

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: P935061

Luminaire Tested: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

**Test Information**

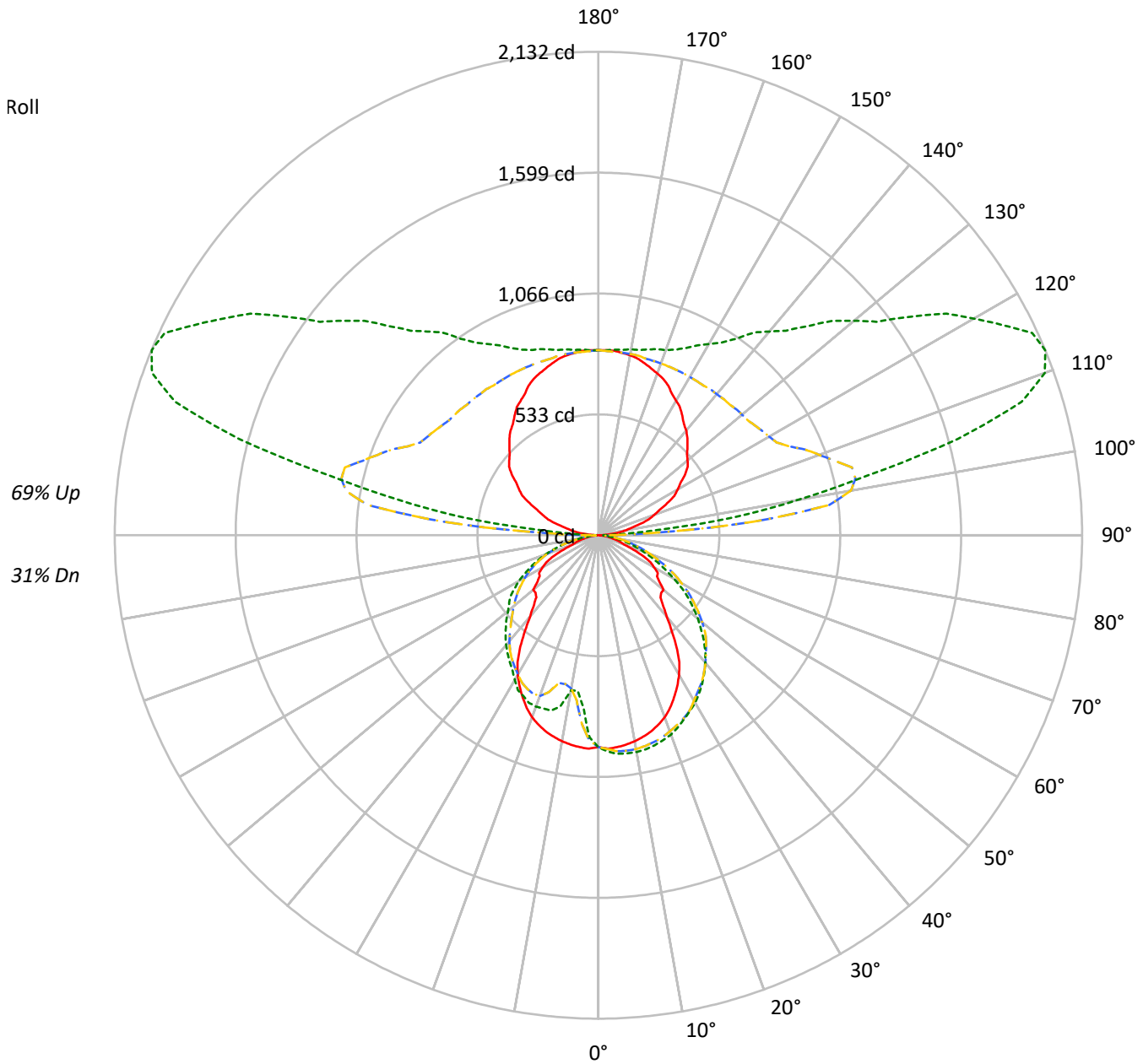
Test Method: LM-79-2019  
Report Number: P935061  
REPORT IS A COMBINATION OF REPORTS P933739 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7717.6 lumens  
Efficiency: N/A  
Efficacy: 124.9 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: P935061  
CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-3000K

### 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	
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	35	34	33	27
2	85	78	72	67	76	70	65	61	56	53	50	43	40	38	30	29	28	22
3	78	69	62	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	34	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	24	21	20	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	25	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	15	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°	5777	5777	5777	5777
5°	5818	5831	5818	4585
10°	5777	5745	5777	4107
15°	5713	5621	5713	4693
20°	5591	5473	5591	4703
25°	5344	5258	5344	4603
30°	5026	5080	5026	4384
35°	4479	4853	4479	4144
40°	3730	4588	3730	3962
45°	3330	4276	3330	3754
50°	3535	3906	3535	3543
55°	3323	3506	3323	3422
60°	3421	2977	3421	3134
65°	3096	2461	3096	2751
70°	2139	1961	2139	2306
75°	1870	1450	1870	1736
80°	1494	958	1494	1044
85°	841	507	841	431

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 5107 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.3	1.1
10°-20°	239.4	3.1
20°-30°	370.0	4.8
30°-40°	441.7	5.7
40°-50°	444.3	5.8
50°-60°	386.6	5.0
60°-70°	274.1	3.6
70°-80°	145.0	1.9
80°-90°	39.2	0.5
90°-100°	398.0	5.2
100°-110°	1046.4	13.6
110°-120°	1085.0	14.1
120°-130°	870.3	11.3
130°-140°	682.9	8.8
140°-150°	524.1	6.8
150°-160°	377.5	4.9
160°-170°	231.0	3.0
170°-180°	78.0	1.0
0°-30°	693.7	9.0
0°-40°	1135.4	14.7
0°-60°	1966.2	25.5
0°-90°	2424.6	31.4
90°-120°	2529.3	32.8
90°-150°	4606.6	59.7
90°-180°	5293.0	68.6
0°-180°	7717.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	934	934	934	934	934	
5°	938	967	938	761	938	89
15°	896	959	896	800	896	252
25°	789	894	789	783	789	362
35°	600	798	600	681	600	371
45°	387	657	387	577	387	310
55°	315	485	315	474	315	290
65°	219	292	219	327	219	209
75°	83	139	83	166	83	87
85°	14	35	14	30	14	19
90°	5	21	5	21	5	5
95°	53	241	53	241	53	58
105°	188	1638	188	1638	188	200
115°	335	2110	335	2110	335	331
125°	466	1680	466	1680	466	414
135°	555	1304	555	1304	555	429
145°	644	1058	644	1058	644	403
155°	728	911	728	911	728	334
165°	785	848	785	848	785	222
175°	816	822	816	822	816	78
180°	816	816	816	816	816	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9
2.5°	941.9	941.9	947.2	948.9	948.9	946.3	943.6	946.3	954.3	956.9	956.0
5°	938.3	945.4	955.2	956.9	958.7	957.8	956.0	957.8	966.6	968.4	969.3
7.5°	931.3	944.5	956.9	959.5	962.2	959.5	958.7	960.4	969.3	971.0	971.0
10°	922.4	941.0	955.2	956.9	959.5	956.9	956.9	960.4	969.3	971.0	971.9
12.5°	910.1	935.7	948.9	950.7	954.3	953.4	952.4	956.0	964.8	966.6	966.6
15°	896.0	926.0	938.3	940.1	946.3	944.5	944.5	948.0	957.8	960.4	959.5
17.5°	876.5	913.6	927.7	930.4	934.8	933.9	934.8	938.3	947.2	948.9	949.8
20°	854.4	896.8	913.6	916.2	920.6	920.6	920.6	925.1	933.9	937.4	937.4
22.5°	824.4	879.1	896.8	898.6	903.9	903.9	905.6	911.9	919.8	920.6	920.6
25°	789.0	859.7	874.7	880.1	885.3	888.0	890.6	894.2	896.8	896.0	896.8
27.5°	751.9	834.9	854.4	857.9	865.0	867.7	871.2	872.1	872.9	875.6	873.8
30°	710.4	800.5	829.6	833.2	844.7	846.4	842.9	844.7	849.1	850.9	852.7
32.5°	663.6	749.3	804.0	812.0	822.6	817.3	816.4	819.0	826.1	826.1	827.9
35°	600.0	709.5	780.2	787.2	795.2	789.0	792.6	793.5	797.8	800.5	799.6
37.5°	530.1	675.1	755.4	760.7	766.9	758.9	764.3	766.9	770.4	768.7	768.7
40°	468.3	621.1	726.3	729.8	735.1	728.9	734.3	736.0	737.8	736.0	735.1
42.5°	422.4	561.9	695.4	699.7	696.2	700.6	702.5	706.0	703.3	699.7	699.7
45°	387.0	546.0	661.8	667.1	661.8	668.8	671.5	671.5	663.6	661.8	660.9
47.5°	375.5	514.2	628.2	628.2	625.5	634.4	638.8	632.6	624.6	622.0	622.0
50°	374.6	478.8	582.2	578.7	591.1	601.7	597.2	591.1	584.9	575.2	575.2
52.5°	340.2	435.5	523.0	536.3	555.8	561.9	554.9	548.7	538.0	533.7	530.1
55°	315.4	390.5	469.2	495.7	516.0	523.9	510.7	504.5	488.6	486.0	484.2
57.5°	310.1	325.1	419.7	453.3	478.0	477.1	469.2	457.7	444.4	441.8	440.9
60°	284.5	235.0	366.7	406.5	432.0	429.4	422.4	411.7	399.4	397.6	395.9
62.5°	258.0	170.6	306.6	351.7	387.9	387.0	380.8	364.9	356.1	351.7	348.2
65°	219.1	143.2	218.3	292.5	344.6	346.3	333.1	321.6	311.9	306.6	305.7
67.5°	167.0	116.6	147.6	243.9	303.1	301.3	284.5	279.2	266.8	264.2	258.9
70°	123.7	77.7	102.5	197.9	262.4	258.0	244.8	238.5	227.0	220.9	217.4
72.5°	102.5	62.7	75.1	153.7	220.9	215.6	204.1	197.0	187.3	182.0	178.5
75°	83.1	66.2	57.4	114.0	179.3	175.8	165.2	158.2	150.2	143.2	144.0
77.5°	61.0	61.8	45.9	84.0	142.3	136.9	130.8	121.9	118.4	111.4	111.4
80°	45.9	48.6	34.4	57.4	102.5	102.5	97.2	91.0	84.8	81.3	81.3
82.5°	30.9	30.9	25.6	36.2	69.8	67.2	63.6	61.8	58.3	56.6	56.6
85°	14.1	17.7	15.9	22.0	38.0	39.8	39.8	38.0	37.2	35.3	36.2
87.5°	4.4	8.0	9.7	12.4	19.4	20.3	21.2	21.2	21.2	22.0	22.0
90°	5.4	9.8	14.2	15.4	24.2	35.8	41.6	37.0	27.8	20.8	20.8
92.5°	22.0	59.2	96.4	105.7	148.7	205.9	234.5	205.5	147.6	104.1	100.0
95°	52.6	120.8	189.0	206.0	365.9	579.0	685.5	611.7	464.1	353.4	340.9
97.5°	91.0	151.2	211.3	226.3	492.8	848.2	1025.9	979.2	885.9	815.9	792.1
100°	120.6	175.1	229.7	243.3	539.0	933.3	1130.5	1133.9	1140.7	1145.8	1117.4
102.5°	145.8	196.7	247.6	260.3	560.3	960.2	1160.1	1219.5	1338.4	1427.5	1403.2
105°	188.5	231.6	274.7	285.5	576.0	963.2	1156.8	1290.0	1556.4	1756.3	1743.2
107.5°	232.3	272.5	312.8	322.8	578.9	920.3	1091.0	1276.9	1648.5	1927.3	1930.4
110°	261.9	298.2	334.5	343.6	574.5	882.3	1036.2	1243.9	1659.5	1971.1	1984.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	291.0	325.6	360.2	368.8	574.7	849.1	986.3	1199.0	1624.2	1943.2	1964.1
115°	334.8	366.7	398.6	406.6	579.9	811.0	926.6	1131.4	1541.2	1848.4	1877.5
117.5°	378.1	407.1	436.1	443.3	590.7	787.2	885.5	1070.4	1440.1	1717.3	1749.6
120°	403.3	430.6	457.9	464.7	599.5	779.2	869.1	1038.0	1375.8	1629.2	1660.4
122.5°	428.0	455.5	483.1	489.9	612.1	775.0	856.5	1008.6	1312.8	1540.9	1571.8
125°	465.8	490.9	516.0	522.2	629.1	771.6	842.8	972.0	1230.4	1424.3	1452.7
127.5°	496.5	521.8	547.2	553.5	646.1	769.6	831.3	942.2	1164.1	1330.5	1354.5
130°	512.9	540.2	567.5	574.3	658.6	770.8	826.9	925.6	1123.2	1271.3	1293.5
132.5°	529.9	557.2	584.4	591.3	668.6	771.6	823.1	911.5	1088.3	1220.9	1240.8
135°	555.1	579.9	604.8	611.0	679.5	770.8	816.5	890.5	1038.6	1149.7	1166.8
137.5°	580.8	605.4	630.1	636.2	696.0	775.6	815.4	878.0	1003.2	1097.1	1111.1
140°	602.3	624.9	647.6	653.2	706.0	776.3	811.6	865.7	973.8	1054.8	1067.9
142.5°	618.7	639.7	660.6	665.8	714.4	779.1	811.6	859.1	954.0	1025.2	1036.5
145°	643.9	662.2	680.4	685.0	725.4	779.2	806.1	844.9	922.7	980.9	989.4
147.5°	669.1	686.8	704.6	709.1	741.4	784.5	806.1	836.7	897.8	943.6	950.7
150°	685.5	701.6	717.7	721.7	749.8	787.3	806.1	831.9	883.5	922.2	927.9
152.5°	702.6	714.8	726.9	730.0	755.3	789.2	806.1	828.2	872.2	905.3	909.6
155°	727.8	736.7	745.7	748.0	767.4	793.2	806.1	823.7	858.7	885.0	887.9
157.5°	746.4	755.2	763.9	766.1	779.4	797.2	806.1	819.7	847.0	867.5	869.5
160°	758.9	765.8	772.6	774.3	784.9	799.1	806.1	817.8	841.1	858.7	859.9
162.5°	771.6	776.7	781.8	783.1	790.7	801.0	806.1	815.9	835.7	850.5	851.5
165°	785.3	789.9	794.5	795.7	799.2	803.8	806.1	813.1	827.3	837.9	839.0
167.5°	797.8	800.0	802.2	802.8	805.7	809.6	811.6	816.2	825.4	832.4	832.9
170°	806.1	808.3	810.5	811.0	811.2	811.5	811.6	816.2	825.4	832.4	832.4
172.5°	810.5	810.9	811.5	811.6	811.6	811.6	811.6	815.2	822.5	828.0	827.5
175°	816.5	816.5	816.5	816.5	814.8	812.6	811.6	813.8	818.5	822.0	822.0
177.5°	816.5	816.5	816.5	816.5	815.2	813.6	812.7	814.5	818.1	820.9	820.3
180°	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9
2.5°	957.8	955.2	957.8	956.0	956.9	954.3	946.3	943.6	946.3	948.9	948.9
5°	969.3	967.4	969.3	969.3	968.4	966.6	957.8	956.0	957.8	958.7	956.9
7.5°	972.8	970.2	972.8	971.0	971.0	969.3	960.4	958.7	959.5	962.2	959.5
10°	972.8	970.2	972.8	971.9	971.0	969.3	960.4	956.9	956.9	959.5	956.9
12.5°	968.4	966.6	968.4	966.6	966.6	964.8	956.0	952.4	953.4	954.3	950.7
15°	961.3	958.7	961.3	959.5	960.4	957.8	948.0	944.5	944.5	946.3	940.1
17.5°	950.7	947.2	950.7	949.8	948.9	947.2	938.3	934.8	933.9	934.8	930.4
20°	938.3	935.7	938.3	937.4	937.4	933.9	925.1	920.6	920.6	920.6	916.2
22.5°	918.9	916.2	918.9	920.6	920.6	919.8	911.9	905.6	903.9	903.9	898.6
25°	896.8	894.2	896.8	896.8	896.0	896.8	894.2	890.6	888.0	885.3	880.1
27.5°	875.6	873.8	875.6	873.8	875.6	872.9	872.1	871.2	867.7	865.0	857.9
30°	854.4	852.7	854.4	852.7	850.9	849.1	844.7	842.9	846.4	844.7	833.2
32.5°	827.9	826.1	827.9	827.9	826.1	826.1	819.0	816.4	817.3	822.6	812.0
35°	800.5	797.8	800.5	799.6	800.5	797.8	793.5	792.6	789.0	795.2	787.2
37.5°	768.7	766.1	768.7	768.7	768.7	770.4	766.9	764.3	758.9	766.9	760.7
40°	736.0	732.5	736.0	735.1	736.0	737.8	736.0	734.3	728.9	735.1	729.8
42.5°	698.9	698.0	698.9	699.7	699.7	703.3	706.0	702.5	700.6	696.2	699.7
45°	659.2	657.3	659.2	660.9	661.8	663.6	671.5	671.5	668.8	661.8	667.1
47.5°	616.7	612.3	616.7	622.0	622.0	624.6	632.6	638.8	634.4	625.5	628.2
50°	571.7	572.6	571.7	575.2	575.2	584.9	591.1	597.2	601.7	591.1	578.7
52.5°	527.5	526.6	527.5	530.1	533.7	538.0	548.7	554.9	561.9	555.8	536.3
55°	483.3	485.1	483.3	484.2	486.0	488.6	504.5	510.7	523.9	516.0	495.7
57.5°	439.2	436.5	439.2	440.9	441.8	444.4	457.7	469.2	477.1	478.0	453.3
60°	387.9	384.3	387.9	395.9	397.6	399.4	411.7	422.4	429.4	432.0	406.5
62.5°	342.8	336.7	342.8	348.2	351.7	356.1	364.9	380.8	387.0	387.9	351.7
65°	295.1	292.5	295.1	305.7	306.6	311.9	321.6	333.1	346.3	344.6	292.5
67.5°	251.8	251.8	251.8	258.9	264.2	266.8	279.2	284.5	301.3	303.1	243.9
70°	212.0	211.1	212.0	217.4	220.9	227.0	238.5	244.8	258.0	262.4	197.9
72.5°	174.1	173.2	174.1	178.5	182.0	187.3	197.0	204.1	215.6	220.9	153.7
75°	140.5	138.7	140.5	144.0	143.2	150.2	158.2	165.2	175.8	179.3	114.0
77.5°	107.8	107.8	107.8	111.4	111.4	118.4	121.9	130.8	136.9	142.3	84.0
80°	80.4	79.5	80.4	81.3	81.3	84.8	91.0	97.2	102.5	102.5	57.4
82.5°	56.6	54.8	56.6	56.6	56.6	58.3	61.8	63.6	67.2	69.8	36.2
85°	35.3	35.3	35.3	36.2	35.3	37.2	38.0	39.8	39.8	38.0	22.0
87.5°	23.0	22.0	23.0	22.0	22.0	21.2	21.2	21.2	20.3	19.4	12.4
90°	20.8	20.8	20.8	20.8	20.8	27.8	37.0	41.6	35.8	24.2	15.4
92.5°	83.4	66.8	83.4	100.0	104.1	147.6	205.5	234.5	205.9	148.7	105.7
95°	290.7	240.6	290.7	340.9	353.4	464.1	611.7	685.5	579.0	365.9	206.0
97.5°	696.6	601.1	696.6	792.1	815.9	885.9	979.2	1025.9	848.2	492.8	226.3
100°	1003.6	889.9	1003.6	1117.4	1145.8	1140.7	1133.9	1130.5	933.3	539.0	243.3
102.5°	1305.7	1208.3	1305.7	1403.2	1427.5	1338.4	1219.5	1160.1	960.2	560.3	260.3
105°	1690.8	1638.5	1690.8	1743.2	1756.3	1556.4	1290.0	1156.8	963.2	576.0	285.5
107.5°	1943.2	1955.8	1943.2	1930.4	1927.3	1648.5	1276.9	1091.0	920.3	578.9	322.8
110°	2039.3	2093.9	2039.3	1984.7	1971.1	1659.5	1243.9	1036.2	882.3	574.5	343.6





TEST NUMBER: P935061

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2047.8	2131.6	2047.8	1964.1	1943.2	1624.2	1199.0	986.3	849.1	574.7	368.8
115°	1993.6	2109.8	1993.6	1877.5	1848.4	1541.2	1131.4	926.6	811.0	579.9	406.6
117.5°	1878.4	2007.3	1878.4	1749.6	1717.3	1440.1	1070.4	885.5	787.2	590.7	443.3
120°	1785.7	1910.8	1785.7	1660.4	1629.2	1375.8	1038.0	869.1	779.2	599.5	464.7
122.5°	1695.3	1818.8	1695.3	1571.8	1540.9	1312.8	1008.6	856.5	775.0	612.1	489.9
125°	1566.4	1680.1	1566.4	1452.7	1424.3	1230.4	972.0	842.8	771.6	629.1	522.2
127.5°	1450.5	1546.4	1450.5	1354.5	1330.5	1164.1	942.2	831.3	769.6	646.1	553.5
130°	1382.2	1470.8	1382.2	1293.5	1271.3	1123.2	925.6	826.9	770.8	658.6	574.3
132.5°	1320.2	1399.6	1320.2	1240.8	1220.9	1088.3	911.5	823.1	771.6	668.6	591.3
135°	1235.2	1303.7	1235.2	1166.8	1149.7	1038.6	890.5	816.5	770.8	679.5	611.0
137.5°	1167.1	1223.1	1167.1	1111.1	1097.1	1003.2	878.0	815.4	775.6	696.0	636.2
140°	1120.4	1172.7	1120.4	1067.9	1054.8	973.8	865.7	811.6	776.3	706.0	653.2
142.5°	1081.6	1126.7	1081.6	1036.5	1025.2	954.0	859.1	811.6	779.1	714.4	665.8
145°	1023.6	1057.7	1023.6	989.4	980.9	922.7	844.9	806.1	779.2	725.4	685.0
147.5°	979.0	1007.2	979.0	950.7	943.6	897.8	836.7	806.1	784.5	741.4	709.1
150°	950.8	973.8	950.8	927.9	922.2	883.5	831.9	806.1	787.3	749.8	721.7
152.5°	926.9	944.2	926.9	909.6	905.3	872.2	828.2	806.1	789.2	755.3	730.0
155°	899.3	910.7	899.3	887.9	885.0	858.7	823.7	806.1	793.2	767.4	748.0
157.5°	877.5	885.5	877.5	869.5	867.5	847.0	819.7	806.1	797.2	779.4	766.1
160°	864.5	869.1	864.5	859.9	858.7	841.1	817.8	806.1	799.1	784.9	774.3
162.5°	855.9	860.3	855.9	851.5	850.5	835.7	815.9	806.1	801.0	790.7	783.1
165°	843.7	848.3	843.7	839.0	837.9	827.3	813.1	806.1	803.8	799.2	795.7
167.5°	834.8	836.8	834.8	832.9	832.4	825.4	816.2	811.6	809.6	805.7	802.8
170°	832.4	832.4	832.4	832.4	832.4	825.4	816.2	811.6	811.5	811.2	811.0
172.5°	825.9	824.2	825.9	827.5	828.0	822.5	815.2	811.6	811.6	811.6	811.6
175°	822.0	822.0	822.0	822.0	822.0	818.5	813.8	811.6	812.6	814.8	816.5
177.5°	818.4	816.5	818.4	820.3	820.9	818.1	814.5	812.7	813.6	815.2	816.5
180°	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5



TEST NUMBER: P935061

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9
2.5°	947.2	941.9	941.9	933.0	929.5	926.9	922.4	909.2	905.6	902.1	907.4
5°	955.2	945.4	938.3	922.4	909.2	903.9	887.1	855.3	834.0	818.1	809.4
7.5°	956.9	944.5	931.3	906.5	874.7	860.6	809.4	751.0	735.1	721.0	712.1
10°	955.2	941.0	922.4	885.3	810.2	785.5	734.3	696.2	686.5	683.8	686.5
12.5°	948.9	935.7	910.1	848.2	743.0	726.3	696.2	674.2	672.3	676.8	700.6
15°	938.3	926.0	896.0	798.7	706.0	693.6	672.3	664.4	674.2	705.1	776.7
17.5°	927.7	913.6	876.5	750.2	677.7	668.8	653.8	669.7	724.5	766.1	789.9
20°	913.6	896.8	854.4	714.8	657.3	649.4	642.3	713.9	755.4	770.4	783.7
22.5°	896.8	879.1	824.4	690.1	636.2	630.0	634.4	738.7	755.4	766.1	777.6
25°	874.7	859.7	789.0	670.6	619.4	612.3	629.1	736.0	745.7	748.4	771.3
27.5°	854.4	834.9	751.9	652.9	599.1	596.4	633.5	724.5	731.6	734.3	758.9
30°	829.6	800.5	710.4	634.4	577.8	577.0	634.4	710.4	708.6	715.6	740.4
32.5°	804.0	749.3	663.6	611.4	557.5	556.7	628.2	689.2	687.4	697.1	715.6
35°	780.2	709.5	600.0	584.9	531.9	532.8	613.1	664.4	665.3	674.2	685.6
37.5°	755.4	675.1	530.1	555.8	507.1	507.1	592.9	641.4	639.7	642.3	658.3
40°	726.3	621.1	468.3	517.8	484.2	481.6	568.1	616.7	610.5	609.6	631.8
42.5°	695.4	561.9	422.4	467.4	457.7	454.2	538.0	586.7	575.2	577.8	606.1
45°	661.8	546.0	387.0	395.0	430.3	427.6	505.4	552.2	544.3	551.3	580.5
47.5°	628.2	514.2	375.5	327.8	401.1	400.2	469.2	518.6	514.2	521.3	552.2
50°	582.2	478.8	374.6	281.0	368.4	372.0	425.9	486.0	486.0	492.1	524.9
52.5°	523.0	435.5	340.2	254.4	330.4	341.0	387.9	457.7	459.4	465.7	494.7
55°	469.2	390.5	315.4	234.2	285.4	308.4	350.8	428.5	432.0	438.3	464.7
57.5°	419.7	325.1	310.1	210.3	243.9	265.9	318.1	400.2	402.0	407.4	432.9
60°	366.7	235.0	284.5	184.6	207.6	224.4	288.0	366.7	372.8	376.4	398.5
62.5°	306.6	170.6	258.0	167.0	190.0	193.5	263.3	334.9	342.8	345.4	358.7
65°	218.3	143.2	219.1	151.9	171.4	172.3	236.8	302.1	309.2	313.6	323.4
67.5°	147.6	116.6	167.0	137.8	157.3	158.2	211.1	264.2	273.9	277.5	283.6
70°	102.5	77.7	123.7	122.8	141.4	143.2	183.7	229.8	238.5	241.2	244.8
72.5°	75.1	62.7	102.5	110.4	124.5	126.4	155.5	190.9	199.7	202.4	204.1
75°	57.4	66.2	83.1	96.3	106.0	106.9	127.3	155.5	161.7	163.5	164.3
77.5°	45.9	61.8	61.0	77.7	86.6	84.8	99.9	120.2	125.4	125.4	125.4
80°	34.4	48.6	45.9	55.7	63.6	61.8	71.6	85.7	87.5	89.2	88.4
82.5°	25.6	30.9	30.9	35.3	42.4	40.7	47.7	55.7	55.7	55.7	57.4
85°	15.9	17.7	14.1	18.5	23.9	23.0	26.5	30.0	30.9	30.9	29.2
87.5°	9.7	8.0	4.4	7.0	10.6	10.6	12.4	13.3	12.4	12.4	12.4
90°	14.2	9.8	5.4	9.8	14.2	15.4	24.2	35.8	41.6	37.0	27.8
92.5°	96.4	59.2	22.0	59.2	96.4	105.7	148.7	205.9	234.5	205.5	147.6
95°	189.0	120.8	52.6	120.8	189.0	206.0	365.9	579.0	685.5	611.7	464.1
97.5°	211.3	151.2	91.0	151.2	211.3	226.3	492.8	848.2	1025.9	979.2	885.9
100°	229.7	175.1	120.6	175.1	229.7	243.3	539.0	933.3	1130.5	1133.9	1140.7
102.5°	247.6	196.7	145.8	196.7	247.6	260.3	560.3	960.2	1160.1	1219.5	1338.4
105°	274.7	231.6	188.5	231.6	274.7	285.5	576.0	963.2	1156.8	1290.0	1556.4
107.5°	312.8	272.5	232.3	272.5	312.8	322.8	578.9	920.3	1091.0	1276.9	1648.5
110°	334.5	298.2	261.9	298.2	334.5	343.6	574.5	882.3	1036.2	1243.9	1659.5



TEST NUMBER: P935061

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	360.2	325.6	291.0	325.6	360.2	368.8	574.7	849.1	986.3	1199.0	1624.2
115°	398.6	366.7	334.8	366.7	398.6	406.6	579.9	811.0	926.6	1131.4	1541.2
117.5°	436.1	407.1	378.1	407.1	436.1	443.3	590.7	787.2	885.5	1070.4	1440.1
120°	457.9	430.6	403.3	430.6	457.9	464.7	599.5	779.2	869.1	1038.0	1375.8
122.5°	483.1	455.5	428.0	455.5	483.1	489.9	612.1	775.0	856.5	1008.6	1312.8
125°	516.0	490.9	465.8	490.9	516.0	522.2	629.1	771.6	842.8	972.0	1230.4
127.5°	547.2	521.8	496.5	521.8	547.2	553.5	646.1	769.6	831.3	942.2	1164.1
130°	567.5	540.2	512.9	540.2	567.5	574.3	658.6	770.8	826.9	925.6	1123.2
132.5°	584.4	557.2	529.9	557.2	584.4	591.3	668.6	771.6	823.1	911.5	1088.3
135°	604.8	579.9	555.1	579.9	604.8	611.0	679.5	770.8	816.5	890.5	1038.6
137.5°	630.1	605.4	580.8	605.4	630.1	636.2	696.0	775.6	815.4	878.0	1003.2
140°	647.6	624.9	602.3	624.9	647.6	653.2	706.0	776.3	811.6	865.7	973.8
142.5°	660.6	639.7	618.7	639.7	660.6	665.8	714.4	779.1	811.6	859.1	954.0
145°	680.4	662.2	643.9	662.2	680.4	685.0	725.4	779.2	806.1	844.9	922.7
147.5°	704.6	686.8	669.1	686.8	704.6	709.1	741.4	784.5	806.1	836.7	897.8
150°	717.7	701.6	685.5	701.6	717.7	721.7	749.8	787.3	806.1	831.9	883.5
152.5°	726.9	714.8	702.6	714.8	726.9	730.0	755.3	789.2	806.1	828.2	872.2
155°	745.7	736.7	727.8	736.7	745.7	748.0	767.4	793.2	806.1	823.7	858.7
157.5°	763.9	755.2	746.4	755.2	763.9	766.1	779.4	797.2	806.1	819.7	847.0
160°	772.6	765.8	758.9	765.8	772.6	774.3	784.9	799.1	806.1	817.8	841.1
162.5°	781.8	776.7	771.6	776.7	781.8	783.1	790.7	801.0	806.1	815.9	835.7
165°	794.5	789.9	785.3	789.9	794.5	795.7	799.2	803.8	806.1	813.1	827.3
167.5°	802.2	800.0	797.8	800.0	802.2	802.8	805.7	809.6	811.6	816.2	825.4
170°	810.5	808.3	806.1	808.3	810.5	811.0	811.2	811.5	811.6	816.2	825.4
172.5°	811.5	810.9	810.5	810.9	811.5	811.6	811.6	811.6	811.6	815.2	822.5
175°	816.5	816.5	816.5	816.5	816.5	816.5	814.8	812.6	811.6	813.8	818.5
177.5°	816.5	816.5	816.5	816.5	816.5	816.5	815.2	813.6	812.7	814.5	818.1
180°	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5



TEST NUMBER: P935061

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9
2.5°	901.2	898.6	902.1	892.4	902.1	898.6	901.2	907.4	902.1	905.6	909.2
5°	790.8	786.3	772.2	760.7	772.2	786.3	790.8	809.4	818.1	834.0	855.3
7.5°	706.9	703.3	699.7	692.7	699.7	703.3	706.9	712.1	721.0	735.1	751.0
10°	688.3	689.2	694.5	693.6	694.5	689.2	688.3	686.5	683.8	686.5	696.2
12.5°	736.0	743.9	773.1	771.3	773.1	743.9	736.0	700.6	676.8	672.3	674.2
15°	790.8	793.5	799.6	800.5	799.6	793.5	790.8	776.7	705.1	674.2	664.4
17.5°	796.1	797.0	801.4	801.4	801.4	797.0	796.1	789.9	766.1	724.5	669.7
20°	791.7	793.5	802.2	804.0	802.2	793.5	791.7	783.7	770.4	755.4	713.9
22.5°	789.9	793.5	800.5	799.6	800.5	793.5	789.9	777.6	766.1	755.4	738.7
25°	781.1	781.1	782.0	782.8	782.0	781.1	781.1	771.3	748.4	745.7	736.0
27.5°	762.5	764.3	769.6	768.7	769.6	764.3	762.5	758.9	734.3	731.6	724.5
30°	745.7	743.9	739.5	736.0	739.5	743.9	745.7	740.4	715.6	708.6	710.4
32.5°	717.5	713.0	708.6	706.0	708.6	713.0	717.5	715.6	697.1	687.4	689.2
35°	683.8	684.7	683.8	681.2	683.8	684.7	683.8	685.6	674.2	665.3	664.4
37.5°	660.0	661.8	660.9	657.3	660.9	661.8	660.0	658.3	642.3	639.7	641.4
40°	635.3	636.2	635.3	632.6	635.3	636.2	635.3	631.8	609.6	610.5	616.7
42.5°	611.4	610.5	607.9	606.1	607.9	610.5	611.4	606.1	577.8	575.2	586.7
45°	584.1	584.9	579.6	577.0	579.6	584.9	584.1	580.5	551.3	544.3	552.2
47.5°	556.7	556.7	552.2	549.6	552.2	556.7	556.7	552.2	521.3	514.2	518.6
50°	527.5	526.6	520.4	519.5	520.4	526.6	527.5	524.9	492.1	486.0	486.0
52.5°	493.9	493.9	494.7	496.6	494.7	493.9	493.9	494.7	465.7	459.4	457.7
55°	464.7	465.7	471.8	473.6	471.8	465.7	464.7	464.7	438.3	432.0	428.5
57.5°	434.7	434.7	439.2	439.2	439.2	434.7	434.7	432.9	407.4	402.0	400.2
60°	400.2	402.0	405.5	404.6	405.5	402.0	400.2	398.5	376.4	372.8	366.7
62.5°	364.1	365.8	366.7	364.9	366.7	365.8	364.1	358.7	345.4	342.8	334.9
65°	326.0	327.8	328.7	326.9	328.7	327.8	326.0	323.4	313.6	309.2	302.1
67.5°	287.1	286.2	285.4	289.0	285.4	286.2	287.1	283.6	277.5	273.9	264.2
70°	247.4	247.4	246.5	248.3	246.5	247.4	247.4	244.8	241.2	238.5	229.8
72.5°	205.0	204.1	207.6	205.0	207.6	204.1	205.0	204.1	202.4	199.7	190.9
75°	163.5	165.2	163.5	166.1	163.5	165.2	163.5	164.3	163.5	161.7	155.5
77.5°	124.5	126.4	124.5	124.5	124.5	126.4	124.5	125.4	125.4	125.4	120.2
80°	88.4	87.5	87.5	86.6	87.5	87.5	88.4	88.4	89.2	87.5	85.7
82.5°	56.6	55.7	55.7	57.4	55.7	55.7	56.6	57.4	55.7	55.7	55.7
85°	30.9	31.8	30.0	30.0	30.0	31.8	30.9	29.2	30.9	30.9	30.0
87.5°	11.5	10.6	10.6	10.6	10.6	10.6	11.5	12.4	12.4	12.4	13.3
90°	20.8	20.8	20.8	20.8	20.8	20.8	20.8	27.8	37.0	41.6	35.8
92.5°	104.1	100.0	83.4	66.8	83.4	100.0	104.1	147.6	205.5	234.5	205.9
95°	353.4	340.9	290.7	240.6	290.7	340.9	353.4	464.1	611.7	685.5	579.0
97.5°	815.9	792.1	696.6	601.1	696.6	792.1	815.9	885.9	979.2	1025.9	848.2
100°	1145.8	1117.4	1003.6	889.9	1003.6	1117.4	1145.8	1140.7	1133.9	1130.5	933.3
102.5°	1427.5	1403.2	1305.7	1208.3	1305.7	1403.2	1427.5	1338.4	1219.5	1160.1	960.2
105°	1756.3	1743.2	1690.8	1638.5	1690.8	1743.2	1756.3	1556.4	1290.0	1156.8	963.2
107.5°	1927.3	1930.4	1943.2	1955.8	1943.2	1930.4	1927.3	1648.5	1276.9	1091.0	920.3
110°	1971.1	1984.7	2039.3	2093.9	2039.3	1984.7	1971.1	1659.5	1243.9	1036.2	882.3



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**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1943.2	1964.1	2047.8	2131.6	2047.8	1964.1	1943.2	1624.2	1199.0	986.3	849.1
115°	1848.4	1877.5	1993.6	2109.8	1993.6	1877.5	1848.4	1541.2	1131.4	926.6	811.0
117.5°	1717.3	1749.6	1878.4	2007.3	1878.4	1749.6	1717.3	1440.1	1070.4	885.5	787.2
120°	1629.2	1660.4	1785.7	1910.8	1785.7	1660.4	1629.2	1375.8	1038.0	869.1	779.2
122.5°	1540.9	1571.8	1695.3	1818.8	1695.3	1571.8	1540.9	1312.8	1008.6	856.5	775.0
125°	1424.3	1452.7	1566.4	1680.1	1566.4	1452.7	1424.3	1230.4	972.0	842.8	771.6
127.5°	1330.5	1354.5	1450.5	1546.4	1450.5	1354.5	1330.5	1164.1	942.2	831.3	769.6
130°	1271.3	1293.5	1382.2	1470.8	1382.2	1293.5	1271.3	1123.2	925.6	826.9	770.8
132.5°	1220.9	1240.8	1320.2	1399.6	1320.2	1240.8	1220.9	1088.3	911.5	823.1	771.6
135°	1149.7	1166.8	1235.2	1303.7	1235.2	1166.8	1149.7	1038.6	890.5	816.5	770.8
137.5°	1097.1	1111.1	1167.1	1223.1	1167.1	1111.1	1097.1	1003.2	878.0	815.4	775.6
140°	1054.8	1067.9	1120.4	1172.7	1120.4	1067.9	1054.8	973.8	865.7	811.6	776.3
142.5°	1025.2	1036.5	1081.6	1126.7	1081.6	1036.5	1025.2	954.0	859.1	811.6	779.1
145°	980.9	989.4	1023.6	1057.7	1023.6	989.4	980.9	922.7	844.9	806.1	779.2
147.5°	943.6	950.7	979.0	1007.2	979.0	950.7	943.6	897.8	836.7	806.1	784.5
150°	922.2	927.9	950.8	973.8	950.8	927.9	922.2	883.5	831.9	806.1	787.3
152.5°	905.3	909.6	926.9	944.2	926.9	909.6	905.3	872.2	828.2	806.1	789.2
155°	885.0	887.9	899.3	910.7	899.3	887.9	885.0	858.7	823.7	806.1	793.2
157.5°	867.5	869.5	877.5	885.5	877.5	869.5	867.5	847.0	819.7	806.1	797.2
160°	858.7	859.9	864.5	869.1	864.5	859.9	858.7	841.1	817.8	806.1	799.1
162.5°	850.5	851.5	855.9	860.3	855.9	851.5	850.5	835.7	815.9	806.1	801.0
165°	837.9	839.0	843.7	848.3	843.7	839.0	837.9	827.3	813.1	806.1	803.8
167.5°	832.4	832.9	834.8	836.8	834.8	832.9	832.4	825.4	816.2	811.6	809.6
170°	832.4	832.4	832.4	832.4	832.4	832.4	832.4	825.4	816.2	811.6	811.5
172.5°	828.0	827.5	825.9	824.2	825.9	827.5	828.0	822.5	815.2	811.6	811.6
175°	822.0	822.0	822.0	822.0	822.0	822.0	822.0	818.5	813.8	811.6	812.6
177.5°	820.9	820.3	818.4	816.5	818.4	820.3	820.9	818.1	814.5	812.7	813.6
180°	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5



TEST NUMBER: P935061

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**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	933.9	933.9	933.9	933.9	933.9
2.5°	922.4	926.9	929.5	933.0	941.9
5°	887.1	903.9	909.2	922.4	938.3
7.5°	809.4	860.6	874.7	906.5	931.3
10°	734.3	785.5	810.2	885.3	922.4
12.5°	696.2	726.3	743.0	848.2	910.1
15°	672.3	693.6	706.0	798.7	896.0
17.5°	653.8	668.8	677.7	750.2	876.5
20°	642.3	649.4	657.3	714.8	854.4
22.5°	634.4	630.0	636.2	690.1	824.4
25°	629.1	612.3	619.4	670.6	789.0
27.5°	633.5	596.4	599.1	652.9	751.9
30°	634.4	577.0	577.8	634.4	710.4
32.5°	628.2	556.7	557.5	611.4	663.6
35°	613.1	532.8	531.9	584.9	600.0
37.5°	592.9	507.1	507.1	555.8	530.1
40°	568.1	481.6	484.2	517.8	468.3
42.5°	538.0	454.2	457.7	467.4	422.4
45°	505.4	427.6	430.3	395.0	387.0
47.5°	469.2	400.2	401.1	327.8	375.5
50°	425.9	372.0	368.4	281.0	374.6
52.5°	387.9	341.0	330.4	254.4	340.2
55°	350.8	308.4	285.4	234.2	315.4
57.5°	318.1	265.9	243.9	210.3	310.1
60°	288.0	224.4	207.6	184.6	284.5
62.5°	263.3	193.5	190.0	167.0	258.0
65°	236.8	172.3	171.4	151.9	219.1
67.5°	211.1	158.2	157.3	137.8	167.0
70°	183.7	143.2	141.4	122.8	123.7
72.5°	155.5	126.4	124.5	110.4	102.5
75°	127.3	106.9	106.0	96.3	83.1
77.5°	99.9	84.8	86.6	77.7	61.0
80°	71.6	61.8	63.6	55.7	45.9
82.5°	47.7	40.7	42.4	35.3	30.9
85°	26.5	23.0	23.9	18.5	14.1
87.5°	12.4	10.6	10.6	7.0	4.4
90°	24.2	15.4	14.2	9.8	5.4
92.5°	148.7	105.7	96.4	59.2	22.0
95°	365.9	206.0	189.0	120.8	52.6
97.5°	492.8	226.3	211.3	151.2	91.0
100°	539.0	243.3	229.7	175.1	120.6
102.5°	560.3	260.3	247.6	196.7	145.8
105°	576.0	285.5	274.7	231.6	188.5
107.5°	578.9	322.8	312.8	272.5	232.3
110°	574.5	343.6	334.5	298.2	261.9



TEST NUMBER: P935061

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	574.7	368.8	360.2	325.6	291.0
115°	579.9	406.6	398.6	366.7	334.8
117.5°	590.7	443.3	436.1	407.1	378.1
120°	599.5	464.7	457.9	430.6	403.3
122.5°	612.1	489.9	483.1	455.5	428.0
125°	629.1	522.2	516.0	490.9	465.8
127.5°	646.1	553.5	547.2	521.8	496.5
130°	658.6	574.3	567.5	540.2	512.9
132.5°	668.6	591.3	584.4	557.2	529.9
135°	679.5	611.0	604.8	579.9	555.1
137.5°	696.0	636.2	630.1	605.4	580.8
140°	706.0	653.2	647.6	624.9	602.3
142.5°	714.4	665.8	660.6	639.7	618.7
145°	725.4	685.0	680.4	662.2	643.9
147.5°	741.4	709.1	704.6	686.8	669.1
150°	749.8	721.7	717.7	701.6	685.5
152.5°	755.3	730.0	726.9	714.8	702.6
155°	767.4	748.0	745.7	736.7	727.8
157.5°	779.4	766.1	763.9	755.2	746.4
160°	784.9	774.3	772.6	765.8	758.9
162.5°	790.7	783.1	781.8	776.7	771.6
165°	799.2	795.7	794.5	789.9	785.3
167.5°	805.7	802.8	802.2	800.0	797.8
170°	811.2	811.0	810.5	808.3	806.1
172.5°	811.6	811.6	811.5	810.9	810.5
175°	814.8	816.5	816.5	816.5	816.5
177.5°	815.2	816.5	816.5	816.5	816.5
180°	816.5	816.5	816.5	816.5	816.5



TEST NUMBER: P935061  
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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	8.87	9.59	9.97	10.69	12.20	11.70	12.41	12.80	13.51	15.03
	3H	9.34	9.98	10.45	11.09	12.62	13.03	13.67	14.14	14.78	16.31
	4H	9.52	10.13	10.64	11.24	12.78	13.47	14.07	14.59	15.18	16.72
	6H	9.63	10.19	10.76	11.30	12.85	13.74	14.30	14.87	15.41	16.96
	8H	9.63	10.16	10.76	11.29	12.83	13.81	14.34	14.94	15.47	17.01
	12H	9.60	10.10	10.73	11.22	12.79	13.84	14.35	14.98	15.47	17.03
4H	2H	9.89	10.49	11.01	11.60	13.14	12.09	12.70	13.22	13.80	15.34
	3H	10.90	11.41	12.03	12.54	14.09	13.58	14.09	14.71	15.22	16.77
	4H	11.17	11.63	12.31	12.76	14.33	14.10	14.57	15.24	15.69	17.26
	6H	11.29	11.68	12.43	12.83	14.39	14.45	14.85	15.60	16.00	17.56
	8H	11.29	11.66	12.43	12.80	14.37	14.56	14.93	15.70	16.07	17.64
	12H	11.25	11.59	12.41	12.73	14.32	14.61	14.94	15.77	16.09	17.67
8H	4H	11.61	11.98	12.75	13.12	14.70	14.21	14.58	15.36	15.72	17.30
	6H	11.86	12.17	13.03	13.35	14.93	14.64	14.95	15.81	16.13	17.70
	8H	11.91	12.17	13.08	13.33	14.93	14.79	15.06	15.96	16.22	17.81
	12H	11.88	12.12	13.06	13.28	14.90	14.88	15.12	16.05	16.27	17.90
12H	4H	11.61	11.95	12.77	13.10	14.68	14.17	14.51	15.33	15.66	17.24
	6H	11.92	12.19	13.09	13.35	14.95	14.64	14.91	15.81	16.06	17.66
	8H	11.98	12.22	13.16	13.38	15.00	14.79	15.03	15.96	16.18	17.81