3	59.8
90°-180°	4838.0	68.7
0°-180°	7041.5	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	849	849	849	849	849	
5°	853	879	853	692	853	81
15°	814	871	814	728	814	229
25°	717	813	717	712	717	329
35°	545	725	545	619	545	337
45°	352	598	352	524	352	282
55°	287	441	287	430	287	263
65°	199	266	199	297	199	190
75°	76	126	76	151	76	79
85°	13	32	13	27	13	17
90°	5	19	5	19	5	5
95°	48	220	48	220	48	53
105°	172	1498	172	1498	172	183
115°	306	1928	306	1928	306	302
125°	426	1536	426	1536	426	378
135°	507	1192	507	1192	507	393
145°	588	967	588	967	588	369
155°	665	832	665	832	665	306
165°	718	775	718	775	718	203
175°	746	751	746	751	746	71
180°	746	746	746	746	746	



TEST NUMBER: P935950  
 CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9
2.5°	856.1	856.1	861.0	862.6	862.6	860.2	857.8	860.2	867.4	869.8	869.0
5°	852.9	859.4	868.2	869.8	871.4	870.6	869.0	870.6	878.6	880.2	881.1
7.5°	846.4	858.6	869.8	872.2	874.6	872.2	871.4	873.0	881.1	882.7	882.7
10°	838.4	855.3	868.2	869.8	872.2	869.8	869.8	873.0	881.1	882.7	883.5
12.5°	827.2	850.5	862.6	864.2	867.4	866.6	865.8	869.0	877.0	878.6	878.6
15°	814.3	841.6	852.9	854.5	860.2	858.6	858.6	861.8	870.6	873.0	872.2
17.5°	796.7	830.4	843.2	845.6	849.7	848.9	849.7	852.9	861.0	862.6	863.4
20°	776.6	815.1	830.4	832.8	836.8	836.8	836.8	840.8	848.9	852.1	852.1
22.5°	749.3	799.1	815.1	816.7	821.5	821.5	823.2	828.8	836.0	836.8	836.8
25°	717.2	781.4	795.1	799.9	804.7	807.1	809.5	812.7	815.1	814.3	815.1
27.5°	683.4	758.9	776.6	779.8	786.2	788.6	791.8	792.6	793.4	795.9	794.2
30°	645.7	727.6	754.1	757.3	767.7	769.4	766.1	767.7	771.8	773.4	775.0
32.5°	603.1	681.0	730.8	738.0	747.7	742.9	742.1	744.5	750.9	750.9	752.5
35°	545.3	644.9	709.1	715.6	722.8	717.2	720.4	721.2	725.2	727.6	726.8
37.5°	481.9	613.6	686.6	691.5	697.1	689.9	694.7	697.1	700.3	698.7	698.7
40°	425.7	564.6	660.1	663.4	668.2	662.6	667.4	669.0	670.6	669.0	668.2
42.5°	383.9	510.8	632.0	636.1	632.8	636.9	638.5	641.7	639.3	636.1	636.1
45°	351.8	496.3	601.5	606.3	601.5	608.0	610.4	610.4	603.1	601.5	600.7
47.5°	341.4	467.4	571.0	571.0	568.6	576.6	580.6	575.0	567.8	565.4	565.4
50°	340.6	435.3	529.3	526.0	537.3	546.9	542.9	537.3	531.7	522.8	522.8
52.5°	309.2	396.0	475.5	487.5	505.2	510.8	504.4	498.7	489.1	485.1	481.9
55°	286.8	355.0	426.5	450.6	469.0	476.3	464.2	458.6	444.1	441.7	440.1
57.5°	281.9	295.6	381.5	412.0	434.5	433.7	426.5	416.0	404.0	401.6	400.8
60°	258.6	213.6	333.3	369.5	392.7	390.3	383.9	374.3	363.0	361.4	359.8
62.5°	234.5	155.0	278.6	319.7	352.6	351.8	346.2	331.7	323.7	319.7	316.5
65°	199.1	130.1	198.3	265.8	313.3	314.9	302.8	292.4	283.5	278.6	277.8
67.5°	151.8	106.0	134.1	221.6	275.4	273.8	258.6	253.7	242.5	240.1	235.3
70°	112.4	70.7	93.1	179.9	238.5	234.5	222.4	216.8	206.4	200.8	197.5
72.5°	93.1	57.0	68.3	139.7	200.8	195.9	185.5	179.1	170.2	165.4	162.2
75°	75.5	60.2	52.2	103.6	163.0	159.8	150.2	143.7	136.5	130.1	130.9
77.5°	55.4	56.2	41.8	76.3	129.3	124.5	118.8	110.8	107.6	101.2	101.2
80°	41.8	44.2	31.3	52.2	93.1	93.1	88.3	82.7	77.1	73.9	73.9
82.5°	28.1	28.1	23.3	32.9	63.4	61.0	57.8	56.2	53.0	51.4	51.4
85°	12.8	16.1	14.5	20.1	34.5	36.1	36.1	34.5	33.7	32.1	32.9
87.5°	4.0	7.2	8.8	11.2	17.7	18.5	19.3	19.3	19.3	20.1	20.1
90°	5.0	9.0	13.0	14.1	22.1	32.8	38.1	33.8	25.4	19.0	19.0
92.5°	20.0	54.0	88.2	96.7	135.9	188.1	214.3	187.8	134.9	95.2	91.4
95°	48.1	110.4	172.7	188.3	334.4	529.2	626.6	559.1	424.2	323.0	311.6
97.5°	83.1	138.1	193.1	206.9	450.4	775.2	937.6	894.9	809.7	745.7	723.9
100°	110.2	160.0	209.9	222.4	492.6	853.0	1033.2	1036.4	1042.6	1047.3	1021.3
102.5°	133.2	179.8	226.3	237.9	512.1	877.5	1060.3	1114.6	1223.2	1304.7	1282.5
105°	172.3	211.8	251.1	261.0	526.4	880.2	1057.2	1179.0	1422.5	1605.2	1593.2
107.5°	212.4	249.1	285.9	295.0	529.1	841.1	997.2	1167.0	1506.7	1761.5	1764.4
110°	239.4	272.5	305.8	314.1	525.1	806.4	947.1	1137.0	1516.7	1801.5	1814.0



TEST NUMBER: P935950

CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	266.0	297.6	329.2	337.1	525.2	776.1	901.5	1095.9	1484.5	1776.0	1795.1
115°	306.0	335.2	364.3	371.6	530.1	741.3	846.9	1034.1	1408.5	1689.4	1715.9
117.5°	345.6	372.1	398.6	405.2	539.9	719.6	809.3	978.3	1316.2	1569.6	1599.1
120°	368.6	393.6	418.4	424.7	547.9	712.2	794.3	948.7	1257.4	1489.0	1517.6
122.5°	391.1	416.3	441.5	447.8	559.5	708.4	782.8	921.8	1199.8	1408.4	1436.6
125°	425.8	448.6	471.6	477.3	574.9	705.2	770.3	888.4	1124.5	1301.7	1327.7
127.5°	453.8	476.9	500.0	505.8	590.4	703.3	759.8	861.2	1064.0	1216.1	1238.0
130°	468.8	493.7	518.6	524.8	601.8	704.5	755.8	846.0	1026.6	1161.9	1182.2
132.5°	484.3	509.3	534.2	540.4	611.0	705.2	752.3	833.0	994.7	1115.8	1134.0
135°	507.3	530.1	552.7	558.4	621.0	704.5	746.2	813.9	949.2	1050.7	1066.4
137.5°	530.9	553.3	575.8	581.5	636.1	708.9	745.3	802.4	916.9	1002.7	1015.5
140°	550.5	571.2	591.9	597.0	645.3	709.6	741.7	791.1	890.0	964.1	976.0
142.5°	565.5	584.6	603.7	608.5	652.9	712.1	741.7	785.2	872.0	937.1	947.4
145°	588.5	605.2	621.8	626.0	663.0	712.2	736.8	772.2	843.2	896.5	904.3
147.5°	611.5	627.8	644.0	648.1	677.7	717.1	736.8	764.7	820.5	862.4	868.8
150°	626.6	641.3	655.9	659.6	685.3	719.6	736.8	760.4	807.5	842.9	848.1
152.5°	642.1	653.2	664.3	667.1	690.3	721.3	736.8	756.9	797.2	827.4	831.3
155°	665.1	673.4	681.6	683.7	701.3	724.9	736.8	752.8	784.9	808.9	811.5
157.5°	682.1	690.2	698.1	700.1	712.3	728.6	736.8	749.2	774.1	792.8	794.6
160°	693.6	699.9	706.2	707.7	717.4	730.3	736.8	747.4	768.8	784.8	785.8
162.5°	705.2	709.9	714.5	715.7	722.7	732.1	736.8	745.7	763.8	777.3	778.3
165°	717.7	721.9	726.2	727.2	730.4	734.7	736.8	743.2	756.1	765.7	766.8
167.5°	729.2	731.2	733.2	733.7	736.4	740.0	741.7	746.0	754.4	760.8	761.2
170°	736.8	738.8	740.8	741.2	741.4	741.7	741.7	746.0	754.4	760.8	760.8
172.5°	740.8	741.2	741.7	741.7	741.7	741.7	741.7	745.1	751.8	756.7	756.3
175°	746.2	746.2	746.2	746.2	744.7	742.7	741.7	743.8	748.1	751.3	751.3
177.5°	746.2	746.2	746.2	746.2	745.1	743.6	742.8	744.5	747.8	750.2	749.8
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



TEST NUMBER: P935950

CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9
2.5°	870.6	868.2	870.6	869.0	869.8	867.4	860.2	857.8	860.2	862.6	862.6
5°	881.1	879.4	881.1	881.1	880.2	878.6	870.6	869.0	870.6	871.4	869.8
7.5°	884.3	881.9	884.3	882.7	882.7	881.1	873.0	871.4	872.2	874.6	872.2
10°	884.3	881.9	884.3	883.5	882.7	881.1	873.0	869.8	869.8	872.2	869.8
12.5°	880.2	878.6	880.2	878.6	878.6	877.0	869.0	865.8	866.6	867.4	864.2
15°	873.8	871.4	873.8	872.2	873.0	870.6	861.8	858.6	858.6	860.2	854.5
17.5°	864.2	861.0	864.2	863.4	862.6	861.0	852.9	849.7	848.9	849.7	845.6
20°	852.9	850.5	852.9	852.1	852.1	848.9	840.8	836.8	836.8	836.8	832.8
22.5°	835.2	832.8	835.2	836.8	836.8	836.0	828.8	823.2	821.5	821.5	816.7
25°	815.1	812.7	815.1	815.1	814.3	815.1	812.7	809.5	807.1	804.7	799.9
27.5°	795.9	794.2	795.9	794.2	795.9	793.4	792.6	791.8	788.6	786.2	779.8
30°	776.6	775.0	776.6	775.0	773.4	771.8	767.7	766.1	769.4	767.7	757.3
32.5°	752.5	750.9	752.5	752.5	750.9	750.9	744.5	742.1	742.9	747.7	738.0
35°	727.6	725.2	727.6	726.8	727.6	725.2	721.2	720.4	717.2	722.8	715.6
37.5°	698.7	696.3	698.7	698.7	698.7	700.3	697.1	694.7	689.9	697.1	691.5
40°	669.0	665.8	669.0	668.2	669.0	670.6	669.0	667.4	662.6	668.2	663.4
42.5°	635.3	634.5	635.3	636.1	636.1	639.3	641.7	638.5	636.9	632.8	636.1
45°	599.1	597.5	599.1	600.7	601.5	603.1	610.4	610.4	608.0	601.5	606.3
47.5°	560.6	556.6	560.6	565.4	565.4	567.8	575.0	580.6	576.6	568.6	571.0
50°	519.6	520.4	519.6	522.8	522.8	531.7	537.3	542.9	546.9	537.3	526.0
52.5°	479.5	478.7	479.5	481.9	485.1	489.1	498.7	504.4	510.8	505.2	487.5
55°	439.3	440.9	439.3	440.1	441.7	444.1	458.6	464.2	476.3	469.0	450.6
57.5°	399.2	396.8	399.2	400.8	401.6	404.0	416.0	426.5	433.7	434.5	412.0
60°	352.6	349.4	352.6	359.8	361.4	363.0	374.3	383.9	390.3	392.7	369.5
62.5°	311.6	306.0	311.6	316.5	319.7	323.7	331.7	346.2	351.8	352.6	319.7
65°	268.2	265.8	268.2	277.8	278.6	283.5	292.4	302.8	314.9	313.3	265.8
67.5°	228.9	228.9	228.9	235.3	240.1	242.5	253.7	258.6	273.8	275.4	221.6
70°	192.7	191.9	192.7	197.5	200.8	206.4	216.8	222.4	234.5	238.5	179.9
72.5°	158.2	157.4	158.2	162.2	165.4	170.2	179.1	185.5	195.9	200.8	139.7
75°	127.7	126.1	127.7	130.9	130.1	136.5	143.7	150.2	159.8	163.0	103.6
77.5°	98.0	98.0	98.0	101.2	101.2	107.6	110.8	118.8	124.5	129.3	76.3
80°	73.1	72.3	73.1	73.9	73.9	77.1	82.7	88.3	93.1	93.1	52.2
82.5°	51.4	49.8	51.4	51.4	51.4	53.0	56.2	57.8	61.0	63.4	32.9
85°	32.1	32.1	32.1	32.9	32.1	33.7	34.5	36.1	36.1	34.5	20.1
87.5°	20.9	20.1	20.9	20.1	20.1	19.3	19.3	19.3	18.5	17.7	11.2
90°	19.0	19.0	19.0	19.0	19.0	25.4	33.8	38.1	32.8	22.1	14.1
92.5°	76.2	61.1	76.2	91.4	95.2	134.9	187.8	214.3	188.1	135.9	96.7
95°	265.7	219.9	265.7	311.6	323.0	424.2	559.1	626.6	529.2	334.4	188.3
97.5°	636.7	549.4	636.7	723.9	745.7	809.7	894.9	937.6	775.2	450.4	206.9
100°	917.3	813.4	917.3	1021.3	1047.3	1042.6	1036.4	1033.2	853.0	492.6	222.4
102.5°	1193.4	1104.4	1193.4	1282.5	1304.7	1223.2	1114.6	1060.3	877.5	512.1	237.9
105°	1545.4	1497.5	1545.4	1593.2	1605.2	1422.5	1179.0	1057.2	880.2	526.4	261.0
107.5°	1775.9	1787.5	1775.9	1764.4	1761.5	1506.7	1167.0	997.2	841.1	529.1	295.0
110°	1863.8	1913.7	1863.8	1814.0	1801.5	1516.7	1137.0	947.1	806.4	525.1	314.1





TEST NUMBER: P935950

CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1871.7	1948.2	1871.7	1795.1	1776.0	1484.5	1095.9	901.5	776.1	525.2	337.1
115°	1822.1	1928.2	1822.1	1715.9	1689.4	1408.5	1034.1	846.9	741.3	530.1	371.6
117.5°	1716.8	1834.5	1716.8	1599.1	1569.6	1316.2	978.3	809.3	719.6	539.9	405.2
120°	1632.0	1746.4	1632.0	1517.6	1489.0	1257.4	948.7	794.3	712.2	547.9	424.7
122.5°	1549.5	1662.3	1549.5	1436.6	1408.4	1199.8	921.8	782.8	708.4	559.5	447.8
125°	1431.6	1535.6	1431.6	1327.7	1301.7	1124.5	888.4	770.3	705.2	574.9	477.3
127.5°	1325.7	1413.4	1325.7	1238.0	1216.1	1064.0	861.2	759.8	703.3	590.4	505.8
130°	1263.2	1344.2	1263.2	1182.2	1161.9	1026.6	846.0	755.8	704.5	601.8	524.8
132.5°	1206.5	1279.1	1206.5	1134.0	1115.8	994.7	833.0	752.3	705.2	611.0	540.4
135°	1128.9	1191.5	1128.9	1066.4	1050.7	949.2	813.9	746.2	704.5	621.0	558.4
137.5°	1066.7	1117.9	1066.7	1015.5	1002.7	916.9	802.4	745.3	708.9	636.1	581.5
140°	1023.9	1071.8	1023.9	976.0	964.1	890.0	791.1	741.7	709.6	645.3	597.0
142.5°	988.6	1029.7	988.6	947.4	937.1	872.0	785.2	741.7	712.1	652.9	608.5
145°	935.5	966.7	935.5	904.3	896.5	843.2	772.2	736.8	712.2	663.0	626.0
147.5°	894.7	920.6	894.7	868.8	862.4	820.5	764.7	736.8	717.1	677.7	648.1
150°	869.1	890.0	869.1	848.1	842.9	807.5	760.4	736.8	719.6	685.3	659.6
152.5°	847.2	862.9	847.2	831.3	827.4	797.2	756.9	736.8	721.3	690.3	667.1
155°	822.0	832.4	822.0	811.5	808.9	784.9	752.8	736.8	724.9	701.3	683.7
157.5°	802.0	809.3	802.0	794.6	792.8	774.1	749.2	736.8	728.6	712.3	700.1
160°	790.1	794.3	790.1	785.8	784.8	768.8	747.4	736.8	730.3	717.4	707.7
162.5°	782.3	786.3	782.3	778.3	777.3	763.8	745.7	736.8	732.1	722.7	715.7
165°	771.0	775.3	771.0	766.8	765.7	756.1	743.2	736.8	734.7	730.4	727.2
167.5°	763.0	764.8	763.0	761.2	760.8	754.4	746.0	741.7	740.0	736.4	733.7
170°	760.8	760.8	760.8	760.8	760.8	754.4	746.0	741.7	741.7	741.4	741.2
172.5°	754.8	753.3	754.8	756.3	756.7	751.8	745.1	741.7	741.7	741.7	741.7
175°	751.3	751.3	751.3	751.3	751.3	748.1	743.8	741.7	742.7	744.7	746.2
177.5°	748.0	746.2	748.0	749.8	750.2	747.8	744.5	742.8	743.6	745.1	746.2
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



TEST NUMBER: P935950  
 CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9
2.5°	861.0	856.1	856.1	848.0	844.8	842.4	838.4	826.4	823.2	819.9	824.8
5°	868.2	859.4	852.9	838.4	826.4	821.5	806.3	777.4	758.1	743.7	735.6
7.5°	869.8	858.6	846.4	824.0	795.1	782.2	735.6	682.6	668.2	655.3	647.3
10°	868.2	855.3	838.4	804.7	736.4	713.9	667.4	632.8	624.0	621.6	624.0
12.5°	862.6	850.5	827.2	771.0	675.4	660.1	632.8	612.8	611.2	615.2	636.9
15°	852.9	841.6	814.3	726.0	641.7	630.4	611.2	603.9	612.8	640.9	705.9
17.5°	843.2	830.4	796.7	681.8	616.0	608.0	594.3	608.8	658.5	696.3	718.0
20°	830.4	815.1	776.6	649.7	597.5	590.3	583.9	648.9	686.6	700.3	712.3
22.5°	815.1	799.1	749.3	627.2	578.2	572.6	576.6	671.4	686.6	696.3	706.7
25°	795.1	781.4	717.2	609.6	563.0	556.6	571.8	669.0	677.8	680.2	701.1
27.5°	776.6	758.9	683.4	593.5	544.5	542.1	575.8	658.5	665.0	667.4	689.9
30°	754.1	727.6	645.7	576.6	525.2	524.4	576.6	645.7	644.1	650.5	673.0
32.5°	730.8	681.0	603.1	555.8	506.8	506.0	571.0	626.4	624.8	633.6	650.5
35°	709.1	644.9	545.3	531.7	483.5	484.3	557.4	603.9	604.7	612.8	623.2
37.5°	686.6	613.6	481.9	505.2	461.0	461.0	538.9	583.1	581.5	583.9	598.3
40°	660.1	564.6	425.7	470.6	440.1	437.7	516.4	560.6	555.0	554.2	574.2
42.5°	632.0	510.8	383.9	424.9	416.0	412.8	489.1	533.3	522.8	525.2	550.9
45°	601.5	496.3	351.8	359.0	391.1	388.7	459.4	502.0	494.7	501.2	527.7
47.5°	571.0	467.4	341.4	298.0	364.6	363.8	426.5	471.4	467.4	473.9	502.0
50°	529.3	435.3	340.6	255.4	334.9	338.1	387.1	441.7	441.7	447.4	477.1
52.5°	475.5	396.0	309.2	231.3	300.4	310.0	352.6	416.0	417.6	423.3	449.8
55°	426.5	355.0	286.8	212.8	259.4	280.2	318.9	389.5	392.7	398.4	422.5
57.5°	381.5	295.6	281.9	191.1	221.6	241.7	289.2	363.8	365.4	370.3	393.6
60°	333.3	213.6	258.6	167.8	188.7	204.0	261.8	333.3	338.9	342.2	362.2
62.5°	278.6	155.0	234.5	151.8	172.6	175.9	239.3	304.4	311.6	314.1	326.1
65°	198.3	130.1	199.1	138.1	155.8	156.6	215.2	274.6	281.0	285.1	294.0
67.5°	134.1	106.0	151.8	125.3	142.9	143.7	191.9	240.1	248.9	252.1	257.8
70°	93.1	70.7	112.4	111.6	128.5	130.1	167.0	208.8	216.8	219.2	222.4
72.5°	68.3	57.0	93.1	100.4	113.2	114.8	141.3	173.4	181.5	183.9	185.5
75°	52.2	60.2	75.5	87.5	96.4	97.2	115.6	141.3	146.9	148.6	149.4
77.5°	41.8	56.2	55.4	70.7	78.7	77.1	90.7	109.2	114.0	114.0	114.0
80°	31.3	44.2	41.8	50.6	57.8	56.2	65.0	77.9	79.5	81.1	80.3
82.5°	23.3	28.1	28.1	32.1	38.5	36.9	43.4	50.6	50.6	50.6	52.2
85°	14.5	16.1	12.8	16.9	21.7	20.9	24.1	27.3	28.1	28.1	26.5
87.5°	8.8	7.2	4.0	6.4	9.6	9.6	11.2	12.0	11.2	11.2	11.2
90°	13.0	9.0	5.0	9.0	13.0	14.1	22.1	32.8	38.1	33.8	25.4
92.5°	88.2	54.0	20.0	54.0	88.2	96.7	135.9	188.1	214.3	187.8	134.9
95°	172.7	110.4	48.1	110.4	172.7	188.3	334.4	529.2	626.6	559.1	424.2
97.5°	193.1	138.1	83.1	138.1	193.1	206.9	450.4	775.2	937.6	894.9	809.7
100°	209.9	160.0	110.2	160.0	209.9	222.4	492.6	853.0	1033.2	1036.4	1042.6
102.5°	226.3	179.8	133.2	179.8	226.3	237.9	512.1	877.5	1060.3	1114.6	1223.2
105°	251.1	211.8	172.3	211.8	251.1	261.0	526.4	880.2	1057.2	1179.0	1422.5
107.5°	285.9	249.1	212.4	249.1	285.9	295.0	529.1	841.1	997.2	1167.0	1506.7
110°	305.8	272.5	239.4	272.5	305.8	314.1	525.1	806.4	947.1	1137.0	1516.7



TEST NUMBER: P935950

CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	329.2	297.6	266.0	297.6	329.2	337.1	525.2	776.1	901.5	1095.9	1484.5
115°	364.3	335.2	306.0	335.2	364.3	371.6	530.1	741.3	846.9	1034.1	1408.5
117.5°	398.6	372.1	345.6	372.1	398.6	405.2	539.9	719.6	809.3	978.3	1316.2
120°	418.4	393.6	368.6	393.6	418.4	424.7	547.9	712.2	794.3	948.7	1257.4
122.5°	441.5	416.3	391.1	416.3	441.5	447.8	559.5	708.4	782.8	921.8	1199.8
125°	471.6	448.6	425.8	448.6	471.6	477.3	574.9	705.2	770.3	888.4	1124.5
127.5°	500.0	476.9	453.8	476.9	500.0	505.8	590.4	703.3	759.8	861.2	1064.0
130°	518.6	493.7	468.8	493.7	518.6	524.8	601.8	704.5	755.8	846.0	1026.6
132.5°	534.2	509.3	484.3	509.3	534.2	540.4	611.0	705.2	752.3	833.0	994.7
135°	552.7	530.1	507.3	530.1	552.7	558.4	621.0	704.5	746.2	813.9	949.2
137.5°	575.8	553.3	530.9	553.3	575.8	581.5	636.1	708.9	745.3	802.4	916.9
140°	591.9	571.2	550.5	571.2	591.9	597.0	645.3	709.6	741.7	791.1	890.0
142.5°	603.7	584.6	565.5	584.6	603.7	608.5	652.9	712.1	741.7	785.2	872.0
145°	621.8	605.2	588.5	605.2	621.8	626.0	663.0	712.2	736.8	772.2	843.2
147.5°	644.0	627.8	611.5	627.8	644.0	648.1	677.7	717.1	736.8	764.7	820.5
150°	655.9	641.3	626.6	641.3	655.9	659.6	685.3	719.6	736.8	760.4	807.5
152.5°	664.3	653.2	642.1	653.2	664.3	667.1	690.3	721.3	736.8	756.9	797.2
155°	681.6	673.4	665.1	673.4	681.6	683.7	701.3	724.9	736.8	752.8	784.9
157.5°	698.1	690.2	682.1	690.2	698.1	700.1	712.3	728.6	736.8	749.2	774.1
160°	706.2	699.9	693.6	699.9	706.2	707.7	717.4	730.3	736.8	747.4	768.8
162.5°	714.5	709.9	705.2	709.9	714.5	715.7	722.7	732.1	736.8	745.7	763.8
165°	726.2	721.9	717.7	721.9	726.2	727.2	730.4	734.7	736.8	743.2	756.1
167.5°	733.2	731.2	729.2	731.2	733.2	733.7	736.4	740.0	741.7	746.0	754.4
170°	740.8	738.8	736.8	738.8	740.8	741.2	741.4	741.7	741.7	746.0	754.4
172.5°	741.7	741.2	740.8	741.2	741.7	741.7	741.7	741.7	741.7	745.1	751.8
175°	746.2	746.2	746.2	746.2	746.2	746.2	744.7	742.7	741.7	743.8	748.1
177.5°	746.2	746.2	746.2	746.2	746.2	746.2	745.1	743.6	742.8	744.5	747.8
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



TEST NUMBER: P935950  
 CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9	848.9
2.5°	819.1	816.7	819.9	811.1	819.9	816.7	819.1	824.8	819.9	823.2	826.4
5°	718.8	714.8	701.9	691.5	701.9	714.8	718.8	735.6	743.7	758.1	777.4
7.5°	642.5	639.3	636.1	629.6	636.1	639.3	642.5	647.3	655.3	668.2	682.6
10°	625.6	626.4	631.2	630.4	631.2	626.4	625.6	624.0	621.6	624.0	632.8
12.5°	669.0	676.2	702.7	701.1	702.7	676.2	669.0	636.9	615.2	611.2	612.8
15°	718.8	721.2	726.8	727.6	726.8	721.2	718.8	705.9	640.9	612.8	603.9
17.5°	723.6	724.4	728.4	728.4	728.4	724.4	723.6	718.0	696.3	658.5	608.8
20°	719.6	721.2	729.2	730.8	729.2	721.2	719.6	712.3	700.3	686.6	648.9
22.5°	718.0	721.2	727.6	726.8	727.6	721.2	718.0	706.7	696.3	686.6	671.4
25°	709.9	709.9	710.7	711.5	710.7	709.9	709.9	701.1	680.2	677.8	669.0
27.5°	693.1	694.7	699.5	698.7	699.5	694.7	693.1	689.9	667.4	665.0	658.5
30°	677.8	676.2	672.2	669.0	672.2	676.2	677.8	673.0	650.5	644.1	645.7
32.5°	652.1	648.1	644.1	641.7	644.1	648.1	652.1	650.5	633.6	624.8	626.4
35°	621.6	622.4	621.6	619.2	621.6	622.4	621.6	623.2	612.8	604.7	603.9
37.5°	599.9	601.5	600.7	597.5	600.7	601.5	599.9	598.3	583.9	581.5	583.1
40°	577.4	578.2	577.4	575.0	577.4	578.2	577.4	574.2	554.2	555.0	560.6
42.5°	555.8	555.0	552.5	550.9	552.5	555.0	555.8	550.9	525.2	522.8	533.3
45°	530.9	531.7	526.8	524.4	526.8	531.7	530.9	527.7	501.2	494.7	502.0
47.5°	506.0	506.0	502.0	499.5	502.0	506.0	506.0	502.0	473.9	467.4	471.4
50°	479.5	478.7	473.0	472.2	473.0	478.7	479.5	477.1	447.4	441.7	441.7
52.5°	449.0	449.0	449.8	451.4	449.8	449.0	449.0	449.8	423.3	417.6	416.0
55°	422.5	423.3	428.9	430.5	428.9	423.3	422.5	422.5	398.4	392.7	389.5
57.5°	395.2	395.2	399.2	399.2	399.2	395.2	395.2	393.6	370.3	365.4	363.8
60°	363.8	365.4	368.7	367.9	368.7	365.4	363.8	362.2	342.2	338.9	333.3
62.5°	330.9	332.5	333.3	331.7	333.3	332.5	330.9	326.1	314.1	311.6	304.4
65°	296.4	298.0	298.8	297.2	298.8	298.0	296.4	294.0	285.1	281.0	274.6
67.5°	261.0	260.2	259.4	262.6	259.4	260.2	261.0	257.8	252.1	248.9	240.1
70°	224.8	224.8	224.0	225.6	224.0	224.8	224.8	222.4	219.2	216.8	208.8
72.5°	186.3	185.5	188.7	186.3	188.7	185.5	186.3	185.5	183.9	181.5	173.4
75°	148.6	150.2	148.6	151.0	148.6	150.2	148.6	149.4	148.6	146.9	141.3
77.5°	113.2	114.8	113.2	113.2	113.2	114.8	113.2	114.0	114.0	114.0	109.2
80°	80.3	79.5	79.5	78.7	79.5	79.5	80.3	80.3	81.1	79.5	77.9
82.5°	51.4	50.6	50.6	52.2	50.6	50.6	51.4	52.2	50.6	50.6	50.6
85°	28.1	28.9	27.3	27.3	27.3	28.9	28.1	26.5	28.1	28.1	27.3
87.5°	10.4	9.6	9.6	9.6	9.6	9.6	10.4	11.2	11.2	11.2	12.0
90°	19.0	19.0	19.0	19.0	19.0	19.0	19.0	25.4	33.8	38.1	32.8
92.5°	95.2	91.4	76.2	61.1	76.2	91.4	95.2	134.9	187.8	214.3	188.1
95°	323.0	311.6	265.7	219.9	265.7	311.6	323.0	424.2	559.1	626.6	529.2
97.5°	745.7	723.9	636.7	549.4	636.7	723.9	745.7	809.7	894.9	937.6	775.2
100°	1047.3	1021.3	917.3	813.4	917.3	1021.3	1047.3	1042.6	1036.4	1033.2	853.0
102.5°	1304.7	1282.5	1193.4	1104.4	1193.4	1282.5	1304.7	1223.2	1114.6	1060.3	877.5
105°	1605.2	1593.2	1545.4	1497.5	1545.4	1593.2	1605.2	1422.5	1179.0	1057.2	880.2
107.5°	1761.5	1764.4	1775.9	1787.5	1775.9	1764.4	1761.5	1506.7	1167.0	997.2	841.1
110°	1801.5	1814.0	1863.8	1913.7	1863.8	1814.0	1801.5	1516.7	1137.0	947.1	806.4



TEST NUMBER: P935950

CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1776.0	1795.1	1871.7	1948.2	1871.7	1795.1	1776.0	1484.5	1095.9	901.5	776.1
115°	1689.4	1715.9	1822.1	1928.2	1822.1	1715.9	1689.4	1408.5	1034.1	846.9	741.3
117.5°	1569.6	1599.1	1716.8	1834.5	1716.8	1599.1	1569.6	1316.2	978.3	809.3	719.6
120°	1489.0	1517.6	1632.0	1746.4	1632.0	1517.6	1489.0	1257.4	948.7	794.3	712.2
122.5°	1408.4	1436.6	1549.5	1662.3	1549.5	1436.6	1408.4	1199.8	921.8	782.8	708.4
125°	1301.7	1327.7	1431.6	1535.6	1431.6	1327.7	1301.7	1124.5	888.4	770.3	705.2
127.5°	1216.1	1238.0	1325.7	1413.4	1325.7	1238.0	1216.1	1064.0	861.2	759.8	703.3
130°	1161.9	1182.2	1263.2	1344.2	1263.2	1182.2	1161.9	1026.6	846.0	755.8	704.5
132.5°	1115.8	1134.0	1206.5	1279.1	1206.5	1134.0	1115.8	994.7	833.0	752.3	705.2
135°	1050.7	1066.4	1128.9	1191.5	1128.9	1066.4	1050.7	949.2	813.9	746.2	704.5
137.5°	1002.7	1015.5	1066.7	1117.9	1066.7	1015.5	1002.7	916.9	802.4	745.3	708.9
140°	964.1	976.0	1023.9	1071.8	1023.9	976.0	964.1	890.0	791.1	741.7	709.6
142.5°	937.1	947.4	988.6	1029.7	988.6	947.4	937.1	872.0	785.2	741.7	712.1
145°	896.5	904.3	935.5	966.7	935.5	904.3	896.5	843.2	772.2	736.8	712.2
147.5°	862.4	868.8	894.7	920.6	894.7	868.8	862.4	820.5	764.7	736.8	717.1
150°	842.9	848.1	869.1	890.0	869.1	848.1	842.9	807.5	760.4	736.8	719.6
152.5°	827.4	831.3	847.2	862.9	847.2	831.3	827.4	797.2	756.9	736.8	721.3
155°	808.9	811.5	822.0	832.4	822.0	811.5	808.9	784.9	752.8	736.8	724.9
157.5°	792.8	794.6	802.0	809.3	802.0	794.6	792.8	774.1	749.2	736.8	728.6
160°	784.8	785.8	790.1	794.3	790.1	785.8	784.8	768.8	747.4	736.8	730.3
162.5°	777.3	778.3	782.3	786.3	782.3	778.3	777.3	763.8	745.7	736.8	732.1
165°	765.7	766.8	771.0	775.3	771.0	766.8	765.7	756.1	743.2	736.8	734.7
167.5°	760.8	761.2	763.0	764.8	763.0	761.2	760.8	754.4	746.0	741.7	740.0
170°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	754.4	746.0	741.7	741.7
172.5°	756.7	756.3	754.8	753.3	754.8	756.3	756.7	751.8	745.1	741.7	741.7
175°	751.3	751.3	751.3	751.3	751.3	751.3	751.3	748.1	743.8	741.7	742.7
177.5°	750.2	749.8	748.0	746.2	748.0	749.8	750.2	747.8	744.5	742.8	743.6
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



TEST NUMBER: P935950

CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	848.9	848.9	848.9	848.9	848.9
2.5°	838.4	842.4	844.8	848.0	856.1
5°	806.3	821.5	826.4	838.4	852.9
7.5°	735.6	782.2	795.1	824.0	846.4
10°	667.4	713.9	736.4	804.7	838.4
12.5°	632.8	660.1	675.4	771.0	827.2
15°	611.2	630.4	641.7	726.0	814.3
17.5°	594.3	608.0	616.0	681.8	796.7
20°	583.9	590.3	597.5	649.7	776.6
22.5°	576.6	572.6	578.2	627.2	749.3
25°	571.8	556.6	563.0	609.6	717.2
27.5°	575.8	542.1	544.5	593.5	683.4
30°	576.6	524.4	525.2	576.6	645.7
32.5°	571.0	506.0	506.8	555.8	603.1
35°	557.4	484.3	483.5	531.7	545.3
37.5°	538.9	461.0	461.0	505.2	481.9
40°	516.4	437.7	440.1	470.6	425.7
42.5°	489.1	412.8	416.0	424.9	383.9
45°	459.4	388.7	391.1	359.0	351.8
47.5°	426.5	363.8	364.6	298.0	341.4
50°	387.1	338.1	334.9	255.4	340.6
52.5°	352.6	310.0	300.4	231.3	309.2
55°	318.9	280.2	259.4	212.8	286.8
57.5°	289.2	241.7	221.6	191.1	281.9
60°	261.8	204.0	188.7	167.8	258.6
62.5°	239.3	175.9	172.6	151.8	234.5
65°	215.2	156.6	155.8	138.1	199.1
67.5°	191.9	143.7	142.9	125.3	151.8
70°	167.0	130.1	128.5	111.6	112.4
72.5°	141.3	114.8	113.2	100.4	93.1
75°	115.6	97.2	96.4	87.5	75.5
77.5°	90.7	77.1	78.7	70.7	55.4
80°	65.0	56.2	57.8	50.6	41.8
82.5°	43.4	36.9	38.5	32.1	28.1
85°	24.1	20.9	21.7	16.9	12.8
87.5°	11.2	9.6	9.6	6.4	4.0
90°	22.1	14.1	13.0	9.0	5.0
92.5°	135.9	96.7	88.2	54.0	20.0
95°	334.4	188.3	172.7	110.4	48.1
97.5°	450.4	206.9	193.1	138.1	83.1
100°	492.6	222.4	209.9	160.0	110.2
102.5°	512.1	237.9	226.3	179.8	133.2
105°	526.4	261.0	251.1	211.8	172.3
107.5°	529.1	295.0	285.9	249.1	212.4
110°	525.1	314.1	305.8	272.5	239.4



TEST NUMBER: P935950

CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	525.2	337.1	329.2	297.6	266.0
115°	530.1	371.6	364.3	335.2	306.0
117.5°	539.9	405.2	398.6	372.1	345.6
120°	547.9	424.7	418.4	393.6	368.6
122.5°	559.5	447.8	441.5	416.3	391.1
125°	574.9	477.3	471.6	448.6	425.8
127.5°	590.4	505.8	500.0	476.9	453.8
130°	601.8	524.8	518.6	493.7	468.8
132.5°	611.0	540.4	534.2	509.3	484.3
135°	621.0	558.4	552.7	530.1	507.3
137.5°	636.1	581.5	575.8	553.3	530.9
140°	645.3	597.0	591.9	571.2	550.5
142.5°	652.9	608.5	603.7	584.6	565.5
145°	663.0	626.0	621.8	605.2	588.5
147.5°	677.7	648.1	644.0	627.8	611.5
150°	685.3	659.6	655.9	641.3	626.6
152.5°	690.3	667.1	664.3	653.2	642.1
155°	701.3	683.7	681.6	673.4	665.1
157.5°	712.3	700.1	698.1	690.2	682.1
160°	717.4	707.7	706.2	699.9	693.6
162.5°	722.7	715.7	714.5	709.9	705.2
165°	730.4	727.2	726.2	721.9	717.7
167.5°	736.4	733.7	733.2	731.2	729.2
170°	741.4	741.2	740.8	738.8	736.8
172.5°	741.7	741.7	741.7	741.2	740.8
175°	744.7	746.2	746.2	746.2	746.2
177.5°	745.1	746.2	746.2	746.2	746.2
180°	746.2	746.2	746.2	746.2	746.2



TEST NUMBER: P935950  
 CATALOG NUMBER: SQ4-FA-150U-075D-930-1D-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	9.92	10.64	11.03	11.74	13.25	12.72	13.44	13.83	14.54	16.05
	3H	10.39	11.03	11.50	12.14	13.67	14.05	14.69	15.16	15.79	17.33
	4H	10.57	11.18	11.70	12.29	13.83	14.48	15.09	15.60	16.19	17.73
	6H	10.69	11.25	11.82	12.36	13.91	14.75	15.31	15.88	16.42	17.97
	8H	10.68	11.22	11.82	12.34	13.88	14.81	15.34	15.95	16.47	18.01
	12H	10.65	11.15	11.79	12.27	13.84	14.84	15.35	15.98	16.47	18.03
4H	2H	10.93	11.54	12.06	12.65	14.19	13.12	13.72	14.24	14.83	16.37
	3H	11.94	12.45	13.08	13.59	15.14	14.60	15.10	15.73	16.24	17.79
	4H	12.21	12.68	13.35	13.80	15.37	15.11	15.58	16.25	16.70	18.27
	6H	12.33	12.73	13.48	13.88	15.44	15.46	15.86	16.61	17.01	18.57
	8H	12.33	12.71	13.48	13.84	15.42	15.56	15.93	16.70	17.07	18.65
	12H	12.29	12.63	13.45	13.78	15.36	15.60	15.94	16.77	17.09	18.68
8H	4H	12.65	13.02	13.79	14.16	15.74	15.23	15.60	16.37	16.74	18.31
	6H	12.91	13.21	14.07	14.39	15.97	15.65	15.96	16.81	17.14	18.71
	8H	12.95	13.21	14.12	14.37	15.97	15.79	16.06	16.96	17.22	18.82
	12H	12.92	13.16	14.10	14.32	15.95	15.88	16.12	17.05	17.27	18.90
12H	4H	12.65	12.99	13.81	14.14	15.72	15.18	15.52	16.34	16.67	18.25
	6H	12.96	13.23	14.13	14.39	15.99	15.64	15.91	16.81	17.07	18.67
	8H	13.02	13.26	14.20	14.42	16.04	15.79	16.03	16.97	17.19	18.82