

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: P935959

Luminaire Tested: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935959
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-93050-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

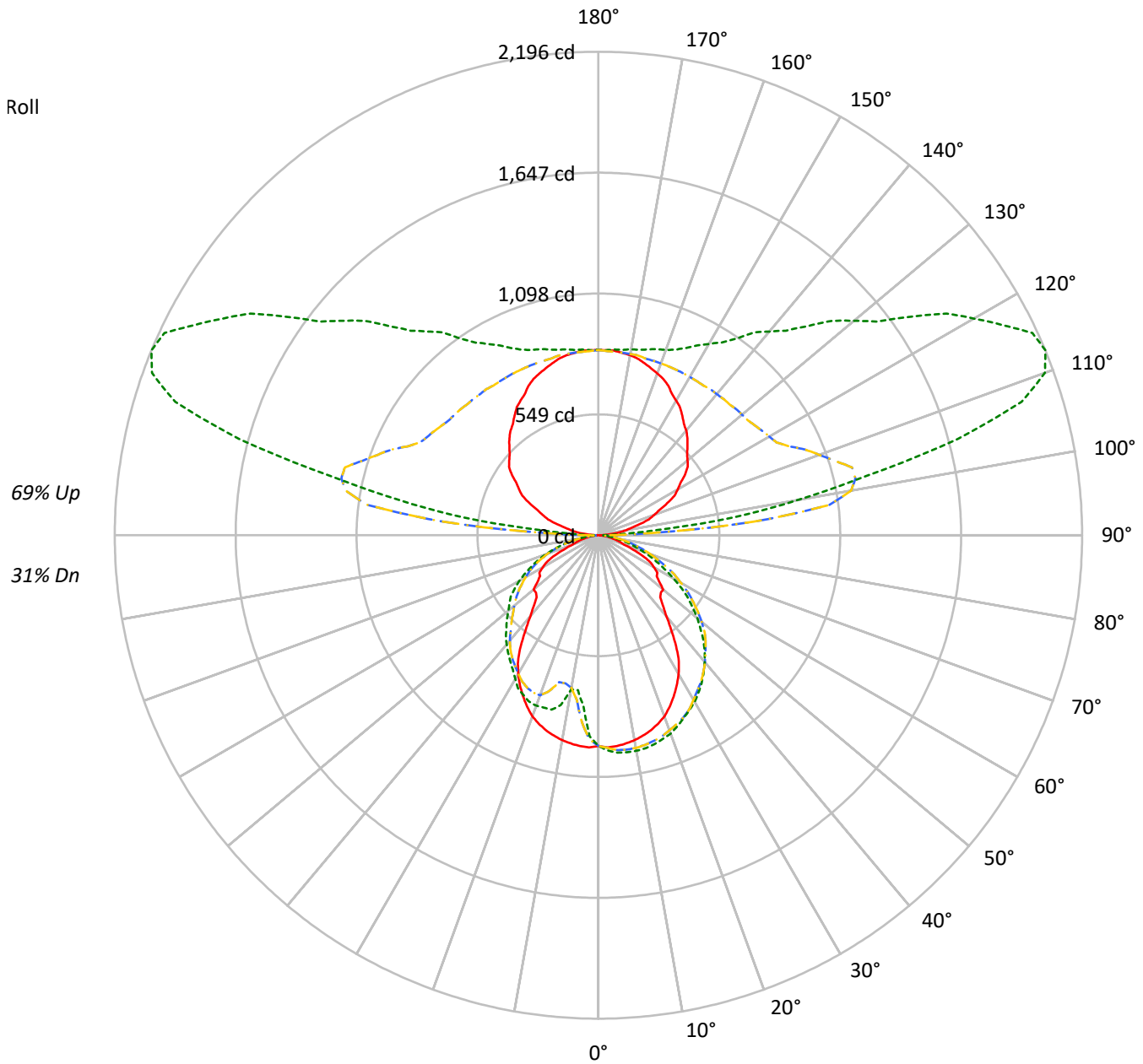
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7937.4 lumens
Efficiency: N/A
Efficacy: 124.8 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: P935959
CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

Luminous Intensity Polar Plot



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



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8878	8878	8878	8878
5°	8936	8963	8936	7047
10°	8866	8829	8866	6312
15°	8759	8638	8759	7213
20°	8566	8411	8566	7228
25°	8181	8080	8181	7075
30°	7687	7806	7687	6738
35°	6843	7459	6843	6369
40°	5692	7051	5692	6090
45°	5078	6572	5078	5769
50°	5382	6002	5382	5446
55°	5048	5387	5048	5261
60°	5185	4576	5185	4818
65°	4678	3782	4678	4229
70°	3217	3013	3217	3544
75°	2791	2228	2791	2668
80°	2204	1474	2204	1604
85°	1201	780	1201	664

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 7796 cd/sqm



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.4	1.1
10°-20°	245.2	3.1
20°-30°	379.1	4.8
30°-40°	452.6	5.7
40°-50°	455.2	5.7
50°-60°	396.1	5.0
60°-70°	280.8	3.5
70°-80°	148.6	1.9
80°-90°	40.2	0.5
90°-100°	410.0	5.2
100°-110°	1078.0	13.6
110°-120°	1117.8	14.1
120°-130°	896.6	11.3
130°-140°	703.5	8.9
140°-150°	540.0	6.8
150°-160°	388.9	4.9
160°-170°	237.9	3.0
170°-180°	80.4	1.0
0°-30°	710.7	9.0
0°-40°	1163.3	14.7
0°-60°	2014.6	25.4
0°-90°	2484.2	31.3
90°-120°	2605.9	32.8
90°-150°	4745.9	59.8
90°-180°	5453.0	68.7
0°-180°	7937.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	957	957	957	957	957	
5°	961	991	961	779	961	91
15°	918	982	918	820	918	258
25°	808	916	808	802	808	371
35°	615	818	615	698	615	380
45°	397	674	397	591	397	318
55°	323	497	323	485	323	297
65°	224	300	224	335	224	215
75°	85	142	85	170	85	89
85°	14	36	14	31	14	20
90°	6	22	6	22	6	5
95°	54	248	54	248	54	60
105°	194	1688	194	1688	194	206
115°	345	2174	345	2174	345	341
125°	480	1731	480	1731	480	426
135°	572	1343	572	1343	572	442
145°	663	1090	663	1090	663	416
155°	750	938	750	938	750	344
165°	809	874	809	874	809	228
175°	841	847	841	847	841	80
180°	841	841	841	841	841	



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8
2.5°	965.0	965.0	970.5	972.3	972.3	969.6	966.9	969.6	977.8	980.5	979.6
5°	961.4	968.7	978.7	980.5	982.3	981.4	979.6	981.4	990.4	992.2	993.1
7.5°	954.1	967.8	980.5	983.2	985.9	983.2	982.3	984.1	993.1	995.0	995.0
10°	945.1	964.1	978.7	980.5	983.2	980.5	980.5	984.1	993.1	995.0	995.9
12.5°	932.4	958.7	972.3	974.1	977.8	976.8	975.9	979.6	988.6	990.4	990.4
15°	917.9	948.7	961.4	963.2	969.6	967.8	967.8	971.4	981.4	984.1	983.2
17.5°	898.0	936.0	950.5	953.2	957.8	956.8	957.8	961.4	970.5	972.3	973.2
20°	875.4	918.8	936.0	938.7	943.3	943.3	943.3	947.8	956.8	960.5	960.5
22.5°	844.6	900.7	918.8	920.6	926.1	926.1	927.9	934.2	942.4	943.3	943.3
25°	808.4	880.8	896.2	901.6	907.1	909.8	912.5	916.1	918.8	917.9	918.8
27.5°	770.4	855.5	875.4	879.0	886.2	889.0	892.6	893.5	894.4	897.1	895.3
30°	727.8	820.2	850.0	853.7	865.4	867.2	863.6	865.4	870.0	871.8	873.6
32.5°	679.9	767.7	823.8	831.9	842.8	837.4	836.5	839.2	846.4	846.4	848.2
35°	614.7	726.9	799.3	806.6	814.7	808.4	812.0	812.9	817.5	820.2	819.3
37.5°	543.2	691.6	774.0	779.4	785.8	777.6	783.1	785.8	789.4	787.6	787.6
40°	479.8	636.4	744.1	747.8	753.2	746.8	752.3	754.1	755.9	754.1	753.2
42.5°	432.8	575.8	712.5	717.0	713.4	717.9	719.7	723.3	720.6	717.0	717.0
45°	396.6	559.5	678.1	683.5	678.1	685.3	688.0	688.0	679.9	678.1	677.2
47.5°	384.8	526.9	643.7	643.7	640.9	650.0	654.5	648.2	640.0	637.3	637.3
50°	383.9	490.7	596.6	593.0	605.6	616.5	612.0	605.6	599.3	589.4	589.4
52.5°	348.6	446.3	535.9	549.5	569.4	575.8	568.5	562.2	551.3	546.8	543.2
55°	323.2	400.2	480.7	507.9	528.7	536.9	523.3	516.9	500.6	497.9	496.1
57.5°	317.7	333.2	430.0	464.4	489.8	488.9	480.7	469.0	455.4	452.7	451.8
60°	291.5	240.8	375.7	416.5	442.7	440.0	432.8	421.9	409.2	407.4	405.6
62.5°	264.3	174.7	314.1	360.3	397.5	396.6	390.2	373.9	364.9	360.3	356.7
65°	224.5	146.6	223.6	299.6	353.1	354.9	341.3	329.6	319.5	314.1	313.2
67.5°	171.1	119.5	151.2	249.8	310.5	308.7	291.5	286.0	273.4	270.6	265.2
70°	126.7	79.7	105.0	202.8	268.8	264.3	250.7	244.4	232.6	226.3	222.7
72.5°	105.0	64.3	76.9	157.5	226.3	220.9	209.1	201.9	191.9	186.5	182.8
75°	85.1	67.9	58.8	116.8	183.7	180.1	169.3	162.0	153.9	146.6	147.5
77.5°	62.5	63.4	47.1	86.0	145.7	140.3	134.0	124.9	121.3	114.1	114.1
80°	47.1	49.8	35.3	58.8	105.0	105.0	99.6	93.2	86.9	83.3	83.3
82.5°	31.7	31.7	26.2	37.1	71.5	68.8	65.2	63.4	59.7	57.9	57.9
85°	14.5	18.1	16.3	22.6	38.9	40.7	40.7	38.9	38.0	36.2	37.1
87.5°	4.5	8.1	10.0	12.7	19.9	20.8	21.7	21.7	21.7	22.6	22.6
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°	22.5	60.9	99.4	109.0	153.2	212.1	241.6	211.7	152.1	107.3	103.0
95°	54.2	124.5	194.7	212.3	376.9	596.5	706.3	630.3	478.2	364.1	351.2
97.5°	93.7	155.7	217.7	233.2	507.7	873.8	1056.9	1008.8	912.7	840.6	816.0
100°	124.2	180.4	236.6	250.6	555.3	961.6	1164.7	1168.2	1175.3	1180.5	1151.2
102.5°	150.2	202.7	255.1	268.2	577.2	989.2	1195.2	1256.4	1378.8	1470.7	1445.6
105°	194.2	238.7	283.0	294.2	593.3	992.2	1191.7	1329.0	1603.5	1809.4	1795.9
107.5°	239.4	280.8	322.2	332.6	596.4	948.2	1124.0	1315.5	1698.4	1985.6	1988.8
110°	269.8	307.2	344.7	354.0	591.9	909.0	1067.5	1281.6	1709.7	2030.7	2044.8



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	299.8	335.5	371.1	380.0	592.1	874.8	1016.2	1235.3	1673.4	2001.9	2023.5
115°	345.0	377.8	410.7	418.9	597.5	835.6	954.7	1165.7	1587.7	1904.3	1934.2
117.5°	389.6	419.5	449.3	456.7	608.6	811.1	912.3	1102.8	1483.6	1769.3	1802.5
120°	415.5	443.6	471.7	478.7	617.6	802.8	895.4	1069.4	1417.4	1678.4	1710.7
122.5°	440.9	469.2	497.7	504.7	630.6	798.5	882.4	1039.1	1352.5	1587.6	1619.3
125°	479.9	505.7	531.6	538.0	648.1	794.9	868.3	1001.4	1267.6	1467.3	1496.6
127.5°	511.5	537.6	563.6	570.2	665.6	792.8	856.5	970.8	1199.3	1370.8	1395.5
130°	528.4	556.5	584.6	591.6	678.4	794.1	851.9	953.7	1157.2	1309.8	1332.6
132.5°	545.9	574.1	602.1	609.2	688.7	794.9	848.0	939.0	1121.2	1257.8	1278.3
135°	571.9	597.5	623.0	629.4	700.1	794.1	841.2	917.5	1070.0	1184.4	1202.1
137.5°	598.4	623.7	649.1	655.4	717.0	799.1	840.1	904.5	1033.5	1130.3	1144.7
140°	620.5	643.8	667.2	673.0	727.4	799.9	836.1	891.8	1003.2	1086.7	1100.2
142.5°	637.4	659.0	680.5	685.9	736.0	802.7	836.1	885.1	982.9	1056.3	1067.9
145°	663.4	682.2	701.0	705.7	747.3	802.8	830.5	870.5	950.5	1010.5	1019.3
147.5°	689.3	707.7	725.9	730.6	763.9	808.3	830.5	862.0	924.9	972.1	979.4
150°	706.3	722.9	739.3	743.5	772.5	811.1	830.5	857.1	910.2	950.1	956.0
152.5°	723.8	736.3	748.8	752.0	778.2	813.0	830.5	853.2	898.6	932.7	937.1
155°	749.7	759.1	768.3	770.7	790.6	817.2	830.5	848.6	884.7	911.8	914.8
157.5°	768.9	778.0	786.9	789.2	803.0	821.3	830.5	844.5	872.6	893.7	895.7
160°	781.9	788.9	796.0	797.7	808.7	823.2	830.5	842.5	866.6	884.6	885.8
162.5°	794.9	800.2	805.4	806.8	814.6	825.2	830.5	840.6	861.0	876.2	877.3
165°	809.0	813.7	818.5	819.7	823.3	828.1	830.5	837.7	852.3	863.2	864.3
167.5°	822.0	824.2	826.5	827.0	830.0	834.1	836.1	840.9	850.4	857.5	858.1
170°	830.5	832.7	835.0	835.6	835.7	836.0	836.1	840.9	850.4	857.5	857.5
172.5°	835.0	835.5	836.0	836.1	836.1	836.1	836.1	839.9	847.4	853.0	852.6
175°	841.2	841.2	841.2	841.2	839.4	837.2	836.1	838.5	843.2	846.9	846.9
177.5°	841.2	841.2	841.2	841.2	839.9	838.2	837.3	839.2	842.9	845.7	845.1
180°	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8
2.5°	981.4	978.7	981.4	979.6	980.5	977.8	969.6	966.9	969.6	972.3	972.3
5°	993.1	991.3	993.1	993.1	992.2	990.4	981.4	979.6	981.4	982.3	980.5
7.5°	996.8	994.0	996.8	995.0	995.0	993.1	984.1	982.3	983.2	985.9	983.2
10°	996.8	994.0	996.8	995.9	995.0	993.1	984.1	980.5	980.5	983.2	980.5
12.5°	992.2	990.4	992.2	990.4	990.4	988.6	979.6	975.9	976.8	977.8	974.1
15°	985.0	982.3	985.0	983.2	984.1	981.4	971.4	967.8	967.8	969.6	963.2
17.5°	974.1	970.5	974.1	973.2	972.3	970.5	961.4	957.8	956.8	957.8	953.2
20°	961.4	958.7	961.4	960.5	960.5	956.8	947.8	943.3	943.3	943.3	938.7
22.5°	941.5	938.7	941.5	943.3	943.3	942.4	934.2	927.9	926.1	926.1	920.6
25°	918.8	916.1	918.8	918.8	917.9	918.8	916.1	912.5	909.8	907.1	901.6
27.5°	897.1	895.3	897.1	895.3	897.1	894.4	893.5	892.6	889.0	886.2	879.0
30°	875.4	873.6	875.4	873.6	871.8	870.0	865.4	863.6	867.2	865.4	853.7
32.5°	848.2	846.4	848.2	848.2	846.4	846.4	839.2	836.5	837.4	842.8	831.9
35°	820.2	817.5	820.2	819.3	820.2	817.5	812.9	812.0	808.4	814.7	806.6
37.5°	787.6	784.9	787.6	787.6	787.6	789.4	785.8	783.1	777.6	785.8	779.4
40°	754.1	750.5	754.1	753.2	754.1	755.9	754.1	752.3	746.8	753.2	747.8
42.5°	716.1	715.2	716.1	717.0	717.0	720.6	723.3	719.7	717.9	713.4	717.0
45°	675.3	673.5	675.3	677.2	678.1	679.9	688.0	688.0	685.3	678.1	683.5
47.5°	631.9	627.4	631.9	637.3	637.3	640.0	648.2	654.5	650.0	640.9	643.7
50°	585.7	586.6	585.7	589.4	589.4	599.3	605.6	612.0	616.5	605.6	593.0
52.5°	540.5	539.6	540.5	543.2	546.8	551.3	562.2	568.5	575.8	569.4	549.5
55°	495.2	497.0	495.2	496.1	497.9	500.6	516.9	523.3	536.9	528.7	507.9
57.5°	450.0	447.2	450.0	451.8	452.7	455.4	469.0	480.7	488.9	489.8	464.4
60°	397.5	393.8	397.5	405.6	407.4	409.2	421.9	432.8	440.0	442.7	416.5
62.5°	351.3	345.0	351.3	356.7	360.3	364.9	373.9	390.2	396.6	397.5	360.3
65°	302.3	299.6	302.3	313.2	314.1	319.5	329.6	341.3	354.9	353.1	299.6
67.5°	258.0	258.0	258.0	265.2	270.6	273.4	286.0	291.5	308.7	310.5	249.8
70°	217.2	216.3	217.2	222.7	226.3	232.6	244.4	250.7	264.3	268.8	202.8
72.5°	178.3	177.4	178.3	182.8	186.5	191.9	201.9	209.1	220.9	226.3	157.5
75°	143.9	142.1	143.9	147.5	146.6	153.9	162.0	169.3	180.1	183.7	116.8
77.5°	110.4	110.4	110.4	114.1	114.1	121.3	124.9	134.0	140.3	145.7	86.0
80°	82.4	81.5	82.4	83.3	83.3	86.9	93.2	99.6	105.0	105.0	58.8
82.5°	57.9	56.1	57.9	57.9	57.9	59.7	63.4	65.2	68.8	71.5	37.1
85°	36.2	36.2	36.2	37.1	36.2	38.0	38.9	40.7	40.7	38.9	22.6
87.5°	23.5	22.6	23.5	22.6	22.6	21.7	21.7	21.7	20.8	19.9	12.7
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	211.7	241.6	212.1	153.2	109.0
95°	299.5	247.8	299.5	351.2	364.1	478.2	630.3	706.3	596.5	376.9	212.3
97.5°	717.7	619.3	717.7	816.0	840.6	912.7	1008.8	1056.9	873.8	507.7	233.2
100°	1034.1	916.8	1034.1	1151.2	1180.5	1175.3	1168.2	1164.7	961.6	555.3	250.6
102.5°	1345.3	1244.9	1345.3	1445.6	1470.7	1378.8	1256.4	1195.2	989.2	577.2	268.2
105°	1742.0	1688.0	1742.0	1795.9	1809.4	1603.5	1329.0	1191.7	992.2	593.3	294.2
107.5°	2001.9	2014.9	2001.9	1988.8	1985.6	1698.4	1315.5	1124.0	948.2	596.4	332.6
110°	2101.0	2157.2	2101.0	2044.8	2030.7	1709.7	1281.6	1067.5	909.0	591.9	354.0



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2109.8	2196.1	2109.8	2023.5	2001.9	1673.4	1235.3	1016.2	874.8	592.1	380.0
115°	2053.9	2173.6	2053.9	1934.2	1904.3	1587.7	1165.7	954.7	835.6	597.5	418.9
117.5°	1935.2	2067.9	1935.2	1802.5	1769.3	1483.6	1102.8	912.3	811.1	608.6	456.7
120°	1839.6	1968.6	1839.6	1710.7	1678.4	1417.4	1069.4	895.4	802.8	617.6	478.7
122.5°	1746.6	1873.8	1746.6	1619.3	1587.6	1352.5	1039.1	882.4	798.5	630.6	504.7
125°	1613.7	1730.9	1613.7	1496.6	1467.3	1267.6	1001.4	868.3	794.9	648.1	538.0
127.5°	1494.3	1593.2	1494.3	1395.5	1370.8	1199.3	970.8	856.5	792.8	665.6	570.2
130°	1423.9	1515.2	1423.9	1332.6	1309.8	1157.2	953.7	851.9	794.1	678.4	591.6
132.5°	1360.0	1441.8	1360.0	1278.3	1257.8	1121.2	939.0	848.0	794.9	688.7	609.2
135°	1272.6	1343.1	1272.6	1202.1	1184.4	1070.0	917.5	841.2	794.1	700.1	629.4
137.5°	1202.4	1260.1	1202.4	1144.7	1130.3	1033.5	904.5	840.1	799.1	717.0	655.4
140°	1154.2	1208.1	1154.2	1100.2	1086.7	1003.2	891.8	836.1	799.9	727.4	673.0
142.5°	1114.3	1160.7	1114.3	1067.9	1056.3	982.9	885.1	836.1	802.7	736.0	685.9
145°	1054.5	1089.6	1054.5	1019.3	1010.5	950.5	870.5	830.5	802.8	747.3	705.7
147.5°	1008.5	1037.7	1008.5	979.4	972.1	924.9	862.0	830.5	808.3	763.9	730.6
150°	979.7	1003.2	979.7	956.0	950.1	910.2	857.1	830.5	811.1	772.5	743.5
152.5°	954.9	972.7	954.9	937.1	932.7	898.6	853.2	830.5	813.0	778.2	752.0
155°	926.5	938.3	926.5	914.8	911.8	884.7	848.6	830.5	817.2	790.6	770.7
157.5°	904.0	912.3	904.0	895.7	893.7	872.6	844.5	830.5	821.3	803.0	789.2
160°	890.6	895.4	890.6	885.8	884.6	866.6	842.5	830.5	823.2	808.7	797.7
162.5°	881.8	886.3	881.8	877.3	876.2	861.0	840.6	830.5	825.2	814.6	806.8
165°	869.1	873.9	869.1	864.3	863.2	852.3	837.7	830.5	828.1	823.3	819.7
167.5°	860.1	862.1	860.1	858.1	857.5	850.4	840.9	836.1	834.1	830.0	827.0
170°	857.5	857.5	857.5	857.5	857.5	850.4	840.9	836.1	836.0	835.7	835.6
172.5°	850.9	849.1	850.9	852.6	853.0	847.4	839.9	836.1	836.1	836.1	836.1
175°	846.9	846.9	846.9	846.9	846.9	843.2	838.5	836.1	837.2	839.4	841.2
177.5°	843.2	841.2	843.2	845.1	845.7	842.9	839.2	837.3	838.2	839.9	841.2
180°	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8
2.5°	970.5	965.0	965.0	955.9	952.3	949.6	945.1	931.5	927.9	924.3	929.7
5°	978.7	968.7	961.4	945.1	931.5	926.1	908.9	876.3	854.6	838.3	829.2
7.5°	980.5	967.8	954.1	928.8	896.2	881.7	829.2	769.5	753.2	738.7	729.7
10°	978.7	964.1	945.1	907.1	830.1	804.8	752.3	713.4	703.4	700.7	703.4
12.5°	972.3	958.7	932.4	869.0	761.3	744.1	713.4	690.7	688.9	693.4	717.9
15°	961.4	948.7	917.9	818.4	723.3	710.6	688.9	680.8	690.7	722.4	795.7
17.5°	950.5	936.0	898.0	768.6	694.3	685.3	669.9	686.2	742.3	784.9	809.3
20°	936.0	918.8	875.4	732.4	673.5	665.4	658.1	731.5	774.0	789.4	803.0
22.5°	918.8	900.7	844.6	707.0	651.8	645.5	650.0	756.8	774.0	784.9	796.6
25°	896.2	880.8	808.4	687.1	634.6	627.4	644.6	754.1	764.0	766.8	790.3
27.5°	875.4	855.5	770.4	669.0	613.8	611.1	649.1	742.3	749.6	752.3	777.6
30°	850.0	820.2	727.8	650.0	592.1	591.2	650.0	727.8	726.0	733.3	758.6
32.5°	823.8	767.7	679.9	626.5	571.2	570.3	643.7	706.1	704.3	714.3	733.3
35°	799.3	726.9	614.7	599.3	545.0	545.9	628.3	680.8	681.7	690.7	702.5
37.5°	774.0	691.6	543.2	569.4	519.7	519.7	607.5	657.2	655.4	658.1	674.4
40°	744.1	636.4	479.8	530.5	496.1	493.4	582.1	631.9	625.6	624.7	647.3
42.5°	712.5	575.8	432.8	478.9	469.0	465.3	551.3	601.1	589.4	592.1	621.0
45°	678.1	559.5	396.6	404.7	440.9	438.2	517.8	565.8	557.7	564.9	594.8
47.5°	643.7	526.9	384.8	335.9	411.0	410.1	480.7	531.4	526.9	534.1	565.8
50°	596.6	490.7	383.9	287.8	377.5	381.2	436.4	497.9	497.9	504.3	537.8
52.5°	535.9	446.3	348.6	260.7	338.6	349.5	397.5	469.0	470.8	477.1	507.0
55°	480.7	400.2	323.2	239.9	292.4	315.9	359.4	439.1	442.7	449.1	476.2
57.5°	430.0	333.2	317.7	215.4	249.8	272.5	325.9	410.1	411.9	417.4	443.6
60°	375.7	240.8	291.5	189.2	212.7	229.9	295.1	375.7	382.1	385.7	408.3
62.5°	314.1	174.7	264.3	171.1	194.6	198.2	269.7	343.1	351.3	354.0	367.6
65°	223.6	146.6	224.5	155.7	175.6	176.5	242.6	309.6	316.8	321.3	331.4
67.5°	151.2	119.5	171.1	141.2	161.1	162.0	216.3	270.6	280.6	284.2	290.6
70°	105.0	79.7	126.7	125.8	144.8	146.6	188.3	235.3	244.4	247.1	250.7
72.5°	76.9	64.3	105.0	113.1	127.6	129.4	159.3	195.5	204.6	207.3	209.1
75°	58.8	67.9	85.1	98.7	108.6	109.5	130.3	159.3	165.6	167.5	168.4
77.5°	47.1	63.4	62.5	79.7	88.7	86.9	102.3	123.1	128.5	128.5	128.5
80°	35.3	49.8	47.1	57.0	65.2	63.4	73.3	87.8	89.6	91.4	90.5
82.5°	26.2	31.7	31.7	36.2	43.4	41.6	48.9	57.0	57.0	57.0	58.8
85°	16.3	18.1	14.5	19.0	24.4	23.5	27.2	30.8	31.7	31.7	29.9
87.5°	10.0	8.1	4.5	7.2	10.9	10.9	12.7	13.6	12.7	12.7	12.7
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	60.9	22.5	60.9	99.4	109.0	153.2	212.1	241.6	211.7	152.1
95°	194.7	124.5	54.2	124.5	194.7	212.3	376.9	596.5	706.3	630.3	478.2
97.5°	217.7	155.7	93.7	155.7	217.7	233.2	507.7	873.8	1056.9	1008.8	912.7
100°	236.6	180.4	124.2	180.4	236.6	250.6	555.3	961.6	1164.7	1168.2	1175.3
102.5°	255.1	202.7	150.2	202.7	255.1	268.2	577.2	989.2	1195.2	1256.4	1378.8
105°	283.0	238.7	194.2	238.7	283.0	294.2	593.3	992.2	1191.7	1329.0	1603.5
107.5°	322.2	280.8	239.4	280.8	322.2	332.6	596.4	948.2	1124.0	1315.5	1698.4
110°	344.7	307.2	269.8	307.2	344.7	354.0	591.9	909.0	1067.5	1281.6	1709.7



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	371.1	335.5	299.8	335.5	371.1	380.0	592.1	874.8	1016.2	1235.3	1673.4
115°	410.7	377.8	345.0	377.8	410.7	418.9	597.5	835.6	954.7	1165.7	1587.7
117.5°	449.3	419.5	389.6	419.5	449.3	456.7	608.6	811.1	912.3	1102.8	1483.6
120°	471.7	443.6	415.5	443.6	471.7	478.7	617.6	802.8	895.4	1069.4	1417.4
122.5°	497.7	469.2	440.9	469.2	497.7	504.7	630.6	798.5	882.4	1039.1	1352.5
125°	531.6	505.7	479.9	505.7	531.6	538.0	648.1	794.9	868.3	1001.4	1267.6
127.5°	563.6	537.6	511.5	537.6	563.6	570.2	665.6	792.8	856.5	970.8	1199.3
130°	584.6	556.5	528.4	556.5	584.6	591.6	678.4	794.1	851.9	953.7	1157.2
132.5°	602.1	574.1	545.9	574.1	602.1	609.2	688.7	794.9	848.0	939.0	1121.2
135°	623.0	597.5	571.9	597.5	623.0	629.4	700.1	794.1	841.2	917.5	1070.0
137.5°	649.1	623.7	598.4	623.7	649.1	655.4	717.0	799.1	840.1	904.5	1033.5
140°	667.2	643.8	620.5	643.8	667.2	673.0	727.4	799.9	836.1	891.8	1003.2
142.5°	680.5	659.0	637.4	659.0	680.5	685.9	736.0	802.7	836.1	885.1	982.9
145°	701.0	682.2	663.4	682.2	701.0	705.7	747.3	802.8	830.5	870.5	950.5
147.5°	725.9	707.7	689.3	707.7	725.9	730.6	763.9	808.3	830.5	862.0	924.9
150°	739.3	722.9	706.3	722.9	739.3	743.5	772.5	811.1	830.5	857.1	910.2
152.5°	748.8	736.3	723.8	736.3	748.8	752.0	778.2	813.0	830.5	853.2	898.6
155°	768.3	759.1	749.7	759.1	768.3	770.7	790.6	817.2	830.5	848.6	884.7
157.5°	786.9	778.0	768.9	778.0	786.9	789.2	803.0	821.3	830.5	844.5	872.6
160°	796.0	788.9	781.9	788.9	796.0	797.7	808.7	823.2	830.5	842.5	866.6
162.5°	805.4	800.2	794.9	800.2	805.4	806.8	814.6	825.2	830.5	840.6	861.0
165°	818.5	813.7	809.0	813.7	818.5	819.7	823.3	828.1	830.5	837.7	852.3
167.5°	826.5	824.2	822.0	824.2	826.5	827.0	830.0	834.1	836.1	840.9	850.4
170°	835.0	832.7	830.5	832.7	835.0	835.6	835.7	836.0	836.1	840.9	850.4
172.5°	836.0	835.5	835.0	835.5	836.0	836.1	836.1	836.1	836.1	839.9	847.4
175°	841.2	841.2	841.2	841.2	841.2	841.2	839.4	837.2	836.1	838.5	843.2
177.5°	841.2	841.2	841.2	841.2	841.2	841.2	839.9	838.2	837.3	839.2	842.9
180°	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8
2.5°	923.4	920.6	924.3	914.3	924.3	920.6	923.4	929.7	924.3	927.9	931.5
5°	810.2	805.7	791.2	779.4	791.2	805.7	810.2	829.2	838.3	854.6	876.3
7.5°	724.2	720.6	717.0	709.7	717.0	720.6	724.2	729.7	738.7	753.2	769.5
10°	705.2	706.1	711.5	710.6	711.5	706.1	705.2	703.4	700.7	703.4	713.4
12.5°	754.1	762.2	792.1	790.3	792.1	762.2	754.1	717.9	693.4	688.9	690.7
15°	810.2	812.9	819.3	820.2	819.3	812.9	810.2	795.7	722.4	690.7	680.8
17.5°	815.6	816.5	821.1	821.1	821.1	816.5	815.6	809.3	784.9	742.3	686.2
20°	811.1	812.9	822.0	823.8	822.0	812.9	811.1	803.0	789.4	774.0	731.5
22.5°	809.3	812.9	820.2	819.3	820.2	812.9	809.3	796.6	784.9	774.0	756.8
25°	800.3	800.3	801.2	802.1	801.2	800.3	800.3	790.3	766.8	764.0	754.1
27.5°	781.2	783.1	788.5	787.6	788.5	783.1	781.2	777.6	752.3	749.6	742.3
30°	764.0	762.2	757.7	754.1	757.7	762.2	764.0	758.6	733.3	726.0	727.8
32.5°	735.1	730.6	726.0	723.3	726.0	730.6	735.1	733.3	714.3	704.3	706.1
35°	700.7	701.6	700.7	698.0	700.7	701.6	700.7	702.5	690.7	681.7	680.8
37.5°	676.2	678.1	677.2	673.5	677.2	678.1	676.2	674.4	658.1	655.4	657.2
40°	650.9	651.8	650.9	648.2	650.9	651.8	650.9	647.3	624.7	625.6	631.9
42.5°	626.5	625.6	622.8	621.0	622.8	625.6	626.5	621.0	592.1	589.4	601.1
45°	598.4	599.3	593.9	591.2	593.9	599.3	598.4	594.8	564.9	557.7	565.8
47.5°	570.3	570.3	565.8	563.1	565.8	570.3	570.3	565.8	534.1	526.9	531.4
50°	540.5	539.6	533.2	532.3	533.2	539.6	540.5	537.8	504.3	497.9	497.9
52.5°	506.1	506.1	507.0	508.8	507.0	506.1	506.1	507.0	477.1	470.8	469.0
55°	476.2	477.1	483.4	485.3	483.4	477.1	476.2	476.2	449.1	442.7	439.1
57.5°	445.4	445.4	450.0	450.0	450.0	445.4	445.4	443.6	417.4	411.9	410.1
60°	410.1	411.9	415.6	414.7	415.6	411.9	410.1	408.3	385.7	382.1	375.7
62.5°	373.0	374.8	375.7	373.9	375.7	374.8	373.0	367.6	354.0	351.3	343.1
65°	334.1	335.9	336.8	335.0	336.8	335.9	334.1	331.4	321.3	316.8	309.6
67.5°	294.2	293.3	292.4	296.0	292.4	293.3	294.2	290.6	284.2	280.6	270.6
70°	253.4	253.4	252.5	254.4	252.5	253.4	253.4	250.7	247.1	244.4	235.3
72.5°	210.0	209.1	212.7	210.0	212.7	209.1	210.0	209.1	207.3	204.6	195.5
75°	167.5	169.3	167.5	170.2	167.5	169.3	167.5	168.4	167.5	165.6	159.3
77.5°	127.6	129.4	127.6	127.6	127.6	129.4	127.6	128.5	128.5	128.5	123.1
80°	90.5	89.6	89.6	88.7	89.6	89.6	90.5	90.5	91.4	89.6	87.8
82.5°	57.9	57.0	57.0	58.8	57.0	57.0	57.9	58.8	57.0	57.0	57.0
85°	31.7	32.6	30.8	30.8	30.8	32.6	31.7	29.9	31.7	31.7	30.8
87.5°	11.8	10.9	10.9	10.9	10.9	10.9	11.8	12.7	12.7	12.7	13.6
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	211.7	241.6	212.1
95°	364.1	351.2	299.5	247.8	299.5	351.2	364.1	478.2	630.3	706.3	596.5
97.5°	840.6	816.0	717.7	619.3	717.7	816.0	840.6	912.7	1008.8	1056.9	873.8
100°	1180.5	1151.2	1034.1	916.8	1034.1	1151.2	1180.5	1175.3	1168.2	1164.7	961.6
102.5°	1470.7	1445.6	1345.3	1244.9	1345.3	1445.6	1470.7	1378.8	1256.4	1195.2	989.2
105°	1809.4	1795.9	1742.0	1688.0	1742.0	1795.9	1809.4	1603.5	1329.0	1191.7	992.2
107.5°	1985.6	1988.8	2001.9	2014.9	2001.9	1988.8	1985.6	1698.4	1315.5	1124.0	948.2
110°	2030.7	2044.8	2101.0	2157.2	2101.0	2044.8	2030.7	1709.7	1281.6	1067.5	909.0



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	2001.9	2023.5	2109.8	2196.1	2109.8	2023.5	2001.9	1673.4	1235.3	1016.2	874.8
115°	1904.3	1934.2	2053.9	2173.6	2053.9	1934.2	1904.3	1587.7	1165.7	954.7	835.6
117.5°	1769.3	1802.5	1935.2	2067.9	1935.2	1802.5	1769.3	1483.6	1102.8	912.3	811.1
120°	1678.4	1710.7	1839.6	1968.6	1839.6	1710.7	1678.4	1417.4	1069.4	895.4	802.8
122.5°	1587.6	1619.3	1746.6	1873.8	1746.6	1619.3	1587.6	1352.5	1039.1	882.4	798.5
125°	1467.3	1496.6	1613.7	1730.9	1613.7	1496.6	1467.3	1267.6	1001.4	868.3	794.9
127.5°	1370.8	1395.5	1494.3	1593.2	1494.3	1395.5	1370.8	1199.3	970.8	856.5	792.8
130°	1309.8	1332.6	1423.9	1515.2	1423.9	1332.6	1309.8	1157.2	953.7	851.9	794.1
132.5°	1257.8	1278.3	1360.0	1441.8	1360.0	1278.3	1257.8	1121.2	939.0	848.0	794.9
135°	1184.4	1202.1	1272.6	1343.1	1272.6	1202.1	1184.4	1070.0	917.5	841.2	794.1
137.5°	1130.3	1144.7	1202.4	1260.1	1202.4	1144.7	1130.3	1033.5	904.5	840.1	799.1
140°	1086.7	1100.2	1154.2	1208.1	1154.2	1100.2	1086.7	1003.2	891.8	836.1	799.9
142.5°	1056.3	1067.9	1114.3	1160.7	1114.3	1067.9	1056.3	982.9	885.1	836.1	802.7
145°	1010.5	1019.3	1054.5	1089.6	1054.5	1019.3	1010.5	950.5	870.5	830.5	802.8
147.5°	972.1	979.4	1008.5	1037.7	1008.5	979.4	972.1	924.9	862.0	830.5	808.3
150°	950.1	956.0	979.7	1003.2	979.7	956.0	950.1	910.2	857.1	830.5	811.1
152.5°	932.7	937.1	954.9	972.7	954.9	937.1	932.7	898.6	853.2	830.5	813.0
155°	911.8	914.8	926.5	938.3	926.5	914.8	911.8	884.7	848.6	830.5	817.2
157.5°	893.7	895.7	904.0	912.3	904.0	895.7	893.7	872.6	844.5	830.5	821.3
160°	884.6	885.8	890.6	895.4	890.6	885.8	884.6	866.6	842.5	830.5	823.2
162.5°	876.2	877.3	881.8	886.3	881.8	877.3	876.2	861.0	840.6	830.5	825.2
165°	863.2	864.3	869.1	873.9	869.1	864.3	863.2	852.3	837.7	830.5	828.1
167.5°	857.5	858.1	860.1	862.1	860.1	858.1	857.5	850.4	840.9	836.1	834.1
170°	857.5	857.5	857.5	857.5	857.5	857.5	857.5	850.4	840.9	836.1	836.0
172.5°	853.0	852.6	850.9	849.1	850.9	852.6	853.0	847.4	839.9	836.1	836.1
175°	846.9	846.9	846.9	846.9	846.9	846.9	846.9	843.2	838.5	836.1	837.2
177.5°	845.7	845.1	843.2	841.2	843.2	845.1	845.7	842.9	839.2	837.3	838.2
180°	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	956.8	956.8	956.8	956.8	956.8
2.5°	945.1	949.6	952.3	955.9	965.0
5°	908.9	926.1	931.5	945.1	961.4
7.5°	829.2	881.7	896.2	928.8	954.1
10°	752.3	804.8	830.1	907.1	945.1
12.5°	713.4	744.1	761.3	869.0	932.4
15°	688.9	710.6	723.3	818.4	917.9
17.5°	669.9	685.3	694.3	768.6	898.0
20°	658.1	665.4	673.5	732.4	875.4
22.5°	650.0	645.5	651.8	707.0	844.6
25°	644.6	627.4	634.6	687.1	808.4
27.5°	649.1	611.1	613.8	669.0	770.4
30°	650.0	591.2	592.1	650.0	727.8
32.5°	643.7	570.3	571.2	626.5	679.9
35°	628.3	545.9	545.0	599.3	614.7
37.5°	607.5	519.7	519.7	569.4	543.2
40°	582.1	493.4	496.1	530.5	479.8
42.5°	551.3	465.3	469.0	478.9	432.8
45°	517.8	438.2	440.9	404.7	396.6
47.5°	480.7	410.1	411.0	335.9	384.8
50°	436.4	381.2	377.5	287.8	383.9
52.5°	397.5	349.5	338.6	260.7	348.6
55°	359.4	315.9	292.4	239.9	323.2
57.5°	325.9	272.5	249.8	215.4	317.7
60°	295.1	229.9	212.7	189.2	291.5
62.5°	269.7	198.2	194.6	171.1	264.3
65°	242.6	176.5	175.6	155.7	224.5
67.5°	216.3	162.0	161.1	141.2	171.1
70°	188.3	146.6	144.8	125.8	126.7
72.5°	159.3	129.4	127.6	113.1	105.0
75°	130.3	109.5	108.6	98.7	85.1
77.5°	102.3	86.9	88.7	79.7	62.5
80°	73.3	63.4	65.2	57.0	47.1
82.5°	48.9	41.6	43.4	36.2	31.7
85°	27.2	23.5	24.4	19.0	14.5
87.5°	12.7	10.9	10.9	7.2	4.5
90°	24.9	15.8	14.7	10.1	5.6
92.5°	153.2	109.0	99.4	60.9	22.5
95°	376.9	212.3	194.7	124.5	54.2
97.5°	507.7	233.2	217.7	155.7	93.7
100°	555.3	250.6	236.6	180.4	124.2
102.5°	577.2	268.2	255.1	202.7	150.2
105°	593.3	294.2	283.0	238.7	194.2
107.5°	596.4	332.6	322.2	280.8	239.4
110°	591.9	354.0	344.7	307.2	269.8



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	592.1	380.0	371.1	335.5	299.8
115°	597.5	418.9	410.7	377.8	345.0
117.5°	608.6	456.7	449.3	419.5	389.6
120°	617.6	478.7	471.7	443.6	415.5
122.5°	630.6	504.7	497.7	469.2	440.9
125°	648.1	538.0	531.6	505.7	479.9
127.5°	665.6	570.2	563.6	537.6	511.5
130°	678.4	591.6	584.6	556.5	528.4
132.5°	688.7	609.2	602.1	574.1	545.9
135°	700.1	629.4	623.0	597.5	571.9
137.5°	717.0	655.4	649.1	623.7	598.4
140°	727.4	673.0	667.2	643.8	620.5
142.5°	736.0	685.9	680.5	659.0	637.4
145°	747.3	705.7	701.0	682.2	663.4
147.5°	763.9	730.6	725.9	707.7	689.3
150°	772.5	743.5	739.3	722.9	706.3
152.5°	778.2	752.0	748.8	736.3	723.8
155°	790.6	770.7	768.3	759.1	749.7
157.5°	803.0	789.2	786.9	778.0	768.9
160°	808.7	797.7	796.0	788.9	781.9
162.5°	814.6	806.8	805.4	800.2	794.9
165°	823.3	819.7	818.5	813.7	809.0
167.5°	830.0	827.0	826.5	824.2	822.0
170°	835.7	835.6	835.0	832.7	830.5
172.5°	836.1	836.1	836.0	835.5	835.0
175°	839.4	841.2	841.2	841.2	841.2
177.5°	839.9	841.2	841.2	841.2	841.2
180°	841.2	841.2	841.2	841.2	841.2



TEST NUMBER: P935959

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-4000K

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	10.34	11.06	11.44	12.15	13.67	13.14	13.85	14.24	14.95	16.47
	3H	10.81	11.45	11.92	12.55	14.09	14.46	15.10	15.57	16.21	17.74
	4H	10.99	11.60	12.11	12.71	14.24	14.89	15.50	16.01	16.61	18.15
	6H	11.10	11.66	12.23	12.77	14.32	15.16	15.72	16.29	16.83	18.38
	8H	11.10	11.63	12.23	12.76	14.30	15.23	15.76	16.36	16.89	18.43
	12H	11.07	11.57	12.20	12.69	14.26	15.26	15.76	16.40	16.88	18.45
4H	2H	11.35	11.95	12.48	13.06	14.60	13.53	14.14	14.66	15.25	16.79
	3H	12.36	12.87	13.49	14.00	15.55	15.01	15.52	16.15	16.65	18.20
	4H	12.63	13.10	13.77	14.22	15.79	15.53	15.99	16.67	17.12	18.69
	6H	12.75	13.15	13.89	14.29	15.85	15.88	16.28	17.02	17.42	18.98
	8H	12.75	13.12	13.89	14.26	15.84	15.98	16.35	17.12	17.49	19.06
	12H	12.71	13.05	13.87	14.20	15.78	16.02	16.36	17.18	17.51	19.09
8H	4H	13.07	13.44	14.21	14.58	16.16	15.64	16.01	16.79	17.15	18.73
	6H	13.32	13.63	14.49	14.81	16.38	16.06	16.37	17.23	17.55	19.13
	8H	13.36	13.63	14.53	14.79	16.39	16.21	16.48	17.38	17.64	19.23
	12H	13.34	13.58	14.51	14.73	16.36	16.29	16.53	17.47	17.69	19.32
12H	4H	13.06	13.40	14.23	14.55	16.14	15.60	15.94	16.76	17.09	18.67
	6H	13.38	13.65	14.55	14.81	16.40	16.06	16.33	17.23	17.49	19.08
	8H	13.44	13.68	14.61	14.83	16.46	16.21	16.44	17.38	17.60	19.23