

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: P935063

Luminaire Tested: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935063
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-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

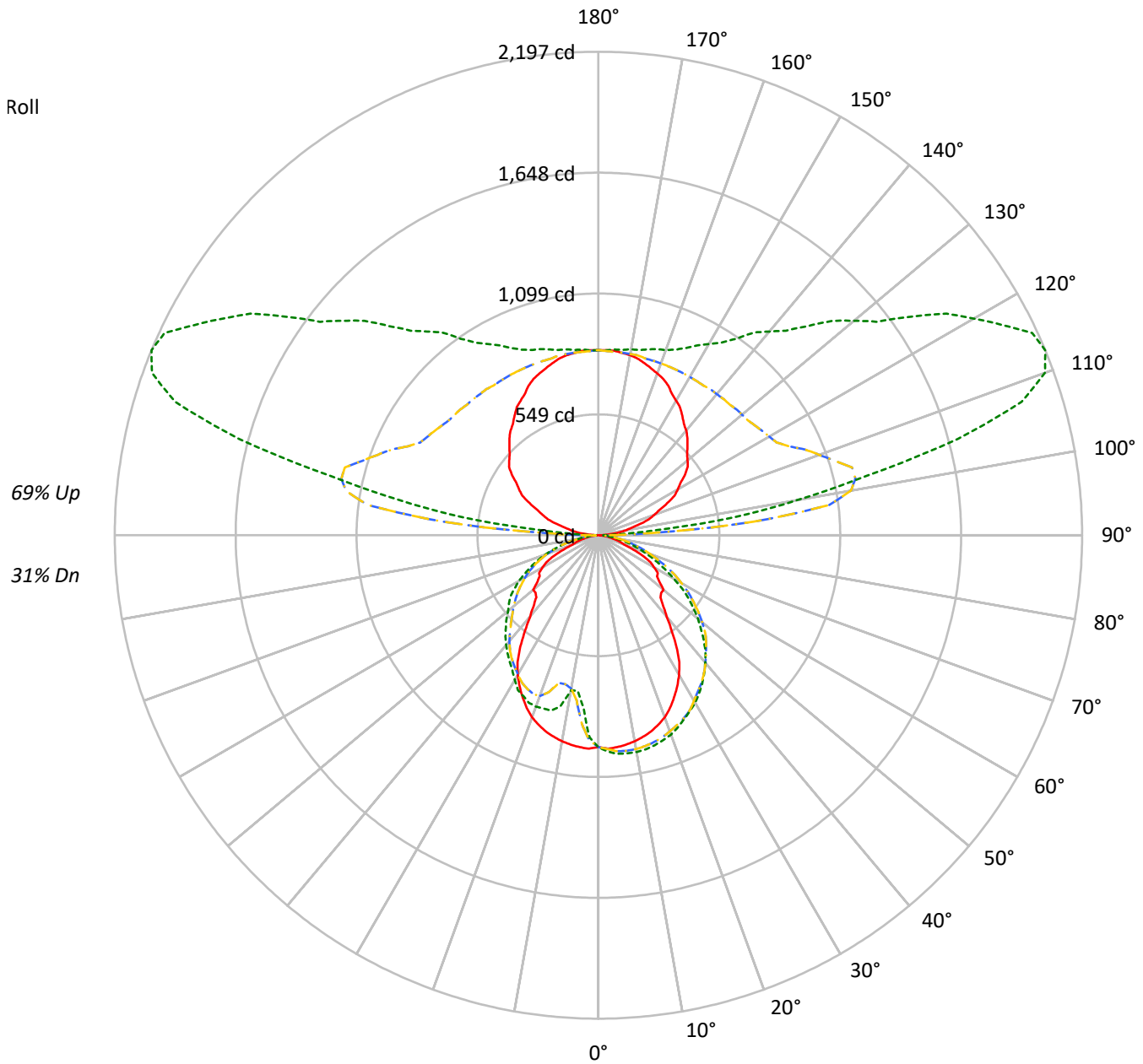
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7953.7 lumens
Efficiency: N/A
Efficacy: 128.7 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: P935063
CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-4000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5954	5954	5954	5954
5°	5996	6010	5996	4726
10°	5954	5920	5954	4233
15°	5888	5792	5888	4837
20°	5762	5640	5762	4847
25°	5507	5419	5507	4744
30°	5180	5235	5180	4519
35°	4615	5002	4615	4270
40°	3843	4728	3843	4084
45°	3432	4407	3432	3868
50°	3643	4025	3643	3652
55°	3424	3613	3424	3527
60°	3526	3068	3526	3230
65°	3191	2536	3191	2835
70°	2203	2021	2203	2377
75°	1926	1494	1926	1789
80°	1540	987	1540	1075
85°	870	523	870	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5263 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	1.1
10°-20°	246.7	3.1
20°-30°	381.3	4.8
30°-40°	455.2	5.7
40°-50°	457.9	5.8
50°-60°	398.4	5.0
60°-70°	282.5	3.6
70°-80°	149.4	1.9
80°-90°	40.4	0.5
90°-100°	410.2	5.2
100°-110°	1078.4	13.6
110°-120°	1118.1	14.1
120°-130°	896.9	11.3
130°-140°	703.7	8.8
140°-150°	540.2	6.8
150°-160°	389.0	4.9
160°-170°	238.0	3.0
170°-180°	80.4	1.0
0°-30°	714.9	9.0
0°-40°	1170.1	14.7
0°-60°	2026.4	25.5
0°-90°	2498.7	31.4
90°-120°	2606.7	32.8
90°-150°	4747.5	59.7
90°-180°	5455.0	68.6
0°-180°	7953.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	962	962	962	962	962	
5°	967	997	967	784	967	92
15°	923	988	923	825	923	260
25°	813	922	813	807	813	373
35°	618	822	618	702	618	383
45°	399	677	399	595	399	319
55°	325	500	325	488	325	299
65°	226	301	226	337	226	216
75°	86	143	86	171	86	90
85°	15	36	15	31	15	20
90°	6	22	6	22	6	5
95°	54	248	54	248	54	60
105°	194	1689	194	1689	194	206
115°	345	2174	345	2174	345	341
125°	480	1732	480	1732	480	426
135°	572	1344	572	1344	572	443
145°	664	1090	664	1090	664	416
155°	750	939	750	939	750	345
165°	809	874	809	874	809	228
175°	841	847	841	847	841	80
180°	841	841	841	841	841	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5
2.5°	970.7	970.7	976.1	977.9	977.9	975.2	972.5	975.2	983.5	986.2	985.3
5°	967.0	974.3	984.4	986.2	988.0	987.1	985.3	987.1	996.1	998.0	998.9
7.5°	959.7	973.4	986.2	988.9	991.6	988.9	988.0	989.8	998.9	1000.7	1000.7
10°	950.6	969.8	984.4	986.2	988.9	986.2	986.2	989.8	998.9	1000.7	1001.7
12.5°	937.9	964.3	977.9	979.7	983.5	982.6	981.6	985.3	994.3	996.1	996.1
15°	923.4	954.3	967.0	968.9	975.2	973.4	973.4	977.0	987.1	989.8	988.9
17.5°	903.3	941.5	956.1	958.8	963.4	962.5	963.4	967.0	976.1	977.9	978.8
20°	880.5	924.3	941.5	944.3	948.8	948.8	948.8	953.4	962.5	966.1	966.1
22.5°	849.6	906.0	924.3	926.1	931.5	931.5	933.3	939.7	947.9	948.8	948.8
25°	813.1	886.0	901.4	907.0	912.4	915.1	917.8	921.5	924.3	923.4	924.3
27.5°	774.9	860.4	880.5	884.2	891.5	894.2	897.8	898.7	899.6	902.4	900.5
30°	732.1	825.0	855.0	858.6	870.5	872.3	868.7	870.5	875.0	876.9	878.7
32.5°	683.8	772.2	828.6	836.8	847.8	842.3	841.3	844.1	851.4	851.4	853.2
35°	618.3	731.2	804.1	811.3	819.5	813.1	816.8	817.7	822.2	825.0	824.1
37.5°	546.4	695.7	778.5	784.0	790.4	782.1	787.7	790.4	794.0	792.2	792.2
40°	482.6	640.1	748.5	752.1	757.6	751.2	756.7	758.5	760.3	758.5	757.6
42.5°	435.3	579.1	716.6	721.1	717.5	722.0	723.9	727.6	724.9	721.1	721.1
45°	398.8	562.7	682.0	687.5	682.0	689.3	692.0	692.0	683.8	682.0	681.1
47.5°	387.0	530.0	647.5	647.5	644.7	653.8	658.3	652.0	643.8	641.0	641.0
50°	386.1	493.5	600.0	596.4	609.2	620.1	615.5	609.2	602.8	592.8	592.8
52.5°	350.6	448.9	539.0	552.7	572.8	579.1	571.9	565.5	554.5	550.0	546.4
55°	325.0	402.4	483.5	510.9	531.8	539.9	526.4	519.9	503.5	500.8	499.0
57.5°	319.6	335.1	432.5	467.2	492.6	491.7	483.5	471.7	458.0	455.3	454.4
60°	293.2	242.2	377.9	418.9	445.2	442.5	435.3	424.3	411.6	409.8	408.0
62.5°	265.8	175.8	316.0	362.4	399.7	398.8	392.5	376.1	367.0	362.4	358.8
65°	225.8	147.5	224.9	301.4	355.1	356.9	343.3	331.5	321.4	316.0	315.1
67.5°	172.1	120.2	152.1	251.4	312.4	310.5	293.2	287.8	275.0	272.3	266.8
70°	127.4	80.1	105.6	203.9	270.5	265.8	252.3	245.8	234.0	227.6	224.0
72.5°	105.6	64.6	77.4	158.4	227.6	222.2	210.4	203.0	193.1	187.5	183.9
75°	85.6	68.2	59.2	117.5	184.8	181.2	170.3	163.0	154.8	147.5	148.4
77.5°	62.8	63.7	47.3	86.5	146.6	141.1	134.8	125.6	122.0	114.8	114.8
80°	47.3	50.1	35.5	59.2	105.6	105.6	100.2	93.8	87.4	83.8	83.8
82.5°	31.9	31.9	26.4	37.3	72.0	69.2	65.5	63.7	60.1	58.3	58.3
85°	14.6	18.2	16.4	22.7	39.2	41.0	41.0	39.2	38.3	36.4	37.3
87.5°	4.5	8.2	10.0	12.8	20.0	20.9	21.8	21.8	21.8	22.7	22.7
90°	5.6	10.1	14.7	15.8	24.9	36.9	42.9	38.1	28.6	21.5	21.5
92.5°	22.6	61.0	99.4	109.0	153.2	212.2	241.7	211.8	152.1	107.3	103.0
95°	54.2	124.5	194.8	212.4	377.1	596.7	706.5	630.4	478.3	364.2	351.3
97.5°	93.8	155.8	217.8	233.3	507.9	874.1	1057.2	1009.2	913.0	840.9	816.3
100°	124.3	180.5	236.7	250.7	555.5	961.8	1165.0	1168.6	1175.6	1180.9	1151.5
102.5°	150.3	202.8	255.2	268.3	577.4	989.5	1195.5	1256.8	1379.3	1471.2	1446.1
105°	194.2	238.7	283.1	294.3	593.6	992.7	1192.2	1329.5	1604.0	1810.0	1796.5
107.5°	239.4	280.9	322.3	332.6	596.6	948.4	1124.4	1315.9	1698.9	1986.2	1989.5
110°	269.9	307.3	344.8	354.1	592.1	909.3	1067.9	1282.0	1710.2	2031.4	2045.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	299.9	335.5	371.2	380.1	592.2	875.1	1016.5	1235.6	1673.9	2002.6	2024.1
115°	345.0	377.9	410.8	419.0	597.7	835.8	954.9	1166.0	1588.3	1904.9	1934.9
117.5°	389.7	419.5	449.4	456.8	608.7	811.3	912.6	1103.1	1484.1	1769.9	1803.1
120°	415.6	443.8	471.9	478.9	617.9	803.1	895.7	1069.7	1417.8	1679.0	1711.2
122.5°	441.1	469.4	497.8	504.9	630.8	798.7	882.7	1039.5	1352.9	1588.0	1619.9
125°	480.0	505.9	531.8	538.2	648.4	795.2	868.6	1001.7	1268.0	1467.8	1497.1
127.5°	511.7	537.8	563.9	570.4	665.8	793.1	856.7	971.1	1199.7	1371.2	1395.9
130°	528.6	556.8	584.8	591.9	678.7	794.4	852.2	953.9	1157.5	1310.2	1333.0
132.5°	546.1	574.2	602.3	609.4	689.0	795.2	848.2	939.4	1121.6	1258.3	1278.7
135°	572.1	597.7	623.3	629.7	700.3	794.4	841.4	917.7	1070.4	1184.9	1202.5
137.5°	598.6	623.9	649.4	655.7	717.2	799.3	840.4	904.9	1033.9	1130.6	1145.0
140°	620.7	644.0	667.4	673.2	727.6	800.1	836.4	892.1	1003.6	1087.1	1100.6
142.5°	637.6	659.2	680.8	686.2	736.3	803.0	836.4	885.3	983.2	1056.6	1068.2
145°	663.6	682.4	701.2	705.9	747.6	803.1	830.8	870.8	950.9	1010.9	1019.7
147.5°	689.6	707.8	726.1	730.7	764.0	808.5	830.8	862.3	925.3	972.5	979.7
150°	706.5	723.0	739.6	743.8	772.7	811.4	830.8	857.4	910.5	950.4	956.3
152.5°	724.0	736.6	749.1	752.3	778.4	813.3	830.8	853.5	898.9	932.9	937.4
155°	750.0	759.2	768.5	770.8	790.8	817.5	830.8	848.9	885.0	912.0	915.0
157.5°	769.2	778.3	787.2	789.5	803.2	821.6	830.8	844.8	872.9	894.0	896.1
160°	782.1	789.2	796.3	798.0	808.9	823.5	830.8	842.8	866.9	885.0	886.2
162.5°	795.2	800.4	805.7	807.0	814.9	825.5	830.8	840.9	861.3	876.5	877.6
165°	809.3	814.0	818.8	820.0	823.6	828.4	830.8	838.0	852.6	863.5	864.7
167.5°	822.2	824.5	826.8	827.3	830.3	834.4	836.4	841.2	850.7	857.8	858.4
170°	830.8	833.0	835.3	835.8	836.0	836.3	836.4	841.2	850.7	857.8	857.8
172.5°	835.3	835.7	836.3	836.4	836.4	836.4	836.4	840.2	847.7	853.3	852.8
175°	841.4	841.4	841.4	841.4	839.7	837.5	836.4	838.7	843.5	847.1	847.1
177.5°	841.4	841.4	841.4	841.4	840.2	838.5	837.5	839.4	843.2	846.0	845.4
180°	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5
2.5°	987.1	984.4	987.1	985.3	986.2	983.5	975.2	972.5	975.2	977.9	977.9
5°	998.9	997.0	998.9	998.9	998.0	996.1	987.1	985.3	987.1	988.0	986.2
7.5°	1002.6	999.8	1002.6	1000.7	1000.7	998.9	989.8	988.0	988.9	991.6	988.9
10°	1002.6	999.8	1002.6	1001.7	1000.7	998.9	989.8	986.2	986.2	988.9	986.2
12.5°	998.0	996.1	998.0	996.1	996.1	994.3	985.3	981.6	982.6	983.5	979.7
15°	990.7	988.0	990.7	988.9	989.8	987.1	977.0	973.4	973.4	975.2	968.9
17.5°	979.7	976.1	979.7	978.8	977.9	976.1	967.0	963.4	962.5	963.4	958.8
20°	967.0	964.3	967.0	966.1	966.1	962.5	953.4	948.8	948.8	948.8	944.3
22.5°	947.0	944.3	947.0	948.8	948.8	947.9	939.7	933.3	931.5	931.5	926.1
25°	924.3	921.5	924.3	924.3	923.4	924.3	921.5	917.8	915.1	912.4	907.0
27.5°	902.4	900.5	902.4	900.5	902.4	899.6	898.7	897.8	894.2	891.5	884.2
30°	880.5	878.7	880.5	878.7	876.9	875.0	870.5	868.7	872.3	870.5	858.6
32.5°	853.2	851.4	853.2	853.2	851.4	851.4	844.1	841.3	842.3	847.8	836.8
35°	825.0	822.2	825.0	824.1	825.0	822.2	817.7	816.8	813.1	819.5	811.3
37.5°	792.2	789.5	792.2	792.2	792.2	794.0	790.4	787.7	782.1	790.4	784.0
40°	758.5	754.9	758.5	757.6	758.5	760.3	758.5	756.7	751.2	757.6	752.1
42.5°	720.2	719.3	720.2	721.1	721.1	724.9	727.6	723.9	722.0	717.5	721.1
45°	679.3	677.4	679.3	681.1	682.0	683.8	692.0	692.0	689.3	682.0	687.5
47.5°	635.6	631.0	635.6	641.0	641.0	643.8	652.0	658.3	653.8	644.7	647.5
50°	589.2	590.1	589.2	592.8	592.8	602.8	609.2	615.5	620.1	609.2	596.4
52.5°	543.6	542.7	543.6	546.4	550.0	554.5	565.5	571.9	579.1	572.8	552.7
55°	498.1	499.9	498.1	499.0	500.8	503.5	519.9	526.4	539.9	531.8	510.9
57.5°	452.6	449.9	452.6	454.4	455.3	458.0	471.7	483.5	491.7	492.6	467.2
60°	399.7	396.1	399.7	408.0	409.8	411.6	424.3	435.3	442.5	445.2	418.9
62.5°	353.3	346.9	353.3	358.8	362.4	367.0	376.1	392.5	398.8	399.7	362.4
65°	304.1	301.4	304.1	315.1	316.0	321.4	331.5	343.3	356.9	355.1	301.4
67.5°	259.5	259.5	259.5	266.8	272.3	275.0	287.8	293.2	310.5	312.4	251.4
70°	218.5	217.6	218.5	224.0	227.6	234.0	245.8	252.3	265.8	270.5	203.9
72.5°	179.4	178.5	179.4	183.9	187.5	193.1	203.0	210.4	222.2	227.6	158.4
75°	144.8	142.9	144.8	148.4	147.5	154.8	163.0	170.3	181.2	184.8	117.5
77.5°	111.1	111.1	111.1	114.8	114.8	122.0	125.6	134.8	141.1	146.6	86.5
80°	82.8	81.9	82.8	83.8	83.8	87.4	93.8	100.2	105.6	105.6	59.2
82.5°	58.3	56.5	58.3	58.3	58.3	60.1	63.7	65.5	69.2	72.0	37.3
85°	36.4	36.4	36.4	37.3	36.4	38.3	39.2	41.0	41.0	39.2	22.7
87.5°	23.7	22.7	23.7	22.7	22.7	21.8	21.8	21.8	20.9	20.0	12.8
90°	21.5	21.5	21.5	21.5	21.5	28.6	38.1	42.9	36.9	24.9	15.8
92.5°	85.9	68.9	85.9	103.0	107.3	152.1	211.8	241.7	212.2	153.2	109.0
95°	299.6	247.9	299.6	351.3	364.2	478.3	630.4	706.5	596.7	377.1	212.4
97.5°	717.9	619.5	717.9	816.3	840.9	913.0	1009.2	1057.2	874.1	507.9	233.3
100°	1034.3	917.1	1034.3	1151.5	1180.9	1175.6	1168.6	1165.0	961.8	555.5	250.7
102.5°	1345.6	1245.2	1345.6	1446.1	1471.2	1379.3	1256.8	1195.5	989.5	577.4	268.3
105°	1742.5	1688.6	1742.5	1796.5	1810.0	1604.0	1329.5	1192.2	992.7	593.6	294.3
107.5°	2002.6	2015.6	2002.6	1989.5	1986.2	1698.9	1315.9	1124.4	948.4	596.6	332.6
110°	2101.7	2157.9	2101.7	2045.4	2031.4	1710.2	1282.0	1067.9	909.3	592.1	354.1



TEST NUMBER: P935063

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2110.5	2196.8	2110.5	2024.1	2002.6	1673.9	1235.6	1016.5	875.1	592.2	380.1
115°	2054.5	2174.3	2054.5	1934.9	1904.9	1588.3	1166.0	954.9	835.8	597.7	419.0
117.5°	1935.9	2068.7	1935.9	1803.1	1769.9	1484.1	1103.1	912.6	811.3	608.7	456.8
120°	1840.3	1969.3	1840.3	1711.2	1679.0	1417.8	1069.7	895.7	803.1	617.9	478.9
122.5°	1747.1	1874.4	1747.1	1619.9	1588.0	1352.9	1039.5	882.7	798.7	630.8	504.9
125°	1614.3	1731.5	1614.3	1497.1	1467.8	1268.0	1001.7	868.6	795.2	648.4	538.2
127.5°	1494.9	1593.7	1494.9	1395.9	1371.2	1199.7	971.1	856.7	793.1	665.8	570.4
130°	1424.5	1515.8	1424.5	1333.0	1310.2	1157.5	953.9	852.2	794.4	678.7	591.9
132.5°	1360.5	1442.4	1360.5	1278.7	1258.3	1121.6	939.4	848.2	795.2	689.0	609.4
135°	1273.0	1343.5	1273.0	1202.5	1184.9	1070.4	917.7	841.4	794.4	700.3	629.7
137.5°	1202.8	1260.5	1202.8	1145.0	1130.6	1033.9	904.9	840.4	799.3	717.2	655.7
140°	1154.6	1208.6	1154.6	1100.6	1087.1	1003.6	892.1	836.4	800.1	727.6	673.2
142.5°	1114.7	1161.1	1114.7	1068.2	1056.6	983.2	885.3	836.4	803.0	736.3	686.2
145°	1054.9	1090.0	1054.9	1019.7	1010.9	950.9	870.8	830.8	803.1	747.6	705.9
147.5°	1008.9	1038.0	1008.9	979.7	972.5	925.3	862.3	830.8	808.5	764.0	730.7
150°	979.9	1003.6	979.9	956.3	950.4	910.5	857.4	830.8	811.4	772.7	743.8
152.5°	955.2	973.0	955.2	937.4	932.9	898.9	853.5	830.8	813.3	778.4	752.3
155°	926.8	938.6	926.8	915.0	912.0	885.0	848.9	830.8	817.5	790.8	770.8
157.5°	904.3	912.6	904.3	896.1	894.0	872.9	844.8	830.8	821.6	803.2	789.5
160°	890.9	895.7	890.9	886.2	885.0	866.9	842.8	830.8	823.5	808.9	798.0
162.5°	882.1	886.6	882.1	877.6	876.5	861.3	840.9	830.8	825.5	814.9	807.0
165°	869.5	874.2	869.5	864.7	863.5	852.6	838.0	830.8	828.4	823.6	820.0
167.5°	860.4	862.3	860.4	858.4	857.8	850.7	841.2	836.4	834.4	830.3	827.3
170°	857.8	857.8	857.8	857.8	857.8	850.7	841.2	836.4	836.3	836.0	835.8
172.5°	851.1	849.4	851.1	852.8	853.3	847.7	840.2	836.4	836.4	836.4	836.4
175°	847.1	847.1	847.1	847.1	847.1	843.5	838.7	836.4	837.5	839.7	841.4
177.5°	843.4	841.4	843.4	845.4	846.0	843.2	839.4	837.5	838.5	840.2	841.4
180°	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4



TEST NUMBER: P935063

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5
2.5°	976.1	970.7	970.7	961.6	957.9	955.2	950.6	937.0	933.3	929.7	935.1
5°	984.4	974.3	967.0	950.6	937.0	931.5	914.2	881.4	859.5	843.2	834.1
7.5°	986.2	973.4	959.7	934.2	901.4	886.9	834.1	774.0	757.6	743.0	733.9
10°	984.4	969.8	950.6	912.4	835.0	809.5	756.7	717.5	707.5	704.8	707.5
12.5°	977.9	964.3	937.9	874.1	765.8	748.5	717.5	694.8	692.9	697.5	722.0
15°	967.0	954.3	923.4	823.2	727.6	714.8	692.9	684.8	694.8	726.7	800.4
17.5°	956.1	941.5	903.3	773.1	698.4	689.3	673.8	690.2	746.7	789.5	814.0
20°	941.5	924.3	880.5	736.6	677.4	669.3	661.9	735.7	778.5	794.0	807.7
22.5°	924.3	906.0	849.6	711.2	655.6	649.3	653.8	761.2	778.5	789.5	801.3
25°	901.4	886.0	813.1	691.1	638.3	631.0	648.4	758.5	768.5	771.3	794.9
27.5°	880.5	860.4	774.9	672.9	617.4	614.6	652.9	746.7	754.0	756.7	782.1
30°	855.0	825.0	732.1	653.8	595.5	594.6	653.8	732.1	730.3	737.5	763.1
32.5°	828.6	772.2	683.8	630.1	574.6	573.7	647.5	710.3	708.5	718.4	737.5
35°	804.1	731.2	618.3	602.8	548.2	549.1	631.9	684.8	685.7	694.8	706.6
37.5°	778.5	695.7	546.4	572.8	522.6	522.6	611.0	661.0	659.2	661.9	678.4
40°	748.5	640.1	482.6	533.6	499.0	496.3	585.5	635.6	629.2	628.3	651.1
42.5°	716.6	579.1	435.3	481.7	471.7	468.1	554.5	604.6	592.8	595.5	624.7
45°	682.0	562.7	398.8	407.1	443.4	440.7	520.8	569.1	560.9	568.2	598.2
47.5°	647.5	530.0	387.0	337.8	413.4	412.5	483.5	534.5	530.0	537.2	569.1
50°	600.0	493.5	386.1	289.6	379.7	383.3	438.9	500.8	500.8	507.2	540.9
52.5°	539.0	448.9	350.6	262.2	340.5	351.5	399.7	471.7	473.5	479.9	509.9
55°	483.5	402.4	325.0	241.3	294.1	317.8	361.5	441.6	445.2	451.7	478.9
57.5°	432.5	335.1	319.6	216.7	251.4	274.1	327.8	412.5	414.3	419.8	446.2
60°	377.9	242.2	293.2	190.3	214.0	231.3	296.8	377.9	384.2	387.9	410.7
62.5°	316.0	175.8	265.8	172.1	195.8	199.4	271.4	345.1	353.3	356.0	369.7
65°	224.9	147.5	225.8	156.6	176.7	177.6	244.0	311.4	318.7	323.2	333.3
67.5°	152.1	120.2	172.1	142.0	162.1	163.0	217.6	272.3	282.3	285.9	292.3
70°	105.6	80.1	127.4	126.5	145.7	147.5	189.4	236.8	245.8	248.6	252.3
72.5°	77.4	64.6	105.6	113.8	128.4	130.3	160.3	196.7	205.8	208.5	210.4
75°	59.2	68.2	85.6	99.3	109.3	110.2	131.2	160.3	166.6	168.5	169.4
77.5°	47.3	63.7	62.8	80.1	89.2	87.4	102.9	123.8	129.3	129.3	129.3
80°	35.5	50.1	47.3	57.4	65.5	63.7	73.8	88.3	90.2	92.0	91.1
82.5°	26.4	31.9	31.9	36.4	43.7	41.9	49.2	57.4	57.4	57.4	59.2
85°	16.4	18.2	14.6	19.1	24.6	23.7	27.3	31.0	31.9	31.9	30.1
87.5°	10.0	8.2	4.5	7.2	11.0	11.0	12.8	13.7	12.8	12.8	12.8
90°	14.7	10.1	5.6	10.1	14.7	15.8	24.9	36.9	42.9	38.1	28.6
92.5°	99.4	61.0	22.6	61.0	99.4	109.0	153.2	212.2	241.7	211.8	152.1
95°	194.8	124.5	54.2	124.5	194.8	212.4	377.1	596.7	706.5	630.4	478.3
97.5°	217.8	155.8	93.8	155.8	217.8	233.3	507.9	874.1	1057.2	1009.2	913.0
100°	236.7	180.5	124.3	180.5	236.7	250.7	555.5	961.8	1165.0	1168.6	1175.6
102.5°	255.2	202.8	150.3	202.8	255.2	268.3	577.4	989.5	1195.5	1256.8	1379.3
105°	283.1	238.7	194.2	238.7	283.1	294.3	593.6	992.7	1192.2	1329.5	1604.0
107.5°	322.3	280.9	239.4	280.9	322.3	332.6	596.6	948.4	1124.4	1315.9	1698.9
110°	344.8	307.3	269.9	307.3	344.8	354.1	592.1	909.3	1067.9	1282.0	1710.2



TEST NUMBER: P935063

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	371.2	335.5	299.9	335.5	371.2	380.1	592.2	875.1	1016.5	1235.6	1673.9
115°	410.8	377.9	345.0	377.9	410.8	419.0	597.7	835.8	954.9	1166.0	1588.3
117.5°	449.4	419.5	389.7	419.5	449.4	456.8	608.7	811.3	912.6	1103.1	1484.1
120°	471.9	443.8	415.6	443.8	471.9	478.9	617.9	803.1	895.7	1069.7	1417.8
122.5°	497.8	469.4	441.1	469.4	497.8	504.9	630.8	798.7	882.7	1039.5	1352.9
125°	531.8	505.9	480.0	505.9	531.8	538.2	648.4	795.2	868.6	1001.7	1268.0
127.5°	563.9	537.8	511.7	537.8	563.9	570.4	665.8	793.1	856.7	971.1	1199.7
130°	584.8	556.8	528.6	556.8	584.8	591.9	678.7	794.4	852.2	953.9	1157.5
132.5°	602.3	574.2	546.1	574.2	602.3	609.4	689.0	795.2	848.2	939.4	1121.6
135°	623.3	597.7	572.1	597.7	623.3	629.7	700.3	794.4	841.4	917.7	1070.4
137.5°	649.4	623.9	598.6	623.9	649.4	655.7	717.2	799.3	840.4	904.9	1033.9
140°	667.4	644.0	620.7	644.0	667.4	673.2	727.6	800.1	836.4	892.1	1003.6
142.5°	680.8	659.2	637.6	659.2	680.8	686.2	736.3	803.0	836.4	885.3	983.2
145°	701.2	682.4	663.6	682.4	701.2	705.9	747.6	803.1	830.8	870.8	950.9
147.5°	726.1	707.8	689.6	707.8	726.1	730.7	764.0	808.5	830.8	862.3	925.3
150°	739.6	723.0	706.5	723.0	739.6	743.8	772.7	811.4	830.8	857.4	910.5
152.5°	749.1	736.6	724.0	736.6	749.1	752.3	778.4	813.3	830.8	853.5	898.9
155°	768.5	759.2	750.0	759.2	768.5	770.8	790.8	817.5	830.8	848.9	885.0
157.5°	787.2	778.3	769.2	778.3	787.2	789.5	803.2	821.6	830.8	844.8	872.9
160°	796.3	789.2	782.1	789.2	796.3	798.0	808.9	823.5	830.8	842.8	866.9
162.5°	805.7	800.4	795.2	800.4	805.7	807.0	814.9	825.5	830.8	840.9	861.3
165°	818.8	814.0	809.3	814.0	818.8	820.0	823.6	828.4	830.8	838.0	852.6
167.5°	826.8	824.5	822.2	824.5	826.8	827.3	830.3	834.4	836.4	841.2	850.7
170°	835.3	833.0	830.8	833.0	835.3	835.8	836.0	836.3	836.4	841.2	850.7
172.5°	836.3	835.7	835.3	835.7	836.3	836.4	836.4	836.4	836.4	840.2	847.7
175°	841.4	841.4	841.4	841.4	841.4	841.4	839.7	837.5	836.4	838.7	843.5
177.5°	841.4	841.4	841.4	841.4	841.4	841.4	840.2	838.5	837.5	839.4	843.2
180°	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4



TEST NUMBER: P935063

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5	962.5
2.5°	928.8	926.1	929.7	919.6	929.7	926.1	928.8	935.1	929.7	933.3	937.0
5°	815.0	810.4	795.8	784.0	795.8	810.4	815.0	834.1	843.2	859.5	881.4
7.5°	728.5	724.9	721.1	713.9	721.1	724.9	728.5	733.9	743.0	757.6	774.0
10°	709.4	710.3	715.7	714.8	715.7	710.3	709.4	707.5	704.8	707.5	717.5
12.5°	758.5	766.7	796.7	794.9	796.7	766.7	758.5	722.0	697.5	692.9	694.8
15°	815.0	817.7	824.1	825.0	824.1	817.7	815.0	800.4	726.7	694.8	684.8
17.5°	820.4	821.3	825.9	825.9	825.9	821.3	820.4	814.0	789.5	746.7	690.2
20°	815.9	817.7	826.8	828.6	826.8	817.7	815.9	807.7	794.0	778.5	735.7
22.5°	814.0	817.7	825.0	824.1	825.0	817.7	814.0	801.3	789.5	778.5	761.2
25°	805.0	805.0	805.9	806.8	805.9	805.0	805.0	794.9	771.3	768.5	758.5
27.5°	785.9	787.7	793.1	792.2	793.1	787.7	785.9	782.1	756.7	754.0	746.7
30°	768.5	766.7	762.1	758.5	762.1	766.7	768.5	763.1	737.5	730.3	732.1
32.5°	739.4	734.8	730.3	727.6	730.3	734.8	739.4	737.5	718.4	708.5	710.3
35°	704.8	705.7	704.8	702.0	704.8	705.7	704.8	706.6	694.8	685.7	684.8
37.5°	680.2	682.0	681.1	677.4	681.1	682.0	680.2	678.4	661.9	659.2	661.0
40°	654.7	655.6	654.7	652.0	654.7	655.6	654.7	651.1	628.3	629.2	635.6
42.5°	630.1	629.2	626.5	624.7	626.5	629.2	630.1	624.7	595.5	592.8	604.6
45°	601.9	602.8	597.3	594.6	597.3	602.8	601.9	598.2	568.2	560.9	569.1
47.5°	573.7	573.7	569.1	566.4	569.1	573.7	573.7	569.1	537.2	530.0	534.5
50°	543.6	542.7	536.3	535.4	536.3	542.7	543.6	540.9	507.2	500.8	500.8
52.5°	509.0	509.0	509.9	511.8	509.9	509.0	509.0	509.9	479.9	473.5	471.7
55°	478.9	479.9	486.3	488.1	486.3	479.9	478.9	478.9	451.7	445.2	441.6
57.5°	448.0	448.0	452.6	452.6	452.6	448.0	448.0	446.2	419.8	414.3	412.5
60°	412.5	414.3	417.9	417.0	417.9	414.3	412.5	410.7	387.9	384.2	377.9
62.5°	375.2	377.0	377.9	376.1	377.9	377.0	375.2	369.7	356.0	353.3	345.1
65°	336.0	337.8	338.7	336.9	338.7	337.8	336.0	333.3	323.2	318.7	311.4
67.5°	295.9	295.0	294.1	297.8	294.1	295.0	295.9	292.3	285.9	282.3	272.3
70°	255.0	255.0	254.1	255.9	254.1	255.0	255.0	252.3	248.6	245.8	236.8
72.5°	211.3	210.4	214.0	211.3	214.0	210.4	211.3	210.4	208.5	205.8	196.7
75°	168.5	170.3	168.5	171.2	168.5	170.3	168.5	169.4	168.5	166.6	160.3
77.5°	128.4	130.3	128.4	128.4	128.4	130.3	128.4	129.3	129.3	129.3	123.8
80°	91.1	90.2	90.2	89.2	90.2	90.2	91.1	91.1	92.0	90.2	88.3
82.5°	58.3	57.4	57.4	59.2	57.4	57.4	58.3	59.2	57.4	57.4	57.4
85°	31.9	32.8	31.0	31.0	31.0	32.8	31.9	30.1	31.9	31.9	31.0
87.5°	11.9	11.0	11.0	11.0	11.0	11.0	11.9	12.8	12.8	12.8	13.7
90°	21.5	21.5	21.5	21.5	21.5	21.5	21.5	28.6	38.1	42.9	36.9
92.5°	107.3	103.0	85.9	68.9	85.9	103.0	107.3	152.1	211.8	241.7	212.2
95°	364.2	351.3	299.6	247.9	299.6	351.3	364.2	478.3	630.4	706.5	596.7
97.5°	840.9	816.3	717.9	619.5	717.9	816.3	840.9	913.0	1009.2	1057.2	874.1
100°	1180.9	1151.5	1034.3	917.1	1034.3	1151.5	1180.9	1175.6	1168.6	1165.0	961.8
102.5°	1471.2	1446.1	1345.6	1245.2	1345.6	1446.1	1471.2	1379.3	1256.8	1195.5	989.5
105°	1810.0	1796.5	1742.5	1688.6	1742.5	1796.5	1810.0	1604.0	1329.5	1192.2	992.7
107.5°	1986.2	1989.5	2002.6	2015.6	2002.6	1989.5	1986.2	1698.9	1315.9	1124.4	948.4
110°	2031.4	2045.4	2101.7	2157.9	2101.7	2045.4	2031.4	1710.2	1282.0	1067.9	909.3



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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	2002.6	2024.1	2110.5	2196.8	2110.5	2024.1	2002.6	1673.9	1235.6	1016.5	875.1
115°	1904.9	1934.9	2054.5	2174.3	2054.5	1934.9	1904.9	1588.3	1166.0	954.9	835.8
117.5°	1769.9	1803.1	1935.9	2068.7	1935.9	1803.1	1769.9	1484.1	1103.1	912.6	811.3
120°	1679.0	1711.2	1840.3	1969.3	1840.3	1711.2	1679.0	1417.8	1069.7	895.7	803.1
122.5°	1588.0	1619.9	1747.1	1874.4	1747.1	1619.9	1588.0	1352.9	1039.5	882.7	798.7
125°	1467.8	1497.1	1614.3	1731.5	1614.3	1497.1	1467.8	1268.0	1001.7	868.6	795.2
127.5°	1371.2	1395.9	1494.9	1593.7	1494.9	1395.9	1371.2	1199.7	971.1	856.7	793.1
130°	1310.2	1333.0	1424.5	1515.8	1424.5	1333.0	1310.2	1157.5	953.9	852.2	794.4
132.5°	1258.3	1278.7	1360.5	1442.4	1360.5	1278.7	1258.3	1121.6	939.4	848.2	795.2
135°	1184.9	1202.5	1273.0	1343.5	1273.0	1202.5	1184.9	1070.4	917.7	841.4	794.4
137.5°	1130.6	1145.0	1202.8	1260.5	1202.8	1145.0	1130.6	1033.9	904.9	840.4	799.3
140°	1087.1	1100.6	1154.6	1208.6	1154.6	1100.6	1087.1	1003.6	892.1	836.4	800.1
142.5°	1056.6	1068.2	1114.7	1161.1	1114.7	1068.2	1056.6	983.2	885.3	836.4	803.0
145°	1010.9	1019.7	1054.9	1090.0	1054.9	1019.7	1010.9	950.9	870.8	830.8	803.1
147.5°	972.5	979.7	1008.9	1038.0	1008.9	979.7	972.5	925.3	862.3	830.8	808.5
150°	950.4	956.3	979.9	1003.6	979.9	956.3	950.4	910.5	857.4	830.8	811.4
152.5°	932.9	937.4	955.2	973.0	955.2	937.4	932.9	898.9	853.5	830.8	813.3
155°	912.0	915.0	926.8	938.6	926.8	915.0	912.0	885.0	848.9	830.8	817.5
157.5°	894.0	896.1	904.3	912.6	904.3	896.1	894.0	872.9	844.8	830.8	821.6
160°	885.0	886.2	890.9	895.7	890.9	886.2	885.0	866.9	842.8	830.8	823.5
162.5°	876.5	877.6	882.1	886.6	882.1	877.6	876.5	861.3	840.9	830.8	825.5
165°	863.5	864.7	869.5	874.2	869.5	864.7	863.5	852.6	838.0	830.8	828.4
167.5°	857.8	858.4	860.4	862.3	860.4	858.4	857.8	850.7	841.2	836.4	834.4
170°	857.8	857.8	857.8	857.8	857.8	857.8	857.8	850.7	841.2	836.4	836.3
172.5°	853.3	852.8	851.1	849.4	851.1	852.8	853.3	847.7	840.2	836.4	836.4
175°	847.1	847.1	847.1	847.1	847.1	847.1	847.1	843.5	838.7	836.4	837.5
177.5°	846.0	845.4	843.4	841.4	843.4	845.4	846.0	843.2	839.4	837.5	838.5
180°	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	962.5	962.5	962.5	962.5	962.5
2.5°	950.6	955.2	957.9	961.6	970.7
5°	914.2	931.5	937.0	950.6	967.0
7.5°	834.1	886.9	901.4	934.2	959.7
10°	756.7	809.5	835.0	912.4	950.6
12.5°	717.5	748.5	765.8	874.1	937.9
15°	692.9	714.8	727.6	823.2	923.4
17.5°	673.8	689.3	698.4	773.1	903.3
20°	661.9	669.3	677.4	736.6	880.5
22.5°	653.8	649.3	655.6	711.2	849.6
25°	648.4	631.0	638.3	691.1	813.1
27.5°	652.9	614.6	617.4	672.9	774.9
30°	653.8	594.6	595.5	653.8	732.1
32.5°	647.5	573.7	574.6	630.1	683.8
35°	631.9	549.1	548.2	602.8	618.3
37.5°	611.0	522.6	522.6	572.8	546.4
40°	585.5	496.3	499.0	533.6	482.6
42.5°	554.5	468.1	471.7	481.7	435.3
45°	520.8	440.7	443.4	407.1	398.8
47.5°	483.5	412.5	413.4	337.8	387.0
50°	438.9	383.3	379.7	289.6	386.1
52.5°	399.7	351.5	340.5	262.2	350.6
55°	361.5	317.8	294.1	241.3	325.0
57.5°	327.8	274.1	251.4	216.7	319.6
60°	296.8	231.3	214.0	190.3	293.2
62.5°	271.4	199.4	195.8	172.1	265.8
65°	244.0	177.6	176.7	156.6	225.8
67.5°	217.6	163.0	162.1	142.0	172.1
70°	189.4	147.5	145.7	126.5	127.4
72.5°	160.3	130.3	128.4	113.8	105.6
75°	131.2	110.2	109.3	99.3	85.6
77.5°	102.9	87.4	89.2	80.1	62.8
80°	73.8	63.7	65.5	57.4	47.3
82.5°	49.2	41.9	43.7	36.4	31.9
85°	27.3	23.7	24.6	19.1	14.6
87.5°	12.8	11.0	11.0	7.2	4.5
90°	24.9	15.8	14.7	10.1	5.6
92.5°	153.2	109.0	99.4	61.0	22.6
95°	377.1	212.4	194.8	124.5	54.2
97.5°	507.9	233.3	217.8	155.8	93.8
100°	555.5	250.7	236.7	180.5	124.3
102.5°	577.4	268.3	255.2	202.8	150.3
105°	593.6	294.3	283.1	238.7	194.2
107.5°	596.6	332.6	322.3	280.9	239.4
110°	592.1	354.1	344.8	307.3	269.9



TEST NUMBER: P935063

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	592.2	380.1	371.2	335.5	299.9
115°	597.7	419.0	410.8	377.9	345.0
117.5°	608.7	456.8	449.4	419.5	389.7
120°	617.9	478.9	471.9	443.8	415.6
122.5°	630.8	504.9	497.8	469.4	441.1
125°	648.4	538.2	531.8	505.9	480.0
127.5°	665.8	570.4	563.9	537.8	511.7
130°	678.7	591.9	584.8	556.8	528.6
132.5°	689.0	609.4	602.3	574.2	546.1
135°	700.3	629.7	623.3	597.7	572.1
137.5°	717.2	655.7	649.4	623.9	598.6
140°	727.6	673.2	667.4	644.0	620.7
142.5°	736.3	686.2	680.8	659.2	637.6
145°	747.6	705.9	701.2	682.4	663.6
147.5°	764.0	730.7	726.1	707.8	689.6
150°	772.7	743.8	739.6	723.0	706.5
152.5°	778.4	752.3	749.1	736.6	724.0
155°	790.8	770.8	768.5	759.2	750.0
157.5°	803.2	789.5	787.2	778.3	769.2
160°	808.9	798.0	796.3	789.2	782.1
162.5°	814.9	807.0	805.7	800.4	795.2
165°	823.6	820.0	818.8	814.0	809.3
167.5°	830.3	827.3	826.8	824.5	822.2
170°	836.0	835.8	835.3	833.0	830.8
172.5°	836.4	836.4	836.3	835.7	835.3
175°	839.7	841.4	841.4	841.4	841.4
177.5°	840.2	841.4	841.4	841.4	841.4
180°	841.4	841.4	841.4	841.4	841.4



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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	8.98	9.69	10.08	10.79	12.31	11.80	12.52	12.90	13.62	15.13
	3H	9.44	10.08	10.55	11.19	12.72	13.13	13.77	14.24	14.88	16.41
	4H	9.63	10.24	10.75	11.34	12.88	13.57	14.18	14.69	15.29	16.82
	6H	9.74	10.30	10.87	11.41	12.96	13.85	14.41	14.98	15.52	17.06
	8H	9.74	10.27	10.87	11.39	12.94	13.92	14.45	15.05	15.57	17.12
	12H	9.70	10.21	10.84	11.33	12.89	13.95	14.45	15.08	15.57	17.14
4H	2H	9.99	10.60	11.12	11.71	13.24	12.19	12.80	13.32	13.91	15.45
	3H	11.00	11.51	12.14	12.64	14.19	13.68	14.19	14.82	15.32	16.87
	4H	11.27	11.74	12.41	12.86	14.43	14.20	14.67	15.34	15.79	17.36
	6H	11.39	11.79	12.53	12.94	14.50	14.56	14.96	15.70	16.10	17.66
	8H	11.39	11.76	12.54	12.90	14.48	14.66	15.03	15.80	16.17	17.75
	12H	11.35	11.69	12.51	12.84	14.42	14.71	15.05	15.87	16.20	17.78
8H	4H	11.71	12.09	12.86	13.22	14.80	14.32	14.69	15.46	15.83	17.40
	6H	11.97	12.28	13.13	13.46	15.03	14.75	15.05	15.91	16.23	17.81
	8H	12.01	12.28	13.18	13.44	15.03	14.90	15.16	16.07	16.32	17.92
	12H	11.99	12.22	13.16	13.38	15.01	14.99	15.22	16.16	16.38	18.01
12H	4H	11.71	12.05	12.87	13.20	14.78	14.27	14.61	15.43	15.76	17.34
	6H	12.03	12.30	13.20	13.46	15.05	14.74	15.01	15.91	16.17	17.76
	8H	12.09	12.32	13.26	13.48	15.11	14.90	15.13	16.07	16.29	17.92