

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: P935974

Luminaire Tested: SQ4-FA-150U-075D-940-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935974
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-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

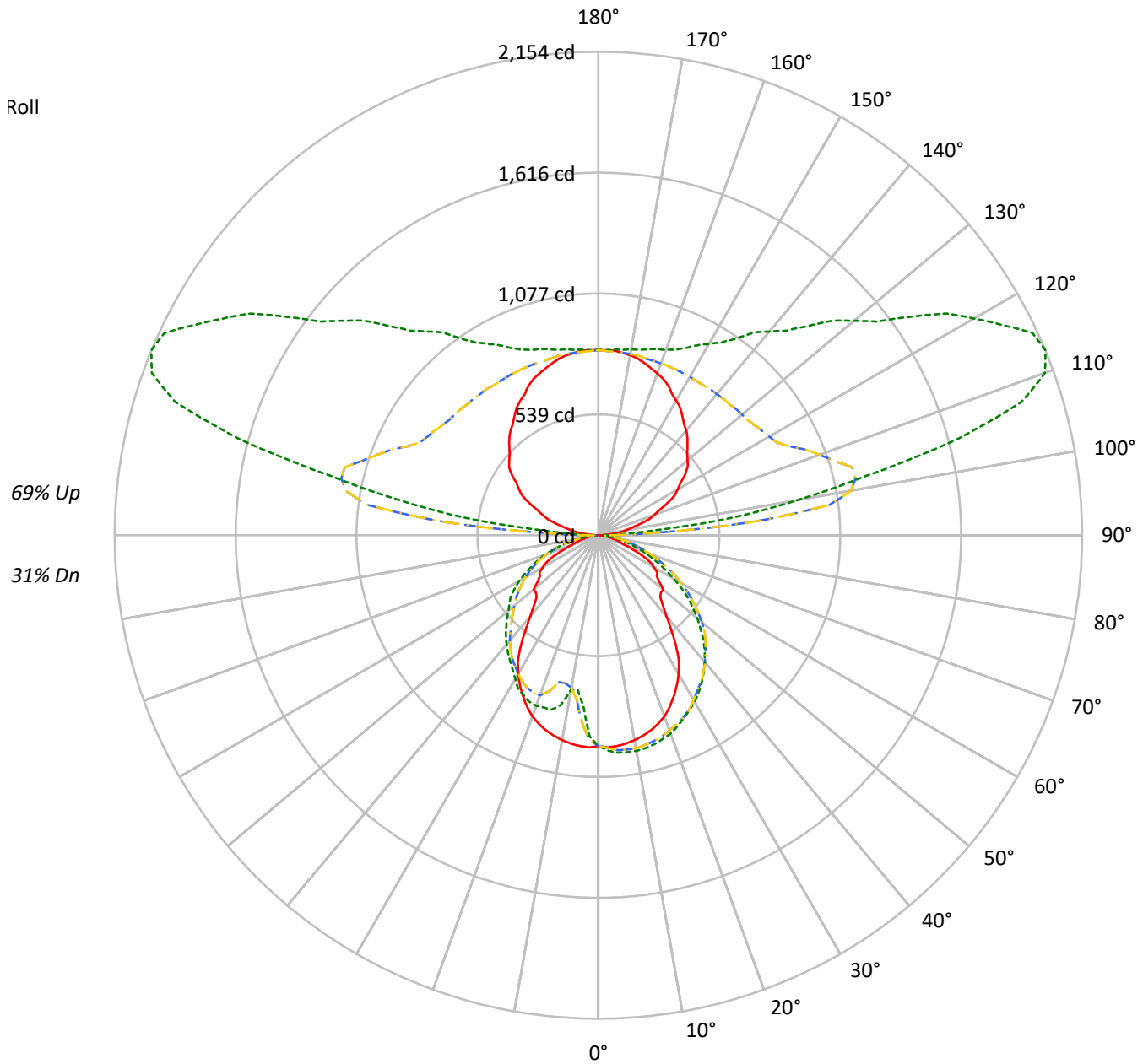
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7786.8 lumens
Efficiency: N/A
Efficacy: 122.4 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: P935974
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Luminous Intensity Polar Plot



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



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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	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	34	34	33	34	34	33	26
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	30	29	28	30	29	28	22
3	78	69	61	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	33	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	23	21	19	17	15	19	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	24	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	14	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°	8710	8710	8710	8710
5°	8766	8793	8766	6914
10°	8698	8662	8698	6193
15°	8593	8475	8593	7076
20°	8404	8252	8404	7091
25°	8027	7927	8027	6941
30°	7541	7658	7541	6611
35°	6713	7318	6713	6248
40°	5585	6916	5585	5974
45°	4980	6448	4980	5660
50°	5279	5888	5279	5343
55°	4953	5285	4953	5161
60°	5086	4490	5086	4727
65°	4589	3710	4589	4148
70°	3156	2956	3156	3476
75°	2738	2185	2738	2617
80°	2162	1445	2162	1573
85°	1176	765	1176	651

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 7648 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.7	1.1
10°-20°	240.6	3.1
20°-30°	371.9	4.8
30°-40°	444.0	5.7
40°-50°	446.6	5.7
50°-60°	388.6	5.0
60°-70°	275.5	3.5
70°-80°	145.7	1.9
80°-90°	39.4	0.5
90°-100°	402.3	5.2
100°-110°	1057.6	13.6
110°-120°	1096.6	14.1
120°-130°	879.6	11.3
130°-140°	690.2	8.9
140°-150°	529.7	6.8
150°-160°	381.5	4.9
160°-170°	233.4	3.0
170°-180°	78.9	1.0
0°-30°	697.2	9.0
0°-40°	1141.2	14.7
0°-60°	1976.4	25.4
0°-90°	2437.1	31.3
90°-120°	2556.5	32.8
90°-150°	4656.0	59.8
90°-180°	5350.0	68.7
0°-180°	7786.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	939	939	939	939	939	
5°	943	972	943	765	943	89
15°	900	964	900	805	900	253
25°	793	899	793	787	793	364
35°	603	802	603	685	603	373
45°	389	661	389	580	389	312
55°	317	488	317	476	317	291
65°	220	294	220	329	220	210
75°	84	139	84	167	84	88
85°	14	36	14	30	14	19
90°	6	21	6	21	6	5
95°	53	243	53	243	53	59
105°	191	1656	191	1656	191	202
115°	338	2132	338	2132	338	334
125°	471	1698	471	1698	471	418
135°	561	1318	561	1318	561	434
145°	651	1069	651	1069	651	408
155°	736	920	736	920	736	338
165°	794	857	794	857	794	224
175°	825	831	825	831	825	78
180°	825	825	825	825	825	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7
2.5°	946.7	946.7	952.1	953.9	953.9	951.2	948.6	951.2	959.2	961.9	961.0
5°	943.1	950.3	960.1	961.9	963.7	962.8	961.0	962.8	971.6	973.4	974.3
7.5°	936.0	949.4	961.9	964.5	967.2	964.5	963.7	965.4	974.3	976.1	976.1
10°	927.2	945.8	960.1	961.9	964.5	961.9	961.9	965.4	974.3	976.1	977.0
12.5°	914.7	940.5	953.9	955.7	959.2	958.3	957.4	961.0	969.9	971.6	971.6
15°	900.5	930.7	943.1	944.9	951.2	949.4	949.4	953.0	962.8	965.4	964.5
17.5°	881.0	918.3	932.5	935.2	939.6	938.7	939.6	943.1	952.1	953.9	954.8
20°	858.8	901.4	918.3	920.9	925.4	925.4	925.4	929.8	938.7	942.3	942.3
22.5°	828.6	883.6	901.4	903.2	908.5	908.5	910.3	916.5	924.5	925.4	925.4
25°	793.1	864.1	879.2	884.5	889.9	892.5	895.2	898.7	901.4	900.5	901.4
27.5°	755.8	839.2	858.8	862.3	869.4	872.1	875.7	876.5	877.4	880.1	878.3
30°	714.0	804.6	833.9	837.5	849.0	850.8	847.2	849.0	853.5	855.2	857.0
32.5°	667.0	753.1	808.2	816.2	826.8	821.5	820.6	823.3	830.4	830.4	832.1
35°	603.0	713.2	784.2	791.3	799.3	793.1	796.6	797.5	802.0	804.6	803.7
37.5°	532.9	678.5	759.3	764.7	770.9	762.9	768.2	770.9	774.4	772.6	772.6
40°	470.7	624.4	730.0	733.6	738.9	732.7	738.0	739.8	741.6	739.8	738.9
42.5°	424.6	564.9	698.9	703.4	699.8	704.3	706.0	709.6	706.9	703.4	703.4
45°	389.0	548.9	665.2	670.5	665.2	672.3	675.0	675.0	667.0	665.2	664.3
47.5°	377.5	516.9	631.5	631.5	628.8	637.7	642.1	635.9	627.9	625.2	625.2
50°	376.6	481.4	585.3	581.7	594.2	604.8	600.4	594.2	587.9	578.2	578.2
52.5°	342.0	437.9	525.8	539.1	558.6	564.9	557.8	551.5	540.9	536.4	532.9
55°	317.1	392.6	471.6	498.3	518.7	526.7	513.4	507.1	491.2	488.5	486.7
57.5°	311.7	326.9	421.9	455.6	480.5	479.6	471.6	460.1	446.8	444.1	443.2
60°	285.9	236.2	368.6	408.6	434.3	431.7	424.6	413.9	401.5	399.7	397.9
62.5°	259.3	171.4	308.1	353.5	389.9	389.0	382.8	366.8	358.0	353.5	350.0
65°	220.2	143.9	219.3	293.9	346.4	348.2	334.9	323.3	313.5	308.1	307.2
67.5°	167.8	117.2	148.3	245.1	304.6	302.8	285.9	280.6	268.2	265.5	260.2
70°	124.3	78.1	103.0	198.9	263.7	259.3	246.0	239.8	228.2	222.0	218.4
72.5°	103.0	63.0	75.5	154.5	222.0	216.7	205.1	198.0	188.3	182.9	179.4
75°	83.5	66.6	57.7	114.6	180.3	176.7	166.1	159.0	151.0	143.9	144.7
77.5°	61.3	62.2	46.2	84.4	143.0	137.6	131.4	122.5	119.0	111.9	111.9
80°	46.2	48.8	34.6	57.7	103.0	103.0	97.7	91.5	85.2	81.7	81.7
82.5°	31.1	31.1	25.8	36.4	70.2	67.5	63.9	62.2	58.6	56.8	56.8
85°	14.2	17.8	16.0	22.2	38.2	40.0	40.0	38.2	37.3	35.5	36.4
87.5°	4.4	8.0	9.8	12.4	19.5	20.4	21.3	21.3	21.3	22.2	22.2
90°	5.5	9.9	14.4	15.5	24.4	36.2	42.1	37.4	28.1	21.0	21.0
92.5°	22.1	59.8	97.5	106.9	150.2	208.1	237.0	207.7	149.2	105.2	101.1
95°	53.2	122.1	191.0	208.2	369.8	585.2	692.9	618.3	469.1	357.2	344.5
97.5°	91.9	152.7	213.6	228.7	498.1	857.3	1036.8	989.7	895.4	824.7	800.5
100°	121.8	177.0	232.1	245.9	544.8	943.3	1142.6	1146.1	1153.0	1158.1	1129.4
102.5°	147.3	198.8	250.2	263.1	566.3	970.4	1172.5	1232.5	1352.7	1442.8	1418.2
105°	190.6	234.2	277.7	288.6	582.1	973.4	1169.1	1303.8	1573.1	1775.1	1761.9
107.5°	234.9	275.5	316.1	326.3	585.1	930.2	1102.7	1290.5	1666.2	1947.9	1951.1
110°	264.7	301.4	338.2	347.3	580.7	891.7	1047.3	1257.3	1677.3	1992.2	2006.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	294.1	329.1	364.1	372.8	580.8	858.3	997.0	1211.9	1641.6	1964.0	1985.1
115°	338.4	370.7	402.9	411.0	586.2	819.8	936.6	1143.6	1557.6	1868.2	1897.6
117.5°	382.2	411.5	440.8	448.1	597.1	795.7	895.0	1081.9	1455.5	1735.8	1768.4
120°	407.6	435.2	462.7	469.7	605.9	787.6	878.4	1049.1	1390.5	1646.6	1678.2
122.5°	432.5	460.3	488.2	495.1	618.7	783.4	865.7	1019.4	1326.8	1557.5	1588.6
125°	470.8	496.1	521.5	527.8	635.8	779.8	851.9	982.4	1243.6	1439.4	1468.2
127.5°	501.8	527.4	553.0	559.4	652.9	777.8	840.2	952.4	1176.6	1344.8	1369.0
130°	518.4	545.9	573.5	580.4	665.6	779.0	835.8	935.6	1135.2	1284.9	1307.3
132.5°	535.6	563.2	590.7	597.6	675.7	779.8	831.9	921.2	1100.0	1234.0	1254.0
135°	561.0	586.2	611.2	617.5	686.8	779.0	825.2	900.1	1049.7	1161.9	1179.3
137.5°	587.1	611.9	636.8	643.0	703.4	783.9	824.2	887.4	1013.9	1108.8	1123.0
140°	608.7	631.6	654.5	660.2	713.6	784.7	820.2	874.9	984.2	1066.1	1079.4
142.5°	625.3	646.5	667.6	672.9	722.0	787.5	820.2	868.3	964.3	1036.3	1047.7
145°	650.8	669.3	687.7	692.3	733.1	787.6	814.7	854.0	932.5	991.4	1000.0
147.5°	676.2	694.2	712.2	716.7	749.4	793.0	814.7	845.6	907.4	953.7	960.8
150°	692.9	709.2	725.3	729.4	757.8	795.7	814.7	840.8	893.0	932.1	937.9
152.5°	710.0	722.4	734.6	737.8	763.4	797.6	814.7	837.0	881.6	915.0	919.3
155°	735.5	744.7	753.7	756.0	775.6	801.7	814.7	832.5	867.9	894.5	897.4
157.5°	754.4	763.2	772.0	774.2	787.7	805.8	814.7	828.5	856.0	876.7	878.8
160°	767.1	774.0	780.9	782.6	793.3	807.6	814.7	826.6	850.2	867.8	869.0
162.5°	779.8	785.0	790.1	791.5	799.2	809.6	814.7	824.7	844.7	859.6	860.6
165°	793.7	798.3	803.0	804.2	807.7	812.4	814.7	821.8	836.1	846.8	848.0
167.5°	806.4	808.6	810.8	811.4	814.3	818.3	820.2	825.0	834.3	841.3	841.8
170°	814.7	817.0	819.2	819.7	819.9	820.2	820.2	825.0	834.3	841.3	841.3
172.5°	819.2	819.6	820.2	820.2	820.2	820.2	820.2	824.0	831.3	836.9	836.4
175°	825.2	825.2	825.2	825.2	823.5	821.3	820.2	822.6	827.3	830.8	830.8
177.5°	825.2	825.2	825.2	825.2	824.0	822.3	821.4	823.3	826.9	829.7	829.1
180°	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7
2.5°	962.8	960.1	962.8	961.0	961.9	959.2	951.2	948.6	951.2	953.9	953.9
5°	974.3	972.5	974.3	974.3	973.4	971.6	962.8	961.0	962.8	963.7	961.9
7.5°	977.9	975.2	977.9	976.1	976.1	974.3	965.4	963.7	964.5	967.2	964.5
10°	977.9	975.2	977.9	977.0	976.1	974.3	965.4	961.9	961.9	964.5	961.9
12.5°	973.4	971.6	973.4	971.6	971.6	969.9	961.0	957.4	958.3	959.2	955.7
15°	966.3	963.7	966.3	964.5	965.4	962.8	953.0	949.4	949.4	951.2	944.9
17.5°	955.7	952.1	955.7	954.8	953.9	952.1	943.1	939.6	938.7	939.6	935.2
20°	943.1	940.5	943.1	942.3	942.3	938.7	929.8	925.4	925.4	925.4	920.9
22.5°	923.6	920.9	923.6	925.4	925.4	924.5	916.5	910.3	908.5	908.5	903.2
25°	901.4	898.7	901.4	901.4	900.5	901.4	898.7	895.2	892.5	889.9	884.5
27.5°	880.1	878.3	880.1	878.3	880.1	877.4	876.5	875.7	872.1	869.4	862.3
30°	858.8	857.0	858.8	857.0	855.2	853.5	849.0	847.2	850.8	849.0	837.5
32.5°	832.1	830.4	832.1	832.1	830.4	830.4	823.3	820.6	821.5	826.8	816.2
35°	804.6	802.0	804.6	803.7	804.6	802.0	797.5	796.6	793.1	799.3	791.3
37.5°	772.6	770.0	772.6	772.6	772.6	774.4	770.9	768.2	762.9	770.9	764.7
40°	739.8	736.2	739.8	738.9	739.8	741.6	739.8	738.0	732.7	738.9	733.6
42.5°	702.5	701.6	702.5	703.4	703.4	706.9	709.6	706.0	704.3	699.8	703.4
45°	662.5	660.8	662.5	664.3	665.2	667.0	675.0	675.0	672.3	665.2	670.5
47.5°	619.9	615.5	619.9	625.2	625.2	627.9	635.9	642.1	637.7	628.8	631.5
50°	574.6	575.5	574.6	578.2	578.2	587.9	594.2	600.4	604.8	594.2	581.7
52.5°	530.2	529.3	530.2	532.9	536.4	540.9	551.5	557.8	564.9	558.6	539.1
55°	485.8	487.6	485.8	486.7	488.5	491.2	507.1	513.4	526.7	518.7	498.3
57.5°	441.4	438.8	441.4	443.2	444.1	446.8	460.1	471.6	479.6	480.5	455.6
60°	389.9	386.4	389.9	397.9	399.7	401.5	413.9	424.6	431.7	434.3	408.6
62.5°	344.6	338.4	344.6	350.0	353.5	358.0	366.8	382.8	389.0	389.9	353.5
65°	296.6	293.9	296.6	307.2	308.1	313.5	323.3	334.9	348.2	346.4	293.9
67.5°	253.1	253.1	253.1	260.2	265.5	268.2	280.6	285.9	302.8	304.6	245.1
70°	213.1	212.2	213.1	218.4	222.0	228.2	239.8	246.0	259.3	263.7	198.9
72.5°	174.9	174.0	174.9	179.4	182.9	188.3	198.0	205.1	216.7	222.0	154.5
75°	141.2	139.4	141.2	144.7	143.9	151.0	159.0	166.1	176.7	180.3	114.6
77.5°	108.3	108.3	108.3	111.9	111.9	119.0	122.5	131.4	137.6	143.0	84.4
80°	80.8	79.9	80.8	81.7	81.7	85.2	91.5	97.7	103.0	103.0	57.7
82.5°	56.8	55.1	56.8	56.8	56.8	58.6	62.2	63.9	67.5	70.2	36.4
85°	35.5	35.5	35.5	36.4	35.5	37.3	38.2	40.0	40.0	38.2	22.2
87.5°	23.1	22.2	23.1	22.2	22.2	21.3	21.3	21.3	20.4	19.5	12.4
90°	21.0	21.0	21.0	21.0	21.0	28.1	37.4	42.1	36.2	24.4	15.5
92.5°	84.3	67.6	84.3	101.1	105.2	149.2	207.7	237.0	208.1	150.2	106.9
95°	293.8	243.1	293.8	344.5	357.2	469.1	618.3	692.9	585.2	369.8	208.2
97.5°	704.1	607.6	704.1	800.5	824.7	895.4	989.7	1036.8	857.3	498.1	228.7
100°	1014.5	899.5	1014.5	1129.4	1158.1	1153.0	1146.1	1142.6	943.3	544.8	245.9
102.5°	1319.7	1221.3	1319.7	1418.2	1442.8	1352.7	1232.5	1172.5	970.4	566.3	263.1
105°	1709.0	1656.0	1709.0	1761.9	1775.1	1573.1	1303.8	1169.1	973.4	582.1	288.6
107.5°	1963.9	1976.7	1963.9	1951.1	1947.9	1666.2	1290.5	1102.7	930.2	585.1	326.3
110°	2061.1	2116.3	2061.1	2006.0	1992.2	1677.3	1257.3	1047.3	891.7	580.7	347.3



TEST NUMBER: P935974

CATALOG NUMBER: SQ4-FA-150U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2069.8	2154.5	2069.8	1985.1	1964.0	1641.6	1211.9	997.0	858.3	580.8	372.8
115°	2015.0	2132.4	2015.0	1897.6	1868.2	1557.6	1143.6	936.6	819.8	586.2	411.0
117.5°	1898.5	2028.7	1898.5	1768.4	1735.8	1455.5	1081.9	895.0	795.7	597.1	448.1
120°	1804.8	1931.3	1804.8	1678.2	1646.6	1390.5	1049.1	878.4	787.6	605.9	469.7
122.5°	1713.5	1838.2	1713.5	1588.6	1557.5	1326.8	1019.4	865.7	783.4	618.7	495.1
125°	1583.1	1698.1	1583.1	1468.2	1439.4	1243.6	982.4	851.9	779.8	635.8	527.8
127.5°	1466.0	1563.0	1466.0	1369.0	1344.8	1176.6	952.4	840.2	777.8	652.9	559.4
130°	1396.9	1486.5	1396.9	1307.3	1284.9	1135.2	935.6	835.8	779.0	665.6	580.4
132.5°	1334.2	1414.5	1334.2	1254.0	1234.0	1100.0	921.2	831.9	779.8	675.7	597.6
135°	1248.4	1317.6	1248.4	1179.3	1161.9	1049.7	900.1	825.2	779.0	686.8	617.5
137.5°	1179.6	1236.2	1179.6	1123.0	1108.8	1013.9	887.4	824.2	783.9	703.4	643.0
140°	1132.3	1185.2	1132.3	1079.4	1066.1	984.2	874.9	820.2	784.7	713.6	660.2
142.5°	1093.2	1138.7	1093.2	1047.7	1036.3	964.3	868.3	820.2	787.5	722.0	672.9
145°	1034.5	1069.0	1034.5	1000.0	991.4	932.5	854.0	814.7	787.6	733.1	692.3
147.5°	989.4	1018.0	989.4	960.8	953.7	907.4	845.6	814.7	793.0	749.4	716.7
150°	961.1	984.2	961.1	937.9	932.1	893.0	840.8	814.7	795.7	757.8	729.4
152.5°	936.8	954.2	936.8	919.3	915.0	881.6	837.0	814.7	797.6	763.4	737.8
155°	909.0	920.5	909.0	897.4	894.5	867.9	832.5	814.7	801.7	775.6	756.0
157.5°	886.8	895.0	886.8	878.8	876.7	856.0	828.5	814.7	805.8	787.7	774.2
160°	873.7	878.4	873.7	869.0	867.8	850.2	826.6	814.7	807.6	793.3	782.6
162.5°	865.1	869.5	865.1	860.6	859.6	844.7	824.7	814.7	809.6	799.2	791.5
165°	852.7	857.4	852.7	848.0	846.8	836.1	821.8	814.7	812.4	807.7	804.2
167.5°	843.8	845.7	843.8	841.8	841.3	834.3	825.0	820.2	818.3	814.3	811.4
170°	841.3	841.3	841.3	841.3	841.3	834.3	825.0	820.2	820.2	819.9	819.7
172.5°	834.7	833.0	834.7	836.4	836.9	831.3	824.0	820.2	820.2	820.2	820.2
175°	830.8	830.8	830.8	830.8	830.8	827.3	822.6	820.2	821.3	823.5	825.2
177.5°	827.2	825.2	827.2	829.1	829.7	826.9	823.3	821.4	822.3	824.0	825.2
180°	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2



TEST NUMBER: P935974

CATALOG NUMBER: SQ4-FA-150U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7
2.5°	952.1	946.7	946.7	937.8	934.3	931.6	927.2	913.8	910.3	906.7	912.1
5°	960.1	950.3	943.1	927.2	913.8	908.5	891.6	859.7	838.4	822.4	813.5
7.5°	961.9	949.4	936.0	911.2	879.2	865.0	813.5	754.9	738.9	724.7	715.8
10°	960.1	945.8	927.2	889.9	814.4	789.5	738.0	699.8	690.1	687.4	690.1
12.5°	953.9	940.5	914.7	852.6	746.9	730.0	699.8	677.6	675.9	680.3	704.3
15°	943.1	930.7	900.5	802.8	709.6	697.2	675.9	667.9	677.6	708.7	780.6
17.5°	932.5	918.3	881.0	754.0	681.2	672.3	657.2	673.2	728.2	770.0	794.0
20°	918.3	901.4	858.8	718.5	660.8	652.8	645.7	717.6	759.3	774.4	787.7
22.5°	901.4	883.6	828.6	693.6	639.4	633.2	637.7	742.5	759.3	770.0	781.5
25°	879.2	864.1	793.1	674.1	622.6	615.5	632.3	739.8	749.6	752.2	775.3
27.5°	858.8	839.2	755.8	656.3	602.2	599.5	636.8	728.2	735.4	738.0	762.9
30°	833.9	804.6	714.0	637.7	580.8	580.0	637.7	714.0	712.3	719.4	744.2
32.5°	808.2	753.1	667.0	614.6	560.4	559.5	631.5	692.7	691.0	700.7	719.4
35°	784.2	713.2	603.0	587.9	534.7	535.6	616.4	667.9	668.8	677.6	689.2
37.5°	759.3	678.5	532.9	558.6	509.8	509.8	595.9	644.8	643.0	645.7	661.6
40°	730.0	624.4	470.7	520.5	486.7	484.0	571.1	619.9	613.7	612.8	635.0
42.5°	698.9	564.9	424.6	469.8	460.1	456.5	540.9	589.7	578.2	580.8	609.3
45°	665.2	548.9	389.0	397.0	432.5	429.9	508.0	555.1	547.1	554.2	583.5
47.5°	631.5	516.9	377.5	329.5	403.2	402.4	471.6	521.3	516.9	524.0	555.1
50°	585.3	481.4	376.6	282.4	370.4	373.9	428.1	488.5	488.5	494.7	527.6
52.5°	525.8	437.9	342.0	255.7	332.2	342.9	389.9	460.1	461.8	468.1	497.4
55°	471.6	392.6	317.1	235.3	286.8	309.9	352.6	430.8	434.3	440.5	467.2
57.5°	421.9	326.9	311.7	211.3	245.1	267.3	319.8	402.4	404.1	409.5	435.2
60°	368.6	236.2	285.9	185.6	208.7	225.6	289.5	368.6	374.8	378.4	400.6
62.5°	308.1	171.4	259.3	167.8	190.9	194.5	264.6	336.6	344.6	347.3	360.6
65°	219.3	143.9	220.2	152.7	172.3	173.2	238.0	303.7	310.8	315.2	325.1
67.5°	148.3	117.2	167.8	138.5	158.1	159.0	212.2	265.5	275.3	278.8	285.0
70°	103.0	78.1	124.3	123.4	142.1	143.9	184.7	230.9	239.8	242.4	246.0
72.5°	75.5	63.0	103.0	111.0	125.2	127.0	156.3	191.8	200.7	203.4	205.1
75°	57.7	66.6	83.5	96.8	106.6	107.4	127.9	156.3	162.5	164.3	165.2
77.5°	46.2	62.2	61.3	78.1	87.0	85.2	100.3	120.8	126.1	126.1	126.1
80°	34.6	48.8	46.2	55.9	63.9	62.2	71.9	86.1	87.9	89.7	88.8
82.5°	25.8	31.1	31.1	35.5	42.6	40.8	48.0	55.9	55.9	55.9	57.7
85°	16.0	17.8	14.2	18.6	24.0	23.1	26.6	30.2	31.1	31.1	29.3
87.5°	9.8	8.0	4.4	7.1	10.7	10.7	12.4	13.3	12.4	12.4	12.4
90°	14.4	9.9	5.5	9.9	14.4	15.5	24.4	36.2	42.1	37.4	28.1
92.5°	97.5	59.8	22.1	59.8	97.5	106.9	150.2	208.1	237.0	207.7	149.2
95°	191.0	122.1	53.2	122.1	191.0	208.2	369.8	585.2	692.9	618.3	469.1
97.5°	213.6	152.7	91.9	152.7	213.6	228.7	498.1	857.3	1036.8	989.7	895.4
100°	232.1	177.0	121.8	177.0	232.1	245.9	544.8	943.3	1142.6	1146.1	1153.0
102.5°	250.2	198.8	147.3	198.8	250.2	263.1	566.3	970.4	1172.5	1232.5	1352.7
105°	277.7	234.2	190.6	234.2	277.7	288.6	582.1	973.4	1169.1	1303.8	1573.1
107.5°	316.1	275.5	234.9	275.5	316.1	326.3	585.1	930.2	1102.7	1290.5	1666.2
110°	338.2	301.4	264.7	301.4	338.2	347.3	580.7	891.7	1047.3	1257.3	1677.3



TEST NUMBER: P935974

CATALOG NUMBER: SQ4-FA-150U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	364.1	329.1	294.1	329.1	364.1	372.8	580.8	858.3	997.0	1211.9	1641.6
115°	402.9	370.7	338.4	370.7	402.9	411.0	586.2	819.8	936.6	1143.6	1557.6
117.5°	440.8	411.5	382.2	411.5	440.8	448.1	597.1	795.7	895.0	1081.9	1455.5
120°	462.7	435.2	407.6	435.2	462.7	469.7	605.9	787.6	878.4	1049.1	1390.5
122.5°	488.2	460.3	432.5	460.3	488.2	495.1	618.7	783.4	865.7	1019.4	1326.8
125°	521.5	496.1	470.8	496.1	521.5	527.8	635.8	779.8	851.9	982.4	1243.6
127.5°	553.0	527.4	501.8	527.4	553.0	559.4	652.9	777.8	840.2	952.4	1176.6
130°	573.5	545.9	518.4	545.9	573.5	580.4	665.6	779.0	835.8	935.6	1135.2
132.5°	590.7	563.2	535.6	563.2	590.7	597.6	675.7	779.8	831.9	921.2	1100.0
135°	611.2	586.2	561.0	586.2	611.2	617.5	686.8	779.0	825.2	900.1	1049.7
137.5°	636.8	611.9	587.1	611.9	636.8	643.0	703.4	783.9	824.2	887.4	1013.9
140°	654.5	631.6	608.7	631.6	654.5	660.2	713.6	784.7	820.2	874.9	984.2
142.5°	667.6	646.5	625.3	646.5	667.6	672.9	722.0	787.5	820.2	868.3	964.3
145°	687.7	669.3	650.8	669.3	687.7	692.3	733.1	787.6	814.7	854.0	932.5
147.5°	712.2	694.2	676.2	694.2	712.2	716.7	749.4	793.0	814.7	845.6	907.4
150°	725.3	709.2	692.9	709.2	725.3	729.4	757.8	795.7	814.7	840.8	893.0
152.5°	734.6	722.4	710.0	722.4	734.6	737.8	763.4	797.6	814.7	837.0	881.6
155°	753.7	744.7	735.5	744.7	753.7	756.0	775.6	801.7	814.7	832.5	867.9
157.5°	772.0	763.2	754.4	763.2	772.0	774.2	787.7	805.8	814.7	828.5	856.0
160°	780.9	774.0	767.1	774.0	780.9	782.6	793.3	807.6	814.7	826.6	850.2
162.5°	790.1	785.0	779.8	785.0	790.1	791.5	799.2	809.6	814.7	824.7	844.7
165°	803.0	798.3	793.7	798.3	803.0	804.2	807.7	812.4	814.7	821.8	836.1
167.5°	810.8	808.6	806.4	808.6	810.8	811.4	814.3	818.3	820.2	825.0	834.3
170°	819.2	817.0	814.7	817.0	819.2	819.7	819.9	820.2	820.2	825.0	834.3
172.5°	820.2	819.6	819.2	819.6	820.2	820.2	820.2	820.2	820.2	824.0	831.3
175°	825.2	825.2	825.2	825.2	825.2	825.2	823.5	821.3	820.2	822.6	827.3
177.5°	825.2	825.2	825.2	825.2	825.2	825.2	824.0	822.3	821.4	823.3	826.9
180°	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2



TEST NUMBER: P935974
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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7
2.5°	905.8	903.2	906.7	897.0	906.7	903.2	905.8	912.1	906.7	910.3	913.8
5°	794.8	790.4	776.2	764.7	776.2	790.4	794.8	813.5	822.4	838.4	859.7
7.5°	710.5	706.9	703.4	696.3	703.4	706.9	710.5	715.8	724.7	738.9	754.9
10°	691.8	692.7	698.1	697.2	698.1	692.7	691.8	690.1	687.4	690.1	699.8
12.5°	739.8	747.8	777.1	775.3	777.1	747.8	739.8	704.3	680.3	675.9	677.6
15°	794.8	797.5	803.7	804.6	803.7	797.5	794.8	780.6	708.7	677.6	667.9
17.5°	800.2	801.1	805.5	805.5	805.5	801.1	800.2	794.0	770.0	728.2	673.2
20°	795.7	797.5	806.4	808.2	806.4	797.5	795.7	787.7	774.4	759.3	717.6
22.5°	794.0	797.5	804.6	803.7	804.6	797.5	794.0	781.5	770.0	759.3	742.5
25°	785.1	785.1	786.0	786.9	786.0	785.1	785.1	775.3	752.2	749.6	739.8
27.5°	766.4	768.2	773.5	772.6	773.5	768.2	766.4	762.9	738.0	735.4	728.2
30°	749.6	747.8	743.3	739.8	743.3	747.8	749.6	744.2	719.4	712.3	714.0
32.5°	721.1	716.7	712.3	709.6	712.3	716.7	721.1	719.4	700.7	691.0	692.7
35°	687.4	688.3	687.4	684.7	687.4	688.3	687.4	689.2	677.6	668.8	667.9
37.5°	663.4	665.2	664.3	660.8	664.3	665.2	663.4	661.6	645.7	643.0	644.8
40°	638.6	639.4	638.6	635.9	638.6	639.4	638.6	635.0	612.8	613.7	619.9
42.5°	614.6	613.7	611.0	609.3	611.0	613.7	614.6	609.3	580.8	578.2	589.7
45°	587.1	587.9	582.6	580.0	582.6	587.9	587.1	583.5	554.2	547.1	555.1
47.5°	559.5	559.5	555.1	552.4	555.1	559.5	559.5	555.1	524.0	516.9	521.3
50°	530.2	529.3	523.1	522.2	523.1	529.3	530.2	527.6	494.7	488.5	488.5
52.5°	496.5	496.5	497.4	499.1	497.4	496.5	496.5	497.4	468.1	461.8	460.1
55°	467.2	468.1	474.3	476.1	474.3	468.1	467.2	467.2	440.5	434.3	430.8
57.5°	437.0	437.0	441.4	441.4	441.4	437.0	437.0	435.2	409.5	404.1	402.4
60°	402.4	404.1	407.7	406.8	407.7	404.1	402.4	400.6	378.4	374.8	368.6
62.5°	365.9	367.7	368.6	366.8	368.6	367.7	365.9	360.6	347.3	344.6	336.6
65°	327.8	329.5	330.4	328.6	330.4	329.5	327.8	325.1	315.2	310.8	303.7
67.5°	288.6	287.7	286.8	290.4	286.8	287.7	288.6	285.0	278.8	275.3	265.5
70°	248.6	248.6	247.8	249.5	247.8	248.6	248.6	246.0	242.4	239.8	230.9
72.5°	206.0	205.1	208.7	206.0	208.7	205.1	206.0	205.1	203.4	200.7	191.8
75°	164.3	166.1	164.3	166.9	164.3	166.1	164.3	165.2	164.3	162.5	156.3
77.5°	125.2	127.0	125.2	125.2	125.2	127.0	125.2	126.1	126.1	126.1	120.8
80°	88.8	87.9	87.9	87.0	87.9	87.9	88.8	88.8	89.7	87.9	86.1
82.5°	56.8	55.9	55.9	57.7	55.9	55.9	56.8	57.7	55.9	55.9	55.9
85°	31.1	32.0	30.2	30.2	30.2	32.0	31.1	29.3	31.1	31.1	30.2
87.5°	11.5	10.7	10.7	10.7	10.7	10.7	11.5	12.4	12.4	12.4	13.3
90°	21.0	21.0	21.0	21.0	21.0	21.0	21.0	28.1	37.4	42.1	36.2
92.5°	105.2	101.1	84.3	67.6	84.3	101.1	105.2	149.2	207.7	237.0	208.1
95°	357.2	344.5	293.8	243.1	293.8	344.5	357.2	469.1	618.3	692.9	585.2
97.5°	824.7	800.5	704.1	607.6	704.1	800.5	824.7	895.4	989.7	1036.8	857.3
100°	1158.1	1129.4	1014.5	899.5	1014.5	1129.4	1158.1	1153.0	1146.1	1142.6	943.3
102.5°	1442.8	1418.2	1319.7	1221.3	1319.7	1418.2	1442.8	1352.7	1232.5	1172.5	970.4
105°	1775.1	1761.9	1709.0	1656.0	1709.0	1761.9	1775.1	1573.1	1303.8	1169.1	973.4
107.5°	1947.9	1951.1	1963.9	1976.7	1963.9	1951.1	1947.9	1666.2	1290.5	1102.7	930.2
110°	1992.2	2006.0	2061.1	2116.3	2061.1	2006.0	1992.2	1677.3	1257.3	1047.3	891.7



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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1964.0	1985.1	2069.8	2154.5	2069.8	1985.1	1964.0	1641.6	1211.9	997.0	858.3
115°	1868.2	1897.6	2015.0	2132.4	2015.0	1897.6	1868.2	1557.6	1143.6	936.6	819.8
117.5°	1735.8	1768.4	1898.5	2028.7	1898.5	1768.4	1735.8	1455.5	1081.9	895.0	795.7
120°	1646.6	1678.2	1804.8	1931.3	1804.8	1678.2	1646.6	1390.5	1049.1	878.4	787.6
122.5°	1557.5	1588.6	1713.5	1838.2	1713.5	1588.6	1557.5	1326.8	1019.4	865.7	783.4
125°	1439.4	1468.2	1583.1	1698.1	1583.1	1468.2	1439.4	1243.6	982.4	851.9	779.8
127.5°	1344.8	1369.0	1466.0	1563.0	1466.0	1369.0	1344.8	1176.6	952.4	840.2	777.8
130°	1284.9	1307.3	1396.9	1486.5	1396.9	1307.3	1284.9	1135.2	935.6	835.8	779.0
132.5°	1234.0	1254.0	1334.2	1414.5	1334.2	1254.0	1234.0	1100.0	921.2	831.9	779.8
135°	1161.9	1179.3	1248.4	1317.6	1248.4	1179.3	1161.9	1049.7	900.1	825.2	779.0
137.5°	1108.8	1123.0	1179.6	1236.2	1179.6	1123.0	1108.8	1013.9	887.4	824.2	783.9
140°	1066.1	1079.4	1132.3	1185.2	1132.3	1079.4	1066.1	984.2	874.9	820.2	784.7
142.5°	1036.3	1047.7	1093.2	1138.7	1093.2	1047.7	1036.3	964.3	868.3	820.2	787.5
145°	991.4	1000.0	1034.5	1069.0	1034.5	1000.0	991.4	932.5	854.0	814.7	787.6
147.5°	953.7	960.8	989.4	1018.0	989.4	960.8	953.7	907.4	845.6	814.7	793.0
150°	932.1	937.9	961.1	984.2	961.1	937.9	932.1	893.0	840.8	814.7	795.7
152.5°	915.0	919.3	936.8	954.2	936.8	919.3	915.0	881.6	837.0	814.7	797.6
155°	894.5	897.4	909.0	920.5	909.0	897.4	894.5	867.9	832.5	814.7	801.7
157.5°	876.7	878.8	886.8	895.0	886.8	878.8	876.7	856.0	828.5	814.7	805.8
160°	867.8	869.0	873.7	878.4	873.7	869.0	867.8	850.2	826.6	814.7	807.6
162.5°	859.6	860.6	865.1	869.5	865.1	860.6	859.6	844.7	824.7	814.7	809.6
165°	846.8	848.0	852.7	857.4	852.7	848.0	846.8	836.1	821.8	814.7	812.4
167.5°	841.3	841.8	843.8	845.7	843.8	841.8	841.3	834.3	825.0	820.2	818.3
170°	841.3	841.3	841.3	841.3	841.3	841.3	841.3	834.3	825.0	820.2	820.2
172.5°	836.9	836.4	834.7	833.0	834.7	836.4	836.9	831.3	824.0	820.2	820.2
175°	830.8	830.8	830.8	830.8	830.8	830.8	830.8	827.3	822.6	820.2	821.3
177.5°	829.7	829.1	827.2	825.2	827.2	829.1	829.7	826.9	823.3	821.4	822.3
180°	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	938.7	938.7	938.7	938.7	938.7
2.5°	927.2	931.6	934.3	937.8	946.7
5°	891.6	908.5	913.8	927.2	943.1
7.5°	813.5	865.0	879.2	911.2	936.0
10°	738.0	789.5	814.4	889.9	927.2
12.5°	699.8	730.0	746.9	852.6	914.7
15°	675.9	697.2	709.6	802.8	900.5
17.5°	657.2	672.3	681.2	754.0	881.0
20°	645.7	652.8	660.8	718.5	858.8
22.5°	637.7	633.2	639.4	693.6	828.6
25°	632.3	615.5	622.6	674.1	793.1
27.5°	636.8	599.5	602.2	656.3	755.8
30°	637.7	580.0	580.8	637.7	714.0
32.5°	631.5	559.5	560.4	614.6	667.0
35°	616.4	535.6	534.7	587.9	603.0
37.5°	595.9	509.8	509.8	558.6	532.9
40°	571.1	484.0	486.7	520.5	470.7
42.5°	540.9	456.5	460.1	469.8	424.6
45°	508.0	429.9	432.5	397.0	389.0
47.5°	471.6	402.4	403.2	329.5	377.5
50°	428.1	373.9	370.4	282.4	376.6
52.5°	389.9	342.9	332.2	255.7	342.0
55°	352.6	309.9	286.8	235.3	317.1
57.5°	319.8	267.3	245.1	211.3	311.7
60°	289.5	225.6	208.7	185.6	285.9
62.5°	264.6	194.5	190.9	167.8	259.3
65°	238.0	173.2	172.3	152.7	220.2
67.5°	212.2	159.0	158.1	138.5	167.8
70°	184.7	143.9	142.1	123.4	124.3
72.5°	156.3	127.0	125.2	111.0	103.0
75°	127.9	107.4	106.6	96.8	83.5
77.5°	100.3	85.2	87.0	78.1	61.3
80°	71.9	62.2	63.9	55.9	46.2
82.5°	48.0	40.8	42.6	35.5	31.1
85°	26.6	23.1	24.0	18.6	14.2
87.5°	12.4	10.7	10.7	7.1	4.4
90°	24.4	15.5	14.4	9.9	5.5
92.5°	150.2	106.9	97.5	59.8	22.1
95°	369.8	208.2	191.0	122.1	53.2
97.5°	498.1	228.7	213.6	152.7	91.9
100°	544.8	245.9	232.1	177.0	121.8
102.5°	566.3	263.1	250.2	198.8	147.3
105°	582.1	288.6	277.7	234.2	190.6
107.5°	585.1	326.3	316.1	275.5	234.9
110°	580.7	347.3	338.2	301.4	264.7



TEST NUMBER: P935974

CATALOG NUMBER: SQ4-FA-150U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	580.8	372.8	364.1	329.1	294.1
115°	586.2	411.0	402.9	370.7	338.4
117.5°	597.1	448.1	440.8	411.5	382.2
120°	605.9	469.7	462.7	435.2	407.6
122.5°	618.7	495.1	488.2	460.3	432.5
125°	635.8	527.8	521.5	496.1	470.8
127.5°	652.9	559.4	553.0	527.4	501.8
130°	665.6	580.4	573.5	545.9	518.4
132.5°	675.7	597.6	590.7	563.2	535.6
135°	686.8	617.5	611.2	586.2	561.0
137.5°	703.4	643.0	636.8	611.9	587.1
140°	713.6	660.2	654.5	631.6	608.7
142.5°	722.0	672.9	667.6	646.5	625.3
145°	733.1	692.3	687.7	669.3	650.8
147.5°	749.4	716.7	712.2	694.2	676.2
150°	757.8	729.4	725.3	709.2	692.9
152.5°	763.4	737.8	734.6	722.4	710.0
155°	775.6	756.0	753.7	744.7	735.5
157.5°	787.7	774.2	772.0	763.2	754.4
160°	793.3	782.6	780.9	774.0	767.1
162.5°	799.2	791.5	790.1	785.0	779.8
165°	807.7	804.2	803.0	798.3	793.7
167.5°	814.3	811.4	810.8	808.6	806.4
170°	819.9	819.7	819.2	817.0	814.7
172.5°	820.2	820.2	820.2	819.6	819.2
175°	823.5	825.2	825.2	825.2	825.2
177.5°	824.0	825.2	825.2	825.2	825.2
180°	825.2	825.2	825.2	825.2	825.2



TEST NUMBER: P935974
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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	10.27	10.99	11.38	12.09	13.60	13.07	13.79	14.17	14.89	16.40
	3H	10.74	11.38	11.85	12.49	14.02	14.40	15.04	15.51	16.14	17.68
	4H	10.92	11.53	12.05	12.64	14.18	14.83	15.43	15.95	16.54	18.08
	6H	11.04	11.59	12.17	12.71	14.26	15.10	15.65	16.23	16.77	18.32
	8H	11.03	11.56	12.17	12.69	14.23	15.16	15.69	16.30	16.82	18.36
	12H	11.00	11.50	12.14	12.62	14.19	15.19	15.70	16.33	16.82	18.38
4H	2H	11.28	11.89	12.41	13.00	14.54	13.46	14.07	14.59	15.18	16.72
	3H	12.29	12.80	13.43	13.93	15.49	14.95	15.45	16.08	16.59	18.14
	4H	12.56	13.03	13.70	14.15	15.72	15.46	15.93	16.60	17.05	18.62
	6H	12.68	13.08	13.83	14.23	15.79	15.81	16.21	16.96	17.36	18.92
	8H	12.68	13.06	13.83	14.19	15.77	15.91	16.28	17.05	17.42	19.00
	12H	12.64	12.98	13.80	14.13	15.71	15.95	16.29	17.11	17.44	19.02
8H	4H	13.00	13.37	14.14	14.51	16.09	15.58	15.95	16.72	17.09	18.66
	6H	13.26	13.56	14.42	14.74	16.32	16.00	16.30	17.16	17.49	19.06
	8H	13.30	13.56	14.47	14.72	16.32	16.14	16.41	17.31	17.57	19.17
	12H	13.27	13.51	14.45	14.67	16.30	16.23	16.46	17.40	17.62	19.25
12H	4H	13.00	13.34	14.16	14.49	16.07	15.53	15.87	16.69	17.02	18.60
	6H	13.31	13.58	14.48	14.74	16.34	15.99	16.26	17.16	17.42	19.02
	8H	13.37	13.61	14.55	14.77	16.39	16.14	16.38	17.32	17.54	19.16