

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: P935860

Luminaire Tested: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935860
REPORT IS A COMBINATION OF REPORTS P933770 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

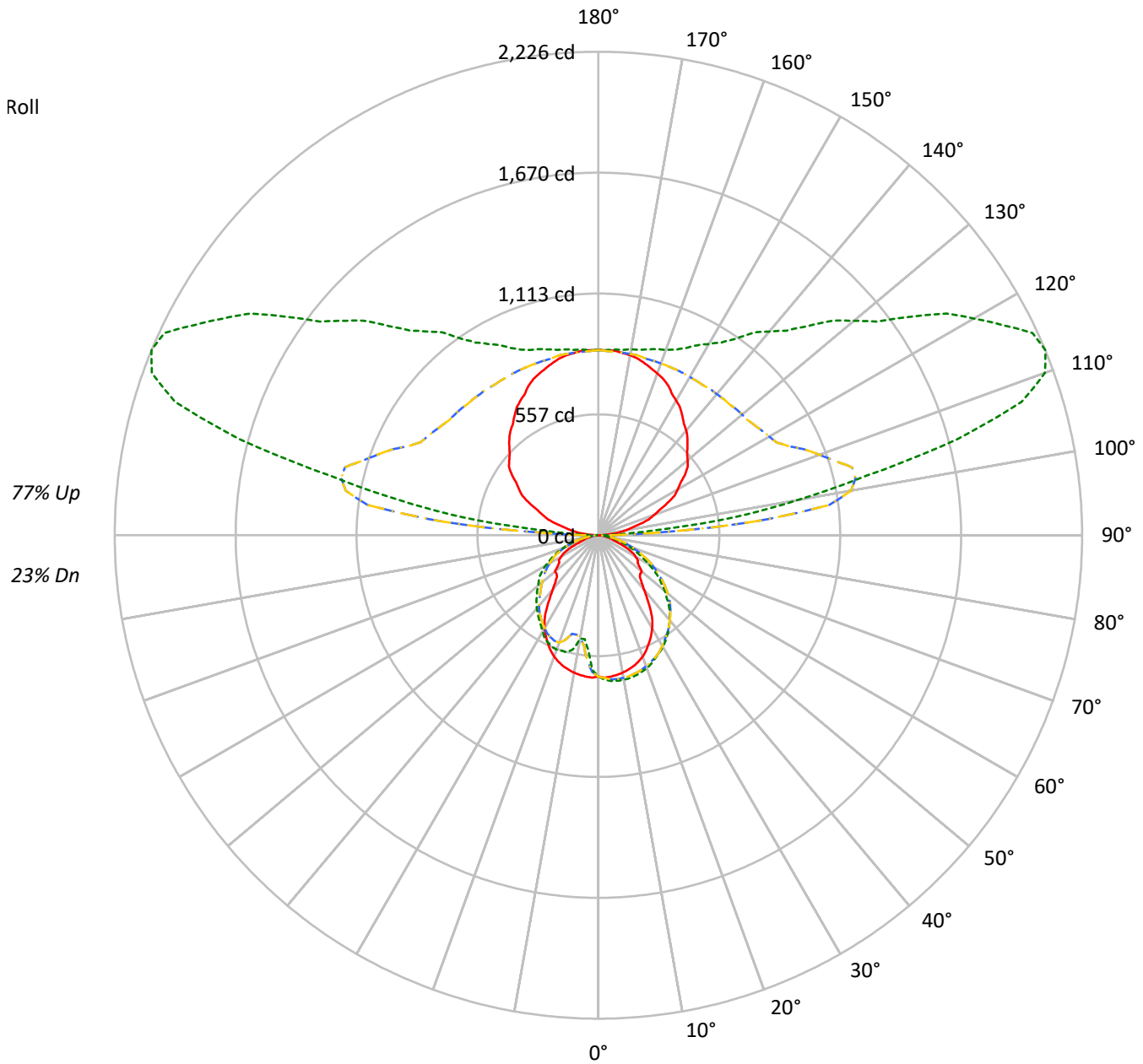
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7218.6 lumens
Efficiency: N/A
Efficacy: 129.8 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): 55.6
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: P935860
CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K

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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	23
1	92	88	84	81	81	78	75	72	60	58	56	43	42	41	28	27	27	20
2	84	77	71	66	74	68	63	59	52	49	46	38	36	34	25	24	23	17
3	76	67	60	55	67	60	54	49	46	42	39	34	31	29	22	20	19	14
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	19	18	16	12
5	64	53	45	39	56	47	40	36	36	32	28	27	24	21	17	16	14	10
6	59	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12	9
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	14	12	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6037	6037	6037	6037
5°	6075	6094	6075	4791
10°	6028	6003	6028	4292
15°	5955	5873	5955	4904
20°	5823	5718	5823	4914
25°	5562	5493	5562	4810
30°	5226	5307	5226	4581
35°	4652	5072	4652	4330
40°	3869	4793	3869	4140
45°	3450	4468	3450	3922
50°	3659	4080	3659	3702
55°	3432	3663	3432	3576
60°	3526	3110	3526	3275
65°	3180	2571	3180	2874
70°	2188	2049	2188	2410
75°	1895	1514	1895	1814
80°	1498	1002	1498	1090
85°	811	530	811	450

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5300 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	0.8
10°-20°	166.7	2.3
20°-30°	257.7	3.6
30°-40°	307.7	4.3
40°-50°	309.5	4.3
50°-60°	269.3	3.7
60°-70°	190.9	2.6
70°-80°	101.0	1.4
80°-90°	28.4	0.4
90°-100°	415.7	5.8
100°-110°	1093.0	15.1
110°-120°	1133.3	15.7
120°-130°	909.0	12.6
130°-140°	713.2	9.9
140°-150°	547.5	7.6
150°-160°	394.3	5.5
160°-170°	241.2	3.3
170°-180°	81.5	1.1
0°-30°	483.2	6.7
0°-40°	790.9	11.0
0°-60°	1369.6	19.0
0°-90°	1690.0	23.4
90°-120°	2642.0	36.6
90°-150°	4811.7	66.7
90°-180°	5529.0	76.6
0°-180°	7218.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	651	651	651	651	651	
5°	654	674	654	530	654	62
15°	624	668	624	558	624	176
25°	550	623	550	545	550	252
35°	418	556	418	474	418	259
45°	270	458	270	402	270	216
55°	220	338	220	330	220	202
65°	153	204	153	228	153	146
75°	58	97	58	116	58	61
85°	10	25	10	21	10	13
90°	6	22	6	22	6	5
95°	55	251	55	251	55	61
105°	197	1711	197	1711	197	209
115°	350	2204	350	2204	350	345
125°	487	1755	487	1755	487	432
135°	580	1362	580	1362	580	449
145°	673	1105	673	1105	673	421
155°	760	951	760	951	760	349
165°	820	886	820	886	820	231
175°	853	859	853	859	853	81
180°	853	853	853	853	853	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	656.1	656.1	659.7	661.0	661.0	659.2	657.3	659.2	664.7	666.5	665.9
5°	653.6	658.5	665.3	666.5	667.8	667.2	665.9	667.2	673.3	674.5	675.1
7.5°	648.7	657.9	666.5	668.4	670.2	668.4	667.8	669.0	675.1	676.3	676.3
10°	642.6	655.4	665.3	666.5	668.4	666.5	666.5	669.0	675.1	676.3	677.0
12.5°	633.9	651.7	661.0	662.2	664.7	664.0	663.5	665.9	672.1	673.3	673.3
15°	624.0	645.0	653.6	654.9	659.2	657.9	657.9	660.4	667.2	669.0	668.4
17.5°	610.5	636.4	646.2	648.1	651.2	650.6	651.2	653.6	659.7	661.0	661.7
20°	595.1	624.7	636.4	638.3	641.3	641.3	641.3	644.4	650.6	653.0	653.0
22.5°	574.2	612.4	624.7	626.0	629.6	629.6	630.8	635.1	640.6	641.3	641.3
25°	549.6	598.8	609.3	613.0	616.7	618.5	620.4	622.8	624.7	624.0	624.7
27.5°	523.7	581.6	595.1	597.6	602.6	604.4	606.9	607.4	608.1	609.9	608.7
30°	494.8	557.6	577.9	580.4	588.3	589.6	587.1	588.3	591.5	592.6	593.9
32.5°	462.2	521.9	560.1	565.6	573.0	569.3	568.7	570.5	575.5	575.5	576.7
35°	417.9	494.2	543.5	548.4	553.9	549.6	552.1	552.6	555.8	557.6	556.9
37.5°	369.3	470.2	526.2	529.9	534.2	528.7	532.4	534.2	536.7	535.5	535.5
40°	326.1	432.7	505.9	508.4	512.1	507.8	511.4	512.7	513.9	512.7	512.1
42.5°	294.2	391.4	484.4	487.5	485.0	488.0	489.3	491.8	489.9	487.5	487.5
45°	269.5	380.4	461.0	464.6	461.0	465.9	467.7	467.7	462.2	461.0	460.3
47.5°	261.5	358.2	437.6	437.6	435.7	441.9	445.0	440.7	435.2	433.2	433.2
50°	261.0	333.6	405.6	403.1	411.8	419.1	416.1	411.8	407.5	400.7	400.7
52.5°	236.9	303.4	364.3	373.6	387.1	391.4	386.5	382.2	374.8	371.8	369.3
55°	219.7	272.0	326.8	345.2	359.5	365.0	355.7	351.4	340.4	338.5	337.3
57.5°	216.0	226.5	292.4	315.7	332.9	332.4	326.8	318.8	309.5	307.7	307.2
60°	198.2	163.7	255.4	283.1	300.9	299.1	294.2	286.8	278.2	277.0	275.8
62.5°	179.7	118.7	213.5	244.9	270.2	269.5	265.3	254.2	248.1	244.9	242.5
65°	152.6	99.7	152.1	203.7	240.1	241.3	232.0	224.0	217.2	213.5	212.9
67.5°	116.4	81.2	102.8	169.9	211.1	209.9	198.2	194.5	185.8	184.0	180.3
70°	86.2	54.1	71.4	137.8	182.8	179.7	170.5	166.2	158.2	153.9	151.4
72.5°	71.4	43.7	52.3	107.1	153.9	150.1	142.2	137.3	130.5	126.8	124.3
75°	57.8	46.2	40.0	79.4	124.9	122.5	115.1	110.1	104.6	99.7	100.3
77.5°	42.5	43.0	32.0	58.5	99.1	95.4	91.1	85.0	82.5	77.5	77.5
80°	32.0	33.9	24.0	40.0	71.4	71.4	67.7	63.4	59.1	56.6	56.6
82.5°	21.6	21.6	17.8	25.2	48.6	46.8	44.3	43.0	40.7	39.4	39.4
85°	9.8	12.3	11.1	15.4	26.4	27.7	27.7	26.4	25.9	24.6	25.2
87.5°	3.1	5.5	6.8	8.6	13.6	14.1	14.8	14.8	14.8	15.4	15.4
90°	5.7	10.3	14.9	16.1	25.2	37.4	43.5	38.6	29.0	21.7	21.7
92.5°	22.9	61.8	100.8	110.5	155.3	215.0	244.9	214.6	154.2	108.7	104.4
95°	55.0	126.2	197.4	215.2	382.1	604.8	716.1	639.0	484.8	369.2	356.1
97.5°	95.0	157.8	220.7	236.4	514.7	885.9	1071.5	1022.8	925.3	852.3	827.3
100°	125.9	182.9	239.9	254.1	563.0	974.9	1180.8	1184.4	1191.5	1196.9	1167.1
102.5°	152.2	205.5	258.6	271.9	585.2	1002.9	1211.7	1273.8	1397.9	1491.1	1465.7
105°	196.9	242.0	287.0	298.3	601.5	1006.0	1208.2	1347.4	1625.7	1834.5	1820.8
107.5°	242.7	284.7	326.7	337.2	604.7	961.3	1139.6	1333.7	1721.9	2013.1	2016.4
110°	273.6	311.5	349.5	358.9	600.1	921.5	1082.3	1299.4	1733.3	2058.8	2073.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	303.9	340.1	376.3	385.2	600.3	887.0	1030.3	1252.4	1696.5	2029.7	2051.5
115°	349.7	383.0	416.4	424.7	605.8	847.2	967.9	1181.8	1609.7	1930.6	1961.0
117.5°	395.0	425.3	455.5	463.1	617.1	822.3	924.9	1118.0	1504.2	1793.8	1827.5
120°	421.2	449.8	478.2	485.4	626.1	813.9	907.8	1084.2	1437.0	1701.7	1734.4
122.5°	447.0	475.7	504.5	511.7	639.4	809.6	894.7	1053.5	1371.2	1609.5	1641.8
125°	486.6	512.7	539.0	545.5	657.1	805.9	880.3	1015.2	1285.1	1487.6	1517.3
127.5°	518.6	545.0	571.4	578.1	674.8	803.8	868.3	984.2	1215.9	1389.8	1414.8
130°	535.8	564.2	592.6	599.8	687.8	805.1	863.7	966.9	1173.2	1327.9	1351.0
132.5°	553.5	582.0	610.5	617.6	698.3	805.9	859.7	952.0	1136.7	1275.2	1296.0
135°	579.8	605.8	631.6	638.2	709.7	805.1	852.8	930.2	1084.8	1200.8	1218.7
137.5°	606.7	632.4	658.1	664.5	726.9	810.1	851.7	917.1	1047.8	1145.9	1160.5
140°	629.1	652.8	676.4	682.3	737.5	811.0	847.7	904.1	1017.1	1101.8	1115.5
142.5°	646.2	668.1	689.9	695.4	746.2	813.8	847.7	897.3	996.5	1071.0	1082.7
145°	672.6	691.7	710.7	715.4	757.6	813.9	842.0	882.5	963.7	1024.5	1033.4
147.5°	698.8	717.5	736.0	740.7	774.4	819.5	842.0	873.9	937.7	985.6	992.9
150°	716.1	732.9	749.6	753.8	783.2	822.3	842.0	869.0	922.8	963.3	969.3
152.5°	733.8	746.5	759.2	762.4	788.9	824.3	842.0	865.0	911.1	945.6	950.1
155°	760.1	769.6	778.9	781.3	801.5	828.5	842.0	860.3	897.0	924.4	927.4
157.5°	779.6	788.8	797.8	800.1	814.1	832.7	842.0	856.2	884.7	906.0	908.2
160°	792.7	799.9	807.0	808.8	819.9	834.6	842.0	854.2	878.6	896.9	898.1
162.5°	805.9	811.2	816.6	817.9	825.9	836.7	842.0	852.3	872.9	888.3	889.4
165°	820.2	825.0	829.9	831.1	834.7	839.6	842.0	849.3	864.1	875.1	876.3
167.5°	833.4	835.7	837.9	838.5	841.5	845.7	847.7	852.5	862.2	869.4	870.0
170°	842.0	844.3	846.6	847.1	847.3	847.6	847.7	852.5	862.2	869.4	869.4
172.5°	846.6	847.0	847.6	847.7	847.7	847.7	847.7	851.5	859.1	864.8	864.4
175°	852.8	852.8	852.8	852.8	851.1	848.8	847.7	850.1	854.9	858.6	858.6
177.5°	852.8	852.8	852.8	852.8	851.5	849.8	848.9	850.8	854.6	857.4	856.9
180°	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	667.2	665.3	667.2	665.9	666.5	664.7	659.2	657.3	659.2	661.0	661.0
5°	675.1	674.0	675.1	675.1	674.5	673.3	667.2	665.9	667.2	667.8	666.5
7.5°	677.6	675.8	677.6	676.3	676.3	675.1	669.0	667.8	668.4	670.2	668.4
10°	677.6	675.8	677.6	677.0	676.3	675.1	669.0	666.5	666.5	668.4	666.5
12.5°	674.5	673.3	674.5	673.3	673.3	672.1	665.9	663.5	664.0	664.7	662.2
15°	669.6	667.8	669.6	668.4	669.0	667.2	660.4	657.9	657.9	659.2	654.9
17.5°	662.2	659.7	662.2	661.7	661.0	659.7	653.6	651.2	650.6	651.2	648.1
20°	653.6	651.7	653.6	653.0	653.0	650.6	644.4	641.3	641.3	641.3	638.3
22.5°	640.1	638.3	640.1	641.3	641.3	640.6	635.1	630.8	629.6	629.6	626.0
25°	624.7	622.8	624.7	624.7	624.0	624.7	622.8	620.4	618.5	616.7	613.0
27.5°	609.9	608.7	609.9	608.7	609.9	608.1	607.4	606.9	604.4	602.6	597.6
30°	595.1	593.9	595.1	593.9	592.6	591.5	588.3	587.1	589.6	588.3	580.4
32.5°	576.7	575.5	576.7	576.7	575.5	575.5	570.5	568.7	569.3	573.0	565.6
35°	557.6	555.8	557.6	556.9	557.6	555.8	552.6	552.1	549.6	553.9	548.4
37.5°	535.5	533.6	535.5	535.5	535.5	536.7	534.2	532.4	528.7	534.2	529.9
40°	512.7	510.2	512.7	512.1	512.7	513.9	512.7	511.4	507.8	512.1	508.4
42.5°	486.8	486.2	486.8	487.5	487.5	489.9	491.8	489.3	488.0	485.0	487.5
45°	459.1	457.9	459.1	460.3	461.0	462.2	467.7	467.7	465.9	461.0	464.6
47.5°	429.6	426.5	429.6	433.2	433.2	435.2	440.7	445.0	441.9	435.7	437.6
50°	398.2	398.8	398.2	400.7	400.7	407.5	411.8	416.1	419.1	411.8	403.1
52.5°	367.4	366.8	367.4	369.3	371.8	374.8	382.2	386.5	391.4	387.1	373.6
55°	336.6	337.9	336.6	337.3	338.5	340.4	351.4	355.7	365.0	359.5	345.2
57.5°	305.9	304.0	305.9	307.2	307.7	309.5	318.8	326.8	332.4	332.9	315.7
60°	270.2	267.7	270.2	275.8	277.0	278.2	286.8	294.2	299.1	300.9	283.1
62.5°	238.8	234.5	238.8	242.5	244.9	248.1	254.2	265.3	269.5	270.2	244.9
65°	205.6	203.7	205.6	212.9	213.5	217.2	224.0	232.0	241.3	240.1	203.7
67.5°	175.4	175.4	175.4	180.3	184.0	185.8	194.5	198.2	209.9	211.1	169.9
70°	147.7	147.1	147.7	151.4	153.9	158.2	166.2	170.5	179.7	182.8	137.8
72.5°	121.2	120.6	121.2	124.3	126.8	130.5	137.3	142.2	150.1	153.9	107.1
75°	97.8	96.6	97.8	100.3	99.7	104.6	110.1	115.1	122.5	124.9	79.4
77.5°	75.1	75.1	75.1	77.5	77.5	82.5	85.0	91.1	95.4	99.1	58.5
80°	56.0	55.4	56.0	56.6	56.6	59.1	63.4	67.7	71.4	71.4	40.0
82.5°	39.4	38.2	39.4	39.4	39.4	40.7	43.0	44.3	46.8	48.6	25.2
85°	24.6	24.6	24.6	25.2	24.6	25.9	26.4	27.7	27.7	26.4	15.4
87.5°	16.0	15.4	16.0	15.4	15.4	14.8	14.8	14.8	14.1	13.6	8.6
90°	21.7	21.7	21.7	21.7	21.7	29.0	38.6	43.5	37.4	25.2	16.1
92.5°	87.1	69.8	87.1	104.4	108.7	154.2	214.6	244.9	215.0	155.3	110.5
95°	303.7	251.3	303.7	356.1	369.2	484.8	639.0	716.1	604.8	382.1	215.2
97.5°	727.6	627.9	727.6	827.3	852.3	925.3	1022.8	1071.5	885.9	514.7	236.4
100°	1048.4	929.5	1048.4	1167.1	1196.9	1191.5	1184.4	1180.8	974.9	563.0	254.1
102.5°	1363.9	1262.1	1363.9	1465.7	1491.1	1397.9	1273.8	1211.7	1002.9	585.2	271.9
105°	1766.1	1711.4	1766.1	1820.8	1834.5	1625.7	1347.4	1208.2	1006.0	601.5	298.3
107.5°	2029.6	2042.8	2029.6	2016.4	2013.1	1721.9	1333.7	1139.6	961.3	604.7	337.2
110°	2130.1	2187.1	2130.1	2073.1	2058.8	1733.3	1299.4	1082.3	921.5	600.1	358.9



TEST NUMBER: P935860

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2139.1	2226.5	2139.1	2051.5	2029.7	1696.5	1252.4	1030.3	887.0	600.3	385.2
115°	2082.3	2203.7	2082.3	1961.0	1930.6	1609.7	1181.8	967.9	847.2	605.8	424.7
117.5°	1962.0	2096.6	1962.0	1827.5	1793.8	1504.2	1118.0	924.9	822.3	617.1	463.1
120°	1865.1	1995.9	1865.1	1734.4	1701.7	1437.0	1084.2	907.8	813.9	626.1	485.4
122.5°	1770.8	1899.7	1770.8	1641.8	1609.5	1371.2	1053.5	894.7	809.6	639.4	511.7
125°	1636.1	1754.9	1636.1	1517.3	1487.6	1285.1	1015.2	880.3	805.9	657.1	545.5
127.5°	1515.0	1615.2	1515.0	1414.8	1389.8	1215.9	984.2	868.3	803.8	674.8	578.1
130°	1443.6	1536.2	1443.6	1351.0	1327.9	1173.2	966.9	863.7	805.1	687.8	599.8
132.5°	1378.8	1461.8	1378.8	1296.0	1275.2	1136.7	952.0	859.7	805.9	698.3	617.6
135°	1290.2	1361.7	1290.2	1218.7	1200.8	1084.8	930.2	852.8	805.1	709.7	638.2
137.5°	1219.1	1277.5	1219.1	1160.5	1145.9	1047.8	917.1	851.7	810.1	726.9	664.5
140°	1170.2	1224.8	1170.2	1115.5	1101.8	1017.1	904.1	847.7	811.0	737.5	682.3
142.5°	1129.8	1176.8	1129.8	1082.7	1071.0	996.5	897.3	847.7	813.8	746.2	695.4
145°	1069.1	1104.7	1069.1	1033.4	1024.5	963.7	882.5	842.0	813.9	757.6	715.4
147.5°	1022.5	1052.0	1022.5	992.9	985.6	937.7	873.9	842.0	819.5	774.4	740.7
150°	993.2	1017.1	993.2	969.3	963.3	922.8	869.0	842.0	822.3	783.2	753.8
152.5°	968.2	986.2	968.2	950.1	945.6	911.1	865.0	842.0	824.3	788.9	762.4
155°	939.4	951.3	939.4	927.4	924.4	897.0	860.3	842.0	828.5	801.5	781.3
157.5°	916.5	924.9	916.5	908.2	906.0	884.7	856.2	842.0	832.7	814.1	800.1
160°	902.9	907.8	902.9	898.1	896.9	878.6	854.2	842.0	834.6	819.9	808.8
162.5°	894.0	898.6	894.0	889.4	888.3	872.9	852.3	842.0	836.7	825.9	817.9
165°	881.2	886.0	881.2	876.3	875.1	864.1	849.3	842.0	839.6	834.7	831.1
167.5°	872.0	874.0	872.0	870.0	869.4	862.2	852.5	847.7	845.7	841.5	838.5
170°	869.4	869.4	869.4	869.4	869.4	862.2	852.5	847.7	847.6	847.3	847.1
172.5°	862.6	860.9	862.6	864.4	864.8	859.1	851.5	847.7	847.7	847.7	847.7
175°	858.6	858.6	858.6	858.6	858.6	854.9	850.1	847.7	848.8	851.1	852.8
177.5°	854.8	852.8	854.8	856.9	857.4	854.6	850.8	848.9	849.8	851.5	852.8
180°	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8



TEST NUMBER: P935860

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	659.7	656.1	656.1	649.9	647.4	645.6	642.6	633.3	630.8	628.3	632.1
5°	665.3	658.5	653.6	642.6	633.3	629.6	617.9	595.8	581.0	569.9	563.7
7.5°	666.5	657.9	648.7	631.5	609.3	599.4	563.7	523.2	512.1	502.3	496.0
10°	665.3	655.4	642.6	616.7	564.4	547.1	511.4	485.0	478.2	476.4	478.2
12.5°	661.0	651.7	633.9	590.8	517.6	505.9	485.0	469.6	468.4	471.4	488.0
15°	653.6	645.0	624.0	556.4	491.8	483.2	468.4	462.8	469.6	491.2	541.0
17.5°	646.2	636.4	610.5	522.5	472.1	465.9	455.5	466.6	504.6	533.6	550.2
20°	636.4	624.7	595.1	497.9	457.9	452.3	447.5	497.3	526.2	536.7	545.9
22.5°	624.7	612.4	574.2	480.7	443.2	438.8	441.9	514.6	526.2	533.6	541.6
25°	609.3	598.8	549.6	467.1	431.4	426.5	438.2	512.7	519.4	521.3	537.3
27.5°	595.1	581.6	523.7	454.8	417.3	415.4	441.3	504.6	509.6	511.4	528.7
30°	577.9	557.6	494.8	441.9	402.5	401.9	441.9	494.8	493.6	498.5	515.7
32.5°	560.1	521.9	462.2	425.9	388.4	387.7	437.6	480.0	478.9	485.6	498.5
35°	543.5	494.2	417.9	407.5	370.5	371.1	427.1	462.8	463.4	469.6	477.6
37.5°	526.2	470.2	369.3	387.1	353.3	353.3	413.0	446.8	445.6	447.5	458.5
40°	505.9	432.7	326.1	360.7	337.3	335.4	395.7	429.6	425.3	424.7	440.0
42.5°	484.4	391.4	294.2	325.6	318.8	316.3	374.8	408.6	400.7	402.5	422.2
45°	461.0	380.4	269.5	275.1	299.7	297.9	352.0	384.7	379.1	384.1	404.3
47.5°	437.6	358.2	261.5	228.3	279.4	278.8	326.8	361.3	358.2	363.1	384.7
50°	405.6	333.6	261.0	195.7	256.7	259.1	296.7	338.5	338.5	342.9	365.6
52.5°	364.3	303.4	236.9	177.2	230.2	237.6	270.2	318.8	320.0	324.3	344.7
55°	326.8	272.0	219.7	163.1	198.8	214.8	244.3	298.5	300.9	305.2	323.8
57.5°	292.4	226.5	216.0	146.5	169.9	185.3	221.5	278.8	280.0	283.8	301.6
60°	255.4	163.7	198.2	128.7	144.6	156.3	200.6	255.4	259.7	262.2	277.6
62.5°	213.5	118.7	179.7	116.4	132.3	134.8	183.4	233.3	238.8	240.6	249.9
65°	152.1	99.7	152.6	105.9	119.4	120.0	164.9	210.5	215.4	218.5	225.3
67.5°	102.8	81.2	116.4	96.0	109.6	110.1	147.1	184.0	190.8	193.3	197.6
70°	71.4	54.1	86.2	85.5	98.5	99.7	128.0	160.0	166.2	168.0	170.5
72.5°	52.3	43.7	71.4	76.9	86.8	88.0	108.3	133.0	139.1	141.0	142.2
75°	40.0	46.2	57.8	67.1	73.9	74.4	88.6	108.3	112.6	113.9	114.4
77.5°	32.0	43.0	42.5	54.1	60.3	59.1	69.6	83.7	87.4	87.4	87.4
80°	24.0	33.9	32.0	38.8	44.3	43.0	49.8	59.7	60.9	62.1	61.6
82.5°	17.8	21.6	21.6	24.6	29.5	28.4	33.2	38.8	38.8	38.8	40.0
85°	11.1	12.3	9.8	12.9	16.6	16.0	18.4	20.9	21.6	21.6	20.3
87.5°	6.8	5.5	3.1	5.0	7.3	7.3	8.6	9.3	8.6	8.6	8.6
90°	14.9	10.3	5.7	10.3	14.9	16.1	25.2	37.4	43.5	38.6	29.0
92.5°	100.8	61.8	22.9	61.8	100.8	110.5	155.3	215.0	244.9	214.6	154.2
95°	197.4	126.2	55.0	126.2	197.4	215.2	382.1	604.8	716.1	639.0	484.8
97.5°	220.7	157.8	95.0	157.8	220.7	236.4	514.7	885.9	1071.5	1022.8	925.3
100°	239.9	182.9	125.9	182.9	239.9	254.1	563.0	974.9	1180.8	1184.4	1191.5
102.5°	258.6	205.5	152.2	205.5	258.6	271.9	585.2	1002.9	1211.7	1273.8	1397.9
105°	287.0	242.0	196.9	242.0	287.0	298.3	601.5	1006.0	1208.2	1347.4	1625.7
107.5°	326.7	284.7	242.7	284.7	326.7	337.2	604.7	961.3	1139.6	1333.7	1721.9
110°	349.5	311.5	273.6	311.5	349.5	358.9	600.1	921.5	1082.3	1299.4	1733.3



TEST NUMBER: P935860

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	376.3	340.1	303.9	340.1	376.3	385.2	600.3	887.0	1030.3	1252.4	1696.5
115°	416.4	383.0	349.7	383.0	416.4	424.7	605.8	847.2	967.9	1181.8	1609.7
117.5°	455.5	425.3	395.0	425.3	455.5	463.1	617.1	822.3	924.9	1118.0	1504.2
120°	478.2	449.8	421.2	449.8	478.2	485.4	626.1	813.9	907.8	1084.2	1437.0
122.5°	504.5	475.7	447.0	475.7	504.5	511.7	639.4	809.6	894.7	1053.5	1371.2
125°	539.0	512.7	486.6	512.7	539.0	545.5	657.1	805.9	880.3	1015.2	1285.1
127.5°	571.4	545.0	518.6	545.0	571.4	578.1	674.8	803.8	868.3	984.2	1215.9
130°	592.6	564.2	535.8	564.2	592.6	599.8	687.8	805.1	863.7	966.9	1173.2
132.5°	610.5	582.0	553.5	582.0	610.5	617.6	698.3	805.9	859.7	952.0	1136.7
135°	631.6	605.8	579.8	605.8	631.6	638.2	709.7	805.1	852.8	930.2	1084.8
137.5°	658.1	632.4	606.7	632.4	658.1	664.5	726.9	810.1	851.7	917.1	1047.8
140°	676.4	652.8	629.1	652.8	676.4	682.3	737.5	811.0	847.7	904.1	1017.1
142.5°	689.9	668.1	646.2	668.1	689.9	695.4	746.2	813.8	847.7	897.3	996.5
145°	710.7	691.7	672.6	691.7	710.7	715.4	757.6	813.9	842.0	882.5	963.7
147.5°	736.0	717.5	698.8	717.5	736.0	740.7	774.4	819.5	842.0	873.9	937.7
150°	749.6	732.9	716.1	732.9	749.6	753.8	783.2	822.3	842.0	869.0	922.8
152.5°	759.2	746.5	733.8	746.5	759.2	762.4	788.9	824.3	842.0	865.0	911.1
155°	778.9	769.6	760.1	769.6	778.9	781.3	801.5	828.5	842.0	860.3	897.0
157.5°	797.8	788.8	779.6	788.8	797.8	800.1	814.1	832.7	842.0	856.2	884.7
160°	807.0	799.9	792.7	799.9	807.0	808.8	819.9	834.6	842.0	854.2	878.6
162.5°	816.6	811.2	805.9	811.2	816.6	817.9	825.9	836.7	842.0	852.3	872.9
165°	829.9	825.0	820.2	825.0	829.9	831.1	834.7	839.6	842.0	849.3	864.1
167.5°	837.9	835.7	833.4	835.7	837.9	838.5	841.5	845.7	847.7	852.5	862.2
170°	846.6	844.3	842.0	844.3	846.6	847.1	847.3	847.6	847.7	852.5	862.2
172.5°	847.6	847.0	846.6	847.0	847.6	847.7	847.7	847.7	847.7	851.5	859.1
175°	852.8	852.8	852.8	852.8	852.8	852.8	851.1	848.8	847.7	850.1	854.9
177.5°	852.8	852.8	852.8	852.8	852.8	852.8	851.5	849.8	848.9	850.8	854.6
180°	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8



TEST NUMBER: P935860
 CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	627.8	626.0	628.3	621.6	628.3	626.0	627.8	632.1	628.3	630.8	633.3
5°	550.8	547.8	538.0	529.9	538.0	547.8	550.8	563.7	569.9	581.0	595.8
7.5°	492.3	489.9	487.5	482.5	487.5	489.9	492.3	496.0	502.3	512.1	523.2
10°	479.4	480.0	483.7	483.2	483.7	480.0	479.4	478.2	476.4	478.2	485.0
12.5°	512.7	518.2	538.5	537.3	538.5	518.2	512.7	488.0	471.4	468.4	469.6
15°	550.8	552.6	556.9	557.6	556.9	552.6	550.8	541.0	491.2	469.6	462.8
17.5°	554.6	555.1	558.2	558.2	558.2	555.1	554.6	550.2	533.6	504.6	466.6
20°	551.4	552.6	558.9	560.1	558.9	552.6	551.4	545.9	536.7	526.2	497.3
22.5°	550.2	552.6	557.6	556.9	557.6	552.6	550.2	541.6	533.6	526.2	514.6
25°	544.1	544.1	544.7	545.3	544.7	544.1	544.1	537.3	521.3	519.4	512.7
27.5°	531.2	532.4	536.0	535.5	536.0	532.4	531.2	528.7	511.4	509.6	504.6
30°	519.4	518.2	515.1	512.7	515.1	518.2	519.4	515.7	498.5	493.6	494.8
32.5°	499.8	496.7	493.6	491.8	493.6	496.7	499.8	498.5	485.6	478.9	480.0
35°	476.4	477.0	476.4	474.5	476.4	477.0	476.4	477.6	469.6	463.4	462.8
37.5°	459.8	461.0	460.3	457.9	460.3	461.0	459.8	458.5	447.5	445.6	446.8
40°	442.5	443.2	442.5	440.7	442.5	443.2	442.5	440.0	424.7	425.3	429.6
42.5°	425.9	425.3	423.4	422.2	423.4	425.3	425.9	422.2	402.5	400.7	408.6
45°	406.8	407.5	403.7	401.9	403.7	407.5	406.8	404.3	384.1	379.1	384.7
47.5°	387.7	387.7	384.7	382.8	384.7	387.7	387.7	384.7	363.1	358.2	361.3
50°	367.4	366.8	362.5	361.8	362.5	366.8	367.4	365.6	342.9	338.5	338.5
52.5°	344.0	344.0	344.7	345.9	344.7	344.0	344.0	344.7	324.3	320.0	318.8
55°	323.8	324.3	328.6	329.9	328.6	324.3	323.8	323.8	305.2	300.9	298.5
57.5°	302.8	302.8	305.9	305.9	305.9	302.8	302.8	301.6	283.8	280.0	278.8
60°	278.8	280.0	282.5	281.9	282.5	280.0	278.8	277.6	262.2	259.7	255.4
62.5°	253.6	254.8	255.4	254.2	255.4	254.8	253.6	249.9	240.6	238.8	233.3
65°	227.1	228.3	229.0	227.7	229.0	228.3	227.1	225.3	218.5	215.4	210.5
67.5°	200.1	199.4	198.8	201.3	198.8	199.4	200.1	197.6	193.3	190.8	184.0
70°	172.3	172.3	171.7	173.0	171.7	172.3	172.3	170.5	168.0	166.2	160.0
72.5°	142.8	142.2	144.6	142.8	144.6	142.2	142.8	142.2	141.0	139.1	133.0
75°	113.9	115.1	113.9	115.7	113.9	115.1	113.9	114.4	113.9	112.6	108.3
77.5°	86.8	88.0	86.8	86.8	86.8	88.0	86.8	87.4	87.4	87.4	83.7
80°	61.6	60.9	60.9	60.3	60.9	60.9	61.6	61.6	62.1	60.9	59.7
82.5°	39.4	38.8	38.8	40.0	38.8	38.8	39.4	40.0	38.8	38.8	38.8
85°	21.6	22.1	20.9	20.9	20.9	22.1	21.6	20.3	21.6	21.6	20.9
87.5°	8.0	7.3	7.3	7.3	7.3	7.3	8.0	8.6	8.6	8.6	9.3
90°	21.7	21.7	21.7	21.7	21.7	21.7	21.7	29.0	38.6	43.5	37.4
92.5°	108.7	104.4	87.1	69.8	87.1	104.4	108.7	154.2	214.6	244.9	215.0
95°	369.2	356.1	303.7	251.3	303.7	356.1	369.2	484.8	639.0	716.1	604.8
97.5°	852.3	827.3	727.6	627.9	727.6	827.3	852.3	925.3	1022.8	1071.5	885.9
100°	1196.9	1167.1	1048.4	929.5	1048.4	1167.1	1196.9	1191.5	1184.4	1180.8	974.9
102.5°	1491.1	1465.7	1363.9	1262.1	1363.9	1465.7	1491.1	1397.9	1273.8	1211.7	1002.9
105°	1834.5	1820.8	1766.1	1711.4	1766.1	1820.8	1834.5	1625.7	1347.4	1208.2	1006.0
107.5°	2013.1	2016.4	2029.6	2042.8	2029.6	2016.4	2013.1	1721.9	1333.7	1139.6	961.3
110°	2058.8	2073.1	2130.1	2187.1	2130.1	2073.1	2058.8	1733.3	1299.4	1082.3	921.5



TEST NUMBER: P935860

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	2029.7	2051.5	2139.1	2226.5	2139.1	2051.5	2029.7	1696.5	1252.4	1030.3	887.0
115°	1930.6	1961.0	2082.3	2203.7	2082.3	1961.0	1930.6	1609.7	1181.8	967.9	847.2
117.5°	1793.8	1827.5	1962.0	2096.6	1962.0	1827.5	1793.8	1504.2	1118.0	924.9	822.3
120°	1701.7	1734.4	1865.1	1995.9	1865.1	1734.4	1701.7	1437.0	1084.2	907.8	813.9
122.5°	1609.5	1641.8	1770.8	1899.7	1770.8	1641.8	1609.5	1371.2	1053.5	894.7	809.6
125°	1487.6	1517.3	1636.1	1754.9	1636.1	1517.3	1487.6	1285.1	1015.2	880.3	805.9
127.5°	1389.8	1414.8	1515.0	1615.2	1515.0	1414.8	1389.8	1215.9	984.2	868.3	803.8
130°	1327.9	1351.0	1443.6	1536.2	1443.6	1351.0	1327.9	1173.2	966.9	863.7	805.1
132.5°	1275.2	1296.0	1378.8	1461.8	1378.8	1296.0	1275.2	1136.7	952.0	859.7	805.9
135°	1200.8	1218.7	1290.2	1361.7	1290.2	1218.7	1200.8	1084.8	930.2	852.8	805.1
137.5°	1145.9	1160.5	1219.1	1277.5	1219.1	1160.5	1145.9	1047.8	917.1	851.7	810.1
140°	1101.8	1115.5	1170.2	1224.8	1170.2	1115.5	1101.8	1017.1	904.1	847.7	811.0
142.5°	1071.0	1082.7	1129.8	1176.8	1129.8	1082.7	1071.0	996.5	897.3	847.7	813.8
145°	1024.5	1033.4	1069.1	1104.7	1069.1	1033.4	1024.5	963.7	882.5	842.0	813.9
147.5°	985.6	992.9	1022.5	1052.0	1022.5	992.9	985.6	937.7	873.9	842.0	819.5
150°	963.3	969.3	993.2	1017.1	993.2	969.3	963.3	922.8	869.0	842.0	822.3
152.5°	945.6	950.1	968.2	986.2	968.2	950.1	945.6	911.1	865.0	842.0	824.3
155°	924.4	927.4	939.4	951.3	939.4	927.4	924.4	897.0	860.3	842.0	828.5
157.5°	906.0	908.2	916.5	924.9	916.5	908.2	906.0	884.7	856.2	842.0	832.7
160°	896.9	898.1	902.9	907.8	902.9	898.1	896.9	878.6	854.2	842.0	834.6
162.5°	888.3	889.4	894.0	898.6	894.0	889.4	888.3	872.9	852.3	842.0	836.7
165°	875.1	876.3	881.2	886.0	881.2	876.3	875.1	864.1	849.3	842.0	839.6
167.5°	869.4	870.0	872.0	874.0	872.0	870.0	869.4	862.2	852.5	847.7	845.7
170°	869.4	869.4	869.4	869.4	869.4	869.4	869.4	862.2	852.5	847.7	847.6
172.5°	864.8	864.4	862.6	860.9	862.6	864.4	864.8	859.1	851.5	847.7	847.7
175°	858.6	858.6	858.6	858.6	858.6	858.6	858.6	854.9	850.1	847.7	848.8
177.5°	857.4	856.9	854.8	852.8	854.8	856.9	857.4	854.6	850.8	848.9	849.8
180°	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8



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CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	650.6	650.6	650.6	650.6	650.6
2.5°	642.6	645.6	647.4	649.9	656.1
5°	617.9	629.6	633.3	642.6	653.6
7.5°	563.7	599.4	609.3	631.5	648.7
10°	511.4	547.1	564.4	616.7	642.6
12.5°	485.0	505.9	517.6	590.8	633.9
15°	468.4	483.2	491.8	556.4	624.0
17.5°	455.5	465.9	472.1	522.5	610.5
20°	447.5	452.3	457.9	497.9	595.1
22.5°	441.9	438.8	443.2	480.7	574.2
25°	438.2	426.5	431.4	467.1	549.6
27.5°	441.3	415.4	417.3	454.8	523.7
30°	441.9	401.9	402.5	441.9	494.8
32.5°	437.6	387.7	388.4	425.9	462.2
35°	427.1	371.1	370.5	407.5	417.9
37.5°	413.0	353.3	353.3	387.1	369.3
40°	395.7	335.4	337.3	360.7	326.1
42.5°	374.8	316.3	318.8	325.6	294.2
45°	352.0	297.9	299.7	275.1	269.5
47.5°	326.8	278.8	279.4	228.3	261.5
50°	296.7	259.1	256.7	195.7	261.0
52.5°	270.2	237.6	230.2	177.2	236.9
55°	244.3	214.8	198.8	163.1	219.7
57.5°	221.5	185.3	169.9	146.5	216.0
60°	200.6	156.3	144.6	128.7	198.2
62.5°	183.4	134.8	132.3	116.4	179.7
65°	164.9	120.0	119.4	105.9	152.6
67.5°	147.1	110.1	109.6	96.0	116.4
70°	128.0	99.7	98.5	85.5	86.2
72.5°	108.3	88.0	86.8	76.9	71.4
75°	88.6	74.4	73.9	67.1	57.8
77.5°	69.6	59.1	60.3	54.1	42.5
80°	49.8	43.0	44.3	38.8	32.0
82.5°	33.2	28.4	29.5	24.6	21.6
85°	18.4	16.0	16.6	12.9	9.8
87.5°	8.6	7.3	7.3	5.0	3.1
90°	25.2	16.1	14.9	10.3	5.7
92.5°	155.3	110.5	100.8	61.8	22.9
95°	382.1	215.2	197.4	126.2	55.0
97.5°	514.7	236.4	220.7	157.8	95.0
100°	563.0	254.1	239.9	182.9	125.9
102.5°	585.2	271.9	258.6	205.5	152.2
105°	601.5	298.3	287.0	242.0	196.9
107.5°	604.7	337.2	326.7	284.7	242.7
110°	600.1	358.9	349.5	311.5	273.6



TEST NUMBER: P935860

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	600.3	385.2	376.3	340.1	303.9
115°	605.8	424.7	416.4	383.0	349.7
117.5°	617.1	463.1	455.5	425.3	395.0
120°	626.1	485.4	478.2	449.8	421.2
122.5°	639.4	511.7	504.5	475.7	447.0
125°	657.1	545.5	539.0	512.7	486.6
127.5°	674.8	578.1	571.4	545.0	518.6
130°	687.8	599.8	592.6	564.2	535.8
132.5°	698.3	617.6	610.5	582.0	553.5
135°	709.7	638.2	631.6	605.8	579.8
137.5°	726.9	664.5	658.1	632.4	606.7
140°	737.5	682.3	676.4	652.8	629.1
142.5°	746.2	695.4	689.9	668.1	646.2
145°	757.6	715.4	710.7	691.7	672.6
147.5°	774.4	740.7	736.0	717.5	698.8
150°	783.2	753.8	749.6	732.9	716.1
152.5°	788.9	762.4	759.2	746.5	733.8
155°	801.5	781.3	778.9	769.6	760.1
157.5°	814.1	800.1	797.8	788.8	779.6
160°	819.9	808.8	807.0	799.9	792.7
162.5°	825.9	817.9	816.6	811.2	805.9
165°	834.7	831.1	829.9	825.0	820.2
167.5°	841.5	838.5	837.9	835.7	833.4
170°	847.3	847.1	846.6	844.3	842.0
172.5°	847.7	847.7	847.6	847.0	846.6
175°	851.1	852.8	852.8	852.8	852.8
177.5°	851.5	852.8	852.8	852.8	852.8
180°	852.8	852.8	852.8	852.8	852.8



TEST NUMBER: P935860

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-5000K

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	7.83	8.50	8.99	9.64	11.25	10.63	11.29	11.79	12.44	14.04
	3H	8.29	8.89	9.46	10.04	11.66	11.95	12.54	13.11	13.69	15.32
	4H	8.47	9.04	9.65	10.19	11.82	12.38	12.94	13.55	14.09	15.72
	6H	8.58	9.10	9.76	10.26	11.89	12.64	13.16	13.82	14.32	15.95
	8H	8.58	9.07	9.76	10.24	11.87	12.71	13.20	13.89	14.37	16.00
	12H	8.54	9.01	9.73	10.17	11.82	12.73	13.20	13.92	14.37	16.02
4H	2H	8.83	9.40	10.01	10.55	12.17	11.01	11.58	12.20	12.73	14.36
	3H	9.84	10.31	11.02	11.49	13.12	12.49	12.96	13.68	14.14	15.78
	4H	10.11	10.54	11.29	11.70	13.36	13.00	13.44	14.19	14.60	16.26
	6H	10.22	10.59	11.41	11.78	13.42	13.35	13.72	14.54	14.91	16.55
	8H	10.22	10.57	11.41	11.75	13.41	13.45	13.79	14.64	14.97	16.63
	12H	10.18	10.49	11.38	11.68	13.35	13.49	13.80	14.69	14.99	16.66
8H	4H	10.54	10.88	11.73	12.06	13.73	13.11	13.46	14.30	14.64	16.30
	6H	10.79	11.08	12.00	12.30	13.96	13.53	13.82	14.74	15.04	16.70
	8H	10.83	11.08	12.05	12.28	13.96	13.68	13.93	14.89	15.12	16.80
	12H	10.81	11.03	12.02	12.22	13.93	13.76	13.98	14.98	15.18	16.89
12H	4H	10.53	10.85	11.74	12.04	13.70	13.07	13.38	14.27	14.57	16.24
	6H	10.85	11.10	12.06	12.30	13.98	13.53	13.78	14.74	14.98	16.66
	8H	10.91	11.12	12.12	12.32	14.03	13.68	13.89	14.89	15.09	16.80