

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: P935958

Luminaire Tested: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935958
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-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

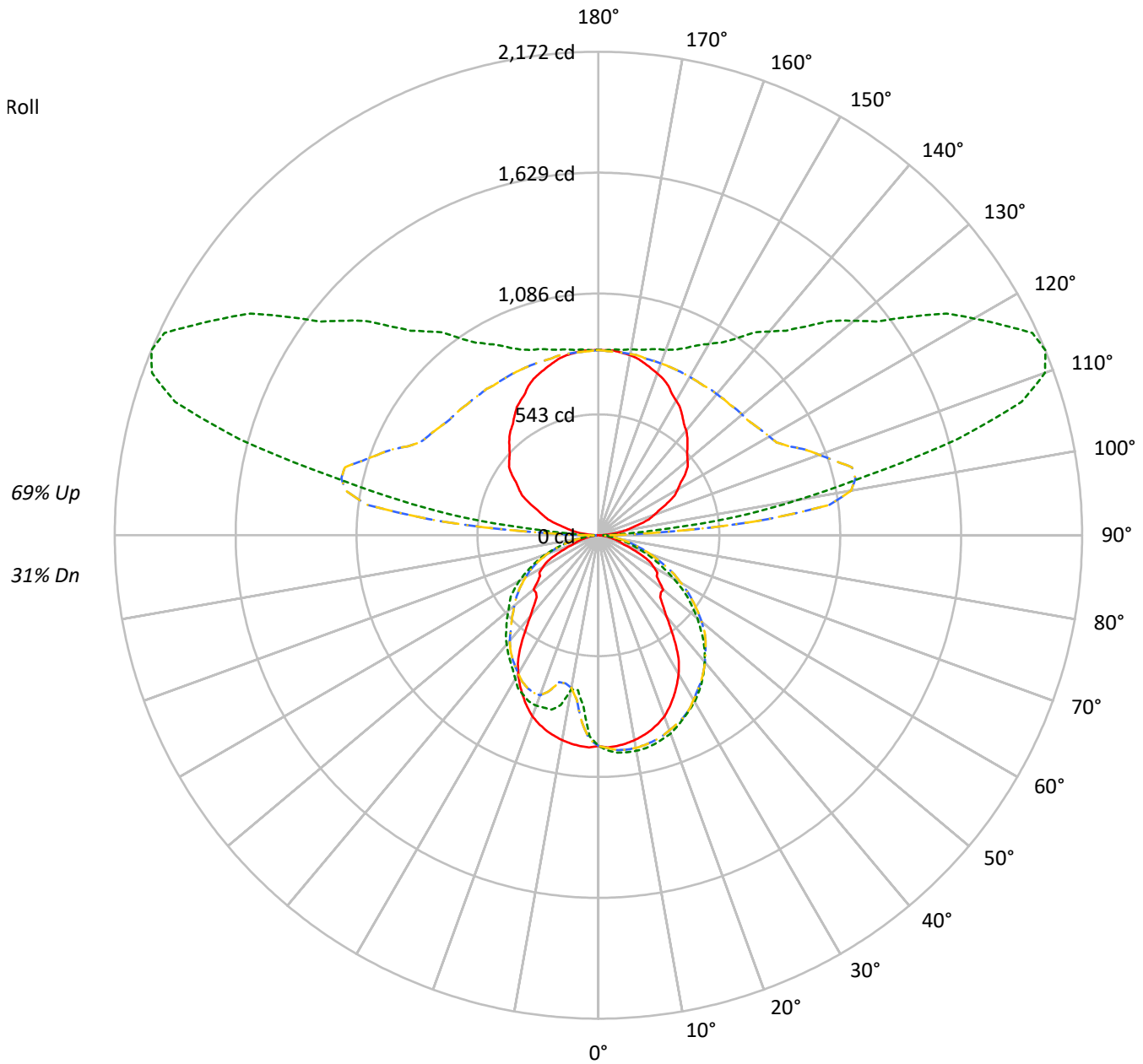
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7851.0 lumens
Efficiency: N/A
Efficacy: 123.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-3500K

Luminous Intensity Polar Plot



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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	34	34	33	26
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	30	29	28	22
3	78	69	61	56	70	62	56	51	49	45	42	38	35	32	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	33	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	23	21	19	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	24	21	18	18	15	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	20	17	14	15	13	11	9
10	44	33	26	21	40	30	23	19	24	19	16	19	15	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8782	8782	8782	8782
5°	8838	8866	8838	6971
10°	8769	8733	8769	6243
15°	8664	8544	8664	7134
20°	8473	8319	8473	7149
25°	8092	7992	8092	6997
30°	7604	7721	7604	6665
35°	6769	7378	6769	6300
40°	5631	6974	5631	6023
45°	5021	6501	5021	5706
50°	5323	5937	5323	5387
55°	4994	5329	4994	5203
60°	5128	4527	5128	4765
65°	4626	3740	4626	4183
70°	3181	2981	3181	3505
75°	2761	2204	2761	2638
80°	2181	1457	2181	1586
85°	1184	771	1184	655

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 7711 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	1.1
10°-20°	242.6	3.1
20°-30°	375.0	4.8
30°-40°	447.6	5.7
40°-50°	450.3	5.7
50°-60°	391.8	5.0
60°-70°	277.8	3.5
70°-80°	146.9	1.9
80°-90°	39.8	0.5
90°-100°	405.6	5.2
100°-110°	1066.3	13.6
110°-120°	1105.6	14.1
120°-130°	886.8	11.3
130°-140°	695.8	8.9
140°-150°	534.1	6.8
150°-160°	384.6	4.9
160°-170°	235.3	3.0
170°-180°	79.5	1.0
0°-30°	703.0	9.0
0°-40°	1150.6	14.7
0°-60°	1992.7	25.4
0°-90°	2457.2	31.3
90°-120°	2577.5	32.8
90°-150°	4694.3	59.8
90°-180°	5394.0	68.7
0°-180°	7851.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	946	946	946	946	946	
5°	951	980	951	771	951	90
15°	908	972	908	811	908	255
25°	800	906	800	793	800	367
35°	608	809	608	690	608	376
45°	392	666	392	585	392	314
55°	320	492	320	480	320	294
65°	222	296	222	331	222	212
75°	84	141	84	168	84	89
85°	14	36	14	30	14	19
90°	6	21	6	21	6	5
95°	54	245	54	245	54	60
105°	192	1670	192	1670	192	204
115°	341	2150	341	2150	341	337
125°	475	1712	475	1712	475	421
135°	566	1328	566	1328	566	438
145°	656	1078	656	1078	656	411
155°	742	928	742	928	742	341
165°	800	864	800	864	800	226
175°	832	838	832	838	832	79
180°	832	832	832	832	832	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4
2.5°	954.5	954.5	960.0	961.7	961.7	959.1	956.4	959.1	967.1	969.8	968.9
5°	950.9	958.2	968.0	969.8	971.6	970.7	968.9	970.7	979.7	981.4	982.3
7.5°	943.7	957.3	969.8	972.5	975.2	972.5	971.6	973.4	982.3	984.1	984.1
10°	934.8	953.6	968.0	969.8	972.5	969.8	969.8	973.4	982.3	984.1	985.0
12.5°	922.3	948.2	961.7	963.5	967.1	966.2	965.3	968.9	977.9	979.7	979.7
15°	907.9	938.4	950.9	952.7	959.1	957.3	957.3	960.8	970.7	973.4	972.5
17.5°	888.2	925.8	940.2	942.9	947.3	946.4	947.3	950.9	960.0	961.7	962.6
20°	865.9	908.8	925.8	928.5	933.0	933.0	933.0	937.5	946.4	950.0	950.0
22.5°	835.4	890.9	908.8	910.6	916.0	916.0	917.8	924.1	932.1	933.0	933.0
25°	799.6	871.2	886.4	891.8	897.2	899.9	902.6	906.1	908.8	907.9	908.8
27.5°	762.0	846.2	865.9	869.4	876.6	879.3	882.9	883.8	884.7	887.3	885.6
30°	719.9	811.2	840.8	844.4	856.0	857.8	854.2	856.0	860.5	862.3	864.1
32.5°	672.5	759.3	814.8	822.9	833.6	828.3	827.4	830.0	837.2	837.2	839.0
35°	608.0	719.0	790.7	797.8	805.9	799.6	803.2	804.1	808.6	811.2	810.3
37.5°	537.3	684.1	765.6	771.0	777.2	769.2	774.5	777.2	780.8	779.0	779.0
40°	474.6	629.5	736.0	739.6	745.0	738.7	744.1	745.9	747.7	745.9	745.0
42.5°	428.0	569.5	704.7	709.2	705.6	710.1	711.9	715.4	712.8	709.2	709.2
45°	392.2	553.4	670.7	676.1	670.7	677.8	680.5	680.5	672.5	670.7	669.8
47.5°	380.6	521.2	636.7	636.7	634.0	642.9	647.4	641.1	633.1	630.4	630.4
50°	379.7	485.3	590.1	586.5	599.1	609.8	605.3	599.1	592.8	582.9	582.9
52.5°	344.8	441.5	530.1	543.5	563.2	569.5	562.3	556.1	545.3	540.9	537.3
55°	319.7	395.8	475.5	502.4	523.0	531.0	517.6	511.3	495.2	492.5	490.7
57.5°	314.3	329.6	425.4	459.4	484.5	483.6	475.5	463.9	450.4	447.7	446.9
60°	288.3	238.2	371.6	411.9	437.9	435.2	428.0	417.3	404.8	403.0	401.2
62.5°	261.4	172.8	310.7	356.4	393.1	392.2	386.0	369.9	360.9	356.4	352.8
65°	222.0	145.0	221.1	296.3	349.3	351.1	337.6	326.0	316.0	310.7	309.8
67.5°	169.2	118.2	149.5	247.1	307.1	305.3	288.3	282.9	270.4	267.7	262.3
70°	125.3	78.8	103.9	200.5	265.9	261.4	248.0	241.7	230.1	223.8	220.2
72.5°	103.9	63.6	76.1	155.8	223.8	218.5	206.8	199.7	189.8	184.4	180.9
75°	84.2	67.1	58.2	115.5	181.7	178.2	167.4	160.3	152.2	145.0	145.9
77.5°	61.8	62.7	46.6	85.1	144.1	138.8	132.5	123.6	120.0	112.8	112.8
80°	46.6	49.2	34.9	58.2	103.9	103.9	98.5	92.2	85.9	82.4	82.4
82.5°	31.3	31.3	26.0	36.7	70.7	68.0	64.5	62.7	59.1	57.3	57.3
85°	14.3	17.9	16.1	22.4	38.5	40.3	40.3	38.5	37.6	35.8	36.7
87.5°	4.5	8.1	9.8	12.5	19.7	20.6	21.5	21.5	21.5	22.4	22.4
90°	5.6	10.0	14.5	15.7	24.6	36.5	42.4	37.7	28.3	21.2	21.2
92.5°	22.3	60.3	98.3	107.8	151.5	209.8	239.0	209.4	150.4	106.1	101.9
95°	53.6	123.1	192.6	210.0	372.8	590.0	698.6	623.4	473.0	360.2	347.4
97.5°	92.7	154.0	215.3	230.6	502.2	864.3	1045.4	997.8	902.7	831.5	807.1
100°	122.8	178.4	234.0	247.9	549.3	951.1	1152.0	1155.5	1162.5	1167.7	1138.7
102.5°	148.5	200.5	252.3	265.3	570.9	978.4	1182.2	1242.7	1363.8	1454.7	1429.9
105°	192.1	236.1	280.0	291.0	586.9	981.4	1178.8	1314.5	1586.0	1789.7	1776.4
107.5°	236.8	277.7	318.7	328.9	589.9	937.8	1111.8	1301.2	1679.9	1964.0	1967.2
110°	266.9	303.9	340.9	350.2	585.4	899.1	1055.9	1267.7	1691.1	2008.6	2022.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	296.5	331.8	367.1	375.9	585.6	865.3	1005.2	1221.8	1655.2	1980.2	2001.5
115°	341.2	373.7	406.2	414.4	591.0	826.6	944.3	1153.0	1570.5	1883.6	1913.2
117.5°	385.3	414.9	444.4	451.8	602.0	802.3	902.4	1090.8	1467.5	1750.1	1782.9
120°	410.9	438.8	466.5	473.5	610.9	794.1	885.6	1057.7	1402.0	1660.2	1692.1
122.5°	436.1	464.1	492.2	499.2	623.8	789.8	872.8	1027.8	1337.8	1570.3	1601.7
125°	474.7	500.2	525.8	532.2	641.0	786.3	858.9	990.5	1253.8	1451.3	1480.3
127.5°	505.9	531.7	557.5	564.0	658.3	784.2	847.1	960.2	1186.3	1355.9	1380.3
130°	522.7	550.4	578.2	585.2	671.0	785.5	842.7	943.3	1144.6	1295.5	1318.1
132.5°	540.0	567.8	595.6	602.5	681.2	786.3	838.7	928.8	1109.0	1244.1	1264.4
135°	565.7	591.0	616.2	622.6	692.4	785.5	832.0	907.5	1058.3	1171.5	1189.0
137.5°	591.9	617.0	642.0	648.3	709.2	790.4	830.9	894.7	1022.3	1118.0	1132.2
140°	613.7	636.8	659.9	665.7	719.5	791.2	827.0	882.1	992.3	1074.9	1088.3
142.5°	630.5	651.8	673.1	678.5	728.0	794.0	827.0	875.4	972.2	1044.8	1056.3
145°	656.2	674.8	693.3	698.0	739.2	794.1	821.4	861.0	940.2	999.5	1008.2
147.5°	681.8	700.0	718.0	722.6	755.6	799.5	821.4	852.6	914.8	961.6	968.7
150°	698.6	715.0	731.3	735.4	764.1	802.3	821.4	847.8	900.3	939.8	945.6
152.5°	715.9	728.3	740.7	743.8	769.7	804.2	821.4	843.9	888.9	922.5	926.9
155°	741.6	750.8	759.9	762.3	782.0	808.3	821.4	839.4	875.1	901.8	904.8
157.5°	760.6	769.5	778.4	780.6	794.2	812.4	821.4	835.3	863.1	883.9	886.0
160°	773.4	780.4	787.3	789.0	799.9	814.3	821.4	833.4	857.2	875.0	876.2
162.5°	786.3	791.5	796.6	798.0	805.8	816.3	821.4	831.5	851.6	866.7	867.7
165°	800.2	804.9	809.6	810.8	814.4	819.1	821.4	828.6	843.0	853.8	854.9
167.5°	813.0	815.3	817.5	818.0	821.0	825.0	827.0	831.7	841.1	848.2	848.8
170°	821.4	823.7	825.9	826.5	826.6	826.9	827.0	831.7	841.1	848.2	848.2
172.5°	825.9	826.4	826.9	827.0	827.0	827.0	827.0	830.8	838.2	843.7	843.3
175°	832.0	832.0	832.0	832.0	830.3	828.1	827.0	829.3	834.1	837.7	837.7
177.5°	832.0	832.0	832.0	832.0	830.8	829.1	828.2	830.0	833.7	836.5	836.0
180°	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4
2.5°	970.7	968.0	970.7	968.9	969.8	967.1	959.1	956.4	959.1	961.7	961.7
5°	982.3	980.5	982.3	982.3	981.4	979.7	970.7	968.9	970.7	971.6	969.8
7.5°	985.9	983.2	985.9	984.1	984.1	982.3	973.4	971.6	972.5	975.2	972.5
10°	985.9	983.2	985.9	985.0	984.1	982.3	973.4	969.8	969.8	972.5	969.8
12.5°	981.4	979.7	981.4	979.7	979.7	977.9	968.9	965.3	966.2	967.1	963.5
15°	974.3	971.6	974.3	972.5	973.4	970.7	960.8	957.3	957.3	959.1	952.7
17.5°	963.5	960.0	963.5	962.6	961.7	960.0	950.9	947.3	946.4	947.3	942.9
20°	950.9	948.2	950.9	950.0	950.0	946.4	937.5	933.0	933.0	933.0	928.5
22.5°	931.2	928.5	931.2	933.0	933.0	932.1	924.1	917.8	916.0	916.0	910.6
25°	908.8	906.1	908.8	908.8	907.9	908.8	906.1	902.6	899.9	897.2	891.8
27.5°	887.3	885.6	887.3	885.6	887.3	884.7	883.8	882.9	879.3	876.6	869.4
30°	865.9	864.1	865.9	864.1	862.3	860.5	856.0	854.2	857.8	856.0	844.4
32.5°	839.0	837.2	839.0	839.0	837.2	837.2	830.0	827.4	828.3	833.6	822.9
35°	811.2	808.6	811.2	810.3	811.2	808.6	804.1	803.2	799.6	805.9	797.8
37.5°	779.0	776.3	779.0	779.0	779.0	780.8	777.2	774.5	769.2	777.2	771.0
40°	745.9	742.3	745.9	745.0	745.9	747.7	745.9	744.1	738.7	745.0	739.6
42.5°	708.3	707.4	708.3	709.2	709.2	712.8	715.4	711.9	710.1	705.6	709.2
45°	668.0	666.2	668.0	669.8	670.7	672.5	680.5	680.5	677.8	670.7	676.1
47.5°	625.0	620.5	625.0	630.4	630.4	633.1	641.1	647.4	642.9	634.0	636.7
50°	579.4	580.3	579.4	582.9	582.9	592.8	599.1	605.3	609.8	599.1	586.5
52.5°	534.6	533.7	534.6	537.3	540.9	545.3	556.1	562.3	569.5	563.2	543.5
55°	489.8	491.6	489.8	490.7	492.5	495.2	511.3	517.6	531.0	523.0	502.4
57.5°	445.1	442.4	445.1	446.9	447.7	450.4	463.9	475.5	483.6	484.5	459.4
60°	393.1	389.6	393.1	401.2	403.0	404.8	417.3	428.0	435.2	437.9	411.9
62.5°	347.5	341.2	347.5	352.8	356.4	360.9	369.9	386.0	392.2	393.1	356.4
65°	299.0	296.3	299.0	309.8	310.7	316.0	326.0	337.6	351.1	349.3	296.3
67.5°	255.2	255.2	255.2	262.3	267.7	270.4	282.9	288.3	305.3	307.1	247.1
70°	214.9	214.0	214.9	220.2	223.8	230.1	241.7	248.0	261.4	265.9	200.5
72.5°	176.4	175.5	176.4	180.9	184.4	189.8	199.7	206.8	218.5	223.8	155.8
75°	142.4	140.6	142.4	145.9	145.0	152.2	160.3	167.4	178.2	181.7	115.5
77.5°	109.2	109.2	109.2	112.8	112.8	120.0	123.6	132.5	138.8	144.1	85.1
80°	81.5	80.6	81.5	82.4	82.4	85.9	92.2	98.5	103.9	103.9	58.2
82.5°	57.3	55.5	57.3	57.3	57.3	59.1	62.7	64.5	68.0	70.7	36.7
85°	35.8	35.8	35.8	36.7	35.8	37.6	38.5	40.3	40.3	38.5	22.4
87.5°	23.3	22.4	23.3	22.4	22.4	21.5	21.5	21.5	20.6	19.7	12.5
90°	21.2	21.2	21.2	21.2	21.2	28.3	37.7	42.4	36.5	24.6	15.7
92.5°	85.0	68.1	85.0	101.9	106.1	150.4	209.4	239.0	209.8	151.5	107.8
95°	296.3	245.1	296.3	347.4	360.2	473.0	623.4	698.6	590.0	372.8	210.0
97.5°	709.9	612.6	709.9	807.1	831.5	902.7	997.8	1045.4	864.3	502.2	230.6
100°	1022.8	906.9	1022.8	1138.7	1167.7	1162.5	1155.5	1152.0	951.1	549.3	247.9
102.5°	1330.6	1231.3	1330.6	1429.9	1454.7	1363.8	1242.7	1182.2	978.4	570.9	265.3
105°	1723.0	1669.7	1723.0	1776.4	1789.7	1586.0	1314.5	1178.8	981.4	586.9	291.0
107.5°	1980.1	1993.0	1980.1	1967.2	1964.0	1679.9	1301.2	1111.8	937.8	589.9	328.9
110°	2078.1	2133.7	2078.1	2022.5	2008.6	1691.1	1267.7	1055.9	899.1	585.4	350.2



TEST NUMBER: P935958

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2086.9	2172.2	2086.9	2001.5	1980.2	1655.2	1221.8	1005.2	865.3	585.6	375.9
115°	2031.6	2149.9	2031.6	1913.2	1883.6	1570.5	1153.0	944.3	826.6	591.0	414.4
117.5°	1914.2	2045.4	1914.2	1782.9	1750.1	1467.5	1090.8	902.4	802.3	602.0	451.8
120°	1819.6	1947.2	1819.6	1692.1	1660.2	1402.0	1057.7	885.6	794.1	610.9	473.5
122.5°	1727.6	1853.4	1727.6	1601.7	1570.3	1337.8	1027.8	872.8	789.8	623.8	499.2
125°	1596.2	1712.1	1596.2	1480.3	1451.3	1253.8	990.5	858.9	786.3	641.0	532.2
127.5°	1478.1	1575.8	1478.1	1380.3	1355.9	1186.3	960.2	847.1	784.2	658.3	564.0
130°	1408.4	1498.8	1408.4	1318.1	1295.5	1144.6	943.3	842.7	785.5	671.0	585.2
132.5°	1345.2	1426.1	1345.2	1264.4	1244.1	1109.0	928.8	838.7	786.3	681.2	602.5
135°	1258.7	1328.5	1258.7	1189.0	1171.5	1058.3	907.5	832.0	785.5	692.4	622.6
137.5°	1189.3	1246.4	1189.3	1132.2	1118.0	1022.3	894.7	830.9	790.4	709.2	648.3
140°	1141.6	1195.0	1141.6	1088.3	1074.9	992.3	882.1	827.0	791.2	719.5	665.7
142.5°	1102.2	1148.1	1102.2	1056.3	1044.8	972.2	875.4	827.0	794.0	728.0	678.5
145°	1043.0	1077.8	1043.0	1008.2	999.5	940.2	861.0	821.4	794.1	739.2	698.0
147.5°	997.6	1026.4	997.6	968.7	961.6	914.8	852.6	821.4	799.5	755.6	722.6
150°	969.0	992.3	969.0	945.6	939.8	900.3	847.8	821.4	802.3	764.1	735.4
152.5°	944.6	962.1	944.6	926.9	922.5	888.9	843.9	821.4	804.2	769.7	743.8
155°	916.4	928.1	916.4	904.8	901.8	875.1	839.4	821.4	808.3	782.0	762.3
157.5°	894.1	902.4	894.1	886.0	883.9	863.1	835.3	821.4	812.4	794.2	780.6
160°	880.9	885.6	880.9	876.2	875.0	857.2	833.4	821.4	814.3	799.9	789.0
162.5°	872.2	876.7	872.2	867.7	866.7	851.6	831.5	821.4	816.3	805.8	798.0
165°	859.7	864.4	859.7	854.9	853.8	843.0	828.6	821.4	819.1	814.4	810.8
167.5°	850.7	852.7	850.7	848.8	848.2	841.1	831.7	827.0	825.0	821.0	818.0
170°	848.2	848.2	848.2	848.2	848.2	841.1	831.7	827.0	826.9	826.6	826.5
172.5°	841.6	839.9	841.6	843.3	843.7	838.2	830.8	827.0	827.0	827.0	827.0
175°	837.7	837.7	837.7	837.7	837.7	834.1	829.3	827.0	828.1	830.3	832.0
177.5°	834.0	832.0	834.0	836.0	836.5	833.7	830.0	828.2	829.1	830.8	832.0
180°	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0



TEST NUMBER: P935958

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4
2.5°	960.0	954.5	954.5	945.5	942.0	939.3	934.8	921.4	917.8	914.2	919.6
5°	968.0	958.2	950.9	934.8	921.4	916.0	899.0	866.8	845.3	829.1	820.2
7.5°	969.8	957.3	943.7	918.7	886.4	872.1	820.2	761.1	745.0	730.7	721.7
10°	968.0	953.6	934.8	897.2	821.1	796.0	744.1	705.6	695.7	693.1	695.7
12.5°	961.7	948.2	922.3	859.6	753.0	736.0	705.6	683.2	681.4	685.9	710.1
15°	950.9	938.4	907.9	809.5	715.4	702.9	681.4	673.4	683.2	714.5	787.1
17.5°	940.2	925.8	888.2	760.2	686.8	677.8	662.6	678.7	734.2	776.3	800.5
20°	925.8	908.8	865.9	724.4	666.2	658.1	651.0	723.5	765.6	780.8	794.2
22.5°	908.8	890.9	835.4	699.3	644.7	638.4	642.9	748.6	765.6	776.3	788.0
25°	886.4	871.2	799.6	679.6	627.7	620.5	637.6	745.9	755.7	758.4	781.7
27.5°	865.9	846.2	762.0	661.7	607.1	604.4	642.0	734.2	741.4	744.1	769.2
30°	840.8	811.2	719.9	642.9	585.6	584.7	642.9	719.9	718.1	725.3	750.4
32.5°	814.8	759.3	672.5	619.6	565.0	564.1	636.7	698.4	696.6	706.5	725.3
35°	790.7	719.0	608.0	592.8	539.1	540.0	621.4	673.4	674.3	683.2	694.9
37.5°	765.6	684.1	537.3	563.2	514.0	514.0	600.8	650.1	648.3	651.0	667.1
40°	736.0	629.5	474.6	524.7	490.7	488.0	575.8	625.0	618.8	617.9	640.2
42.5°	704.7	569.5	428.0	473.7	463.9	460.3	545.3	594.6	582.9	585.6	614.3
45°	670.7	553.4	392.2	400.3	436.1	433.4	512.2	559.7	551.6	558.8	588.3
47.5°	636.7	521.2	380.6	332.3	406.6	405.7	475.5	525.6	521.2	528.3	559.7
50°	590.1	485.3	379.7	284.7	373.4	377.0	431.6	492.5	492.5	498.8	531.9
52.5°	530.1	441.5	344.8	257.8	334.9	345.7	393.1	463.9	465.7	471.9	501.5
55°	475.5	395.8	319.7	237.3	289.2	312.5	355.5	434.3	437.9	444.2	471.0
57.5°	425.4	329.6	314.3	213.1	247.1	269.5	322.4	405.7	407.5	412.8	438.8
60°	371.6	238.2	288.3	187.1	210.4	227.4	291.9	371.6	377.9	381.5	403.9
62.5°	310.7	172.8	261.4	169.2	192.5	196.1	266.8	339.4	347.5	350.2	363.6
65°	221.1	145.0	222.0	154.0	173.7	174.6	239.9	306.2	313.4	317.8	327.8
67.5°	149.5	118.2	169.2	139.7	159.4	160.3	214.0	267.7	277.5	281.1	287.4
70°	103.9	78.8	125.3	124.4	143.2	145.0	186.2	232.8	241.7	244.4	248.0
72.5°	76.1	63.6	103.9	111.9	126.2	128.0	157.6	193.4	202.3	205.0	206.8
75°	58.2	67.1	84.2	97.6	107.4	108.3	128.9	157.6	163.8	165.6	166.5
77.5°	46.6	62.7	61.8	78.8	87.7	85.9	101.2	121.8	127.1	127.1	127.1
80°	34.9	49.2	46.6	56.4	64.5	62.7	72.5	86.8	88.6	90.4	89.5
82.5°	26.0	31.3	31.3	35.8	43.0	41.2	48.3	56.4	56.4	56.4	58.2
85°	16.1	17.9	14.3	18.8	24.2	23.3	26.9	30.4	31.3	31.3	29.5
87.5°	9.8	8.1	4.5	7.2	10.7	10.7	12.5	13.4	12.5	12.5	12.5
90°	14.5	10.0	5.6	10.0	14.5	15.7	24.6	36.5	42.4	37.7	28.3
92.5°	98.3	60.3	22.3	60.3	98.3	107.8	151.5	209.8	239.0	209.4	150.4
95°	192.6	123.1	53.6	123.1	192.6	210.0	372.8	590.0	698.6	623.4	473.0
97.5°	215.3	154.0	92.7	154.0	215.3	230.6	502.2	864.3	1045.4	997.8	902.7
100°	234.0	178.4	122.8	178.4	234.0	247.9	549.3	951.1	1152.0	1155.5	1162.5
102.5°	252.3	200.5	148.5	200.5	252.3	265.3	570.9	978.4	1182.2	1242.7	1363.8
105°	280.0	236.1	192.1	236.1	280.0	291.0	586.9	981.4	1178.8	1314.5	1586.0
107.5°	318.7	277.7	236.8	277.7	318.7	328.9	589.9	937.8	1111.8	1301.2	1679.9
110°	340.9	303.9	266.9	303.9	340.9	350.2	585.4	899.1	1055.9	1267.7	1691.1



TEST NUMBER: P935958

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	367.1	331.8	296.5	331.8	367.1	375.9	585.6	865.3	1005.2	1221.8	1655.2
115°	406.2	373.7	341.2	373.7	406.2	414.4	591.0	826.6	944.3	1153.0	1570.5
117.5°	444.4	414.9	385.3	414.9	444.4	451.8	602.0	802.3	902.4	1090.8	1467.5
120°	466.5	438.8	410.9	438.8	466.5	473.5	610.9	794.1	885.6	1057.7	1402.0
122.5°	492.2	464.1	436.1	464.1	492.2	499.2	623.8	789.8	872.8	1027.8	1337.8
125°	525.8	500.2	474.7	500.2	525.8	532.2	641.0	786.3	858.9	990.5	1253.8
127.5°	557.5	531.7	505.9	531.7	557.5	564.0	658.3	784.2	847.1	960.2	1186.3
130°	578.2	550.4	522.7	550.4	578.2	585.2	671.0	785.5	842.7	943.3	1144.6
132.5°	595.6	567.8	540.0	567.8	595.6	602.5	681.2	786.3	838.7	928.8	1109.0
135°	616.2	591.0	565.7	591.0	616.2	622.6	692.4	785.5	832.0	907.5	1058.3
137.5°	642.0	617.0	591.9	617.0	642.0	648.3	709.2	790.4	830.9	894.7	1022.3
140°	659.9	636.8	613.7	636.8	659.9	665.7	719.5	791.2	827.0	882.1	992.3
142.5°	673.1	651.8	630.5	651.8	673.1	678.5	728.0	794.0	827.0	875.4	972.2
145°	693.3	674.8	656.2	674.8	693.3	698.0	739.2	794.1	821.4	861.0	940.2
147.5°	718.0	700.0	681.8	700.0	718.0	722.6	755.6	799.5	821.4	852.6	914.8
150°	731.3	715.0	698.6	715.0	731.3	735.4	764.1	802.3	821.4	847.8	900.3
152.5°	740.7	728.3	715.9	728.3	740.7	743.8	769.7	804.2	821.4	843.9	888.9
155°	759.9	750.8	741.6	750.8	759.9	762.3	782.0	808.3	821.4	839.4	875.1
157.5°	778.4	769.5	760.6	769.5	778.4	780.6	794.2	812.4	821.4	835.3	863.1
160°	787.3	780.4	773.4	780.4	787.3	789.0	799.9	814.3	821.4	833.4	857.2
162.5°	796.6	791.5	786.3	791.5	796.6	798.0	805.8	816.3	821.4	831.5	851.6
165°	809.6	804.9	800.2	804.9	809.6	810.8	814.4	819.1	821.4	828.6	843.0
167.5°	817.5	815.3	813.0	815.3	817.5	818.0	821.0	825.0	827.0	831.7	841.1
170°	825.9	823.7	821.4	823.7	825.9	826.5	826.6	826.9	827.0	831.7	841.1
172.5°	826.9	826.4	825.9	826.4	826.9	827.0	827.0	827.0	827.0	830.8	838.2
175°	832.0	832.0	832.0	832.0	832.0	832.0	830.3	828.1	827.0	829.3	834.1
177.5°	832.0	832.0	832.0	832.0	832.0	832.0	830.8	829.1	828.2	830.0	833.7
180°	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0



TEST NUMBER: P935958

CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4	946.4
2.5°	913.3	910.6	914.2	904.4	914.2	910.6	913.3	919.6	914.2	917.8	921.4
5°	801.4	796.9	782.6	771.0	782.6	796.9	801.4	820.2	829.1	845.3	866.8
7.5°	716.3	712.8	709.2	702.0	709.2	712.8	716.3	721.7	730.7	745.0	761.1
10°	697.5	698.4	703.8	702.9	703.8	698.4	697.5	695.7	693.1	695.7	705.6
12.5°	745.9	753.9	783.5	781.7	783.5	753.9	745.9	710.1	685.9	681.4	683.2
15°	801.4	804.1	810.3	811.2	810.3	804.1	801.4	787.1	714.5	683.2	673.4
17.5°	806.8	807.7	812.1	812.1	812.1	807.7	806.8	800.5	776.3	734.2	678.7
20°	802.3	804.1	813.0	814.8	813.0	804.1	802.3	794.2	780.8	765.6	723.5
22.5°	800.5	804.1	811.2	810.3	811.2	804.1	800.5	788.0	776.3	765.6	748.6
25°	791.5	791.5	792.4	793.3	792.4	791.5	791.5	781.7	758.4	755.7	745.9
27.5°	772.7	774.5	779.9	779.0	779.9	774.5	772.7	769.2	744.1	741.4	734.2
30°	755.7	753.9	749.5	745.9	749.5	753.9	755.7	750.4	725.3	718.1	719.9
32.5°	727.1	722.6	718.1	715.4	718.1	722.6	727.1	725.3	706.5	696.6	698.4
35°	693.1	694.0	693.1	690.4	693.1	694.0	693.1	694.9	683.2	674.3	673.4
37.5°	668.9	670.7	669.8	666.2	669.8	670.7	668.9	667.1	651.0	648.3	650.1
40°	643.8	644.7	643.8	641.1	643.8	644.7	643.8	640.2	617.9	618.8	625.0
42.5°	619.6	618.8	616.1	614.3	616.1	618.8	619.6	614.3	585.6	582.9	594.6
45°	591.9	592.8	587.4	584.7	587.4	592.8	591.9	588.3	558.8	551.6	559.7
47.5°	564.1	564.1	559.7	557.0	559.7	564.1	564.1	559.7	528.3	521.2	525.6
50°	534.6	533.7	527.4	526.5	527.4	533.7	534.6	531.9	498.8	492.5	492.5
52.5°	500.6	500.6	501.5	503.3	501.5	500.6	500.6	501.5	471.9	465.7	463.9
55°	471.0	471.9	478.2	480.0	478.2	471.9	471.0	471.0	444.2	437.9	434.3
57.5°	440.6	440.6	445.1	445.1	445.1	440.6	440.6	438.8	412.8	407.5	405.7
60°	405.7	407.5	411.0	410.1	411.0	407.5	405.7	403.9	381.5	377.9	371.6
62.5°	369.0	370.7	371.6	369.9	371.6	370.7	369.0	363.6	350.2	347.5	339.4
65°	330.5	332.3	333.1	331.4	333.1	332.3	330.5	327.8	317.8	313.4	306.2
67.5°	291.0	290.1	289.2	292.8	289.2	290.1	291.0	287.4	281.1	277.5	267.7
70°	250.7	250.7	249.8	251.6	249.8	250.7	250.7	248.0	244.4	241.7	232.8
72.5°	207.7	206.8	210.4	207.7	210.4	206.8	207.7	206.8	205.0	202.3	193.4
75°	165.6	167.4	165.6	168.3	165.6	167.4	165.6	166.5	165.6	163.8	157.6
77.5°	126.2	128.0	126.2	126.2	126.2	128.0	126.2	127.1	127.1	127.1	121.8
80°	89.5	88.6	88.6	87.7	88.6	88.6	89.5	89.5	90.4	88.6	86.8
82.5°	57.3	56.4	56.4	58.2	56.4	56.4	57.3	58.2	56.4	56.4	56.4
85°	31.3	32.2	30.4	30.4	30.4	32.2	31.3	29.5	31.3	31.3	30.4
87.5°	11.6	10.7	10.7	10.7	10.7	10.7	11.6	12.5	12.5	12.5	13.4
90°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	28.3	37.7	42.4	36.5
92.5°	106.1	101.9	85.0	68.1	85.0	101.9	106.1	150.4	209.4	239.0	209.8
95°	360.2	347.4	296.3	245.1	296.3	347.4	360.2	473.0	623.4	698.6	590.0
97.5°	831.5	807.1	709.9	612.6	709.9	807.1	831.5	902.7	997.8	1045.4	864.3
100°	1167.7	1138.7	1022.8	906.9	1022.8	1138.7	1167.7	1162.5	1155.5	1152.0	951.1
102.5°	1454.7	1429.9	1330.6	1231.3	1330.6	1429.9	1454.7	1363.8	1242.7	1182.2	978.4
105°	1789.7	1776.4	1723.0	1669.7	1723.0	1776.4	1789.7	1586.0	1314.5	1178.8	981.4
107.5°	1964.0	1967.2	1980.1	1993.0	1980.1	1967.2	1964.0	1679.9	1301.2	1111.8	937.8
110°	2008.6	2022.5	2078.1	2133.7	2078.1	2022.5	2008.6	1691.1	1267.7	1055.9	899.1



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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1980.2	2001.5	2086.9	2172.2	2086.9	2001.5	1980.2	1655.2	1221.8	1005.2	865.3
115°	1883.6	1913.2	2031.6	2149.9	2031.6	1913.2	1883.6	1570.5	1153.0	944.3	826.6
117.5°	1750.1	1782.9	1914.2	2045.4	1914.2	1782.9	1750.1	1467.5	1090.8	902.4	802.3
120°	1660.2	1692.1	1819.6	1947.2	1819.6	1692.1	1660.2	1402.0	1057.7	885.6	794.1
122.5°	1570.3	1601.7	1727.6	1853.4	1727.6	1601.7	1570.3	1337.8	1027.8	872.8	789.8
125°	1451.3	1480.3	1596.2	1712.1	1596.2	1480.3	1451.3	1253.8	990.5	858.9	786.3
127.5°	1355.9	1380.3	1478.1	1575.8	1478.1	1380.3	1355.9	1186.3	960.2	847.1	784.2
130°	1295.5	1318.1	1408.4	1498.8	1408.4	1318.1	1295.5	1144.6	943.3	842.7	785.5
132.5°	1244.1	1264.4	1345.2	1426.1	1345.2	1264.4	1244.1	1109.0	928.8	838.7	786.3
135°	1171.5	1189.0	1258.7	1328.5	1258.7	1189.0	1171.5	1058.3	907.5	832.0	785.5
137.5°	1118.0	1132.2	1189.3	1246.4	1189.3	1132.2	1118.0	1022.3	894.7	830.9	790.4
140°	1074.9	1088.3	1141.6	1195.0	1141.6	1088.3	1074.9	992.3	882.1	827.0	791.2
142.5°	1044.8	1056.3	1102.2	1148.1	1102.2	1056.3	1044.8	972.2	875.4	827.0	794.0
145°	999.5	1008.2	1043.0	1077.8	1043.0	1008.2	999.5	940.2	861.0	821.4	794.1
147.5°	961.6	968.7	997.6	1026.4	997.6	968.7	961.6	914.8	852.6	821.4	799.5
150°	939.8	945.6	969.0	992.3	969.0	945.6	939.8	900.3	847.8	821.4	802.3
152.5°	922.5	926.9	944.6	962.1	944.6	926.9	922.5	888.9	843.9	821.4	804.2
155°	901.8	904.8	916.4	928.1	916.4	904.8	901.8	875.1	839.4	821.4	808.3
157.5°	883.9	886.0	894.1	902.4	894.1	886.0	883.9	863.1	835.3	821.4	812.4
160°	875.0	876.2	880.9	885.6	880.9	876.2	875.0	857.2	833.4	821.4	814.3
162.5°	866.7	867.7	872.2	876.7	872.2	867.7	866.7	851.6	831.5	821.4	816.3
165°	853.8	854.9	859.7	864.4	859.7	854.9	853.8	843.0	828.6	821.4	819.1
167.5°	848.2	848.8	850.7	852.7	850.7	848.8	848.2	841.1	831.7	827.0	825.0
170°	848.2	848.2	848.2	848.2	848.2	848.2	848.2	841.1	831.7	827.0	826.9
172.5°	843.7	843.3	841.6	839.9	841.6	843.3	843.7	838.2	830.8	827.0	827.0
175°	837.7	837.7	837.7	837.7	837.7	837.7	837.7	834.1	829.3	827.0	828.1
177.5°	836.5	836.0	834.0	832.0	834.0	836.0	836.5	833.7	830.0	828.2	829.1
180°	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	946.4	946.4	946.4	946.4	946.4
2.5°	934.8	939.3	942.0	945.5	954.5
5°	899.0	916.0	921.4	934.8	950.9
7.5°	820.2	872.1	886.4	918.7	943.7
10°	744.1	796.0	821.1	897.2	934.8
12.5°	705.6	736.0	753.0	859.6	922.3
15°	681.4	702.9	715.4	809.5	907.9
17.5°	662.6	677.8	686.8	760.2	888.2
20°	651.0	658.1	666.2	724.4	865.9
22.5°	642.9	638.4	644.7	699.3	835.4
25°	637.6	620.5	627.7	679.6	799.6
27.5°	642.0	604.4	607.1	661.7	762.0
30°	642.9	584.7	585.6	642.9	719.9
32.5°	636.7	564.1	565.0	619.6	672.5
35°	621.4	540.0	539.1	592.8	608.0
37.5°	600.8	514.0	514.0	563.2	537.3
40°	575.8	488.0	490.7	524.7	474.6
42.5°	545.3	460.3	463.9	473.7	428.0
45°	512.2	433.4	436.1	400.3	392.2
47.5°	475.5	405.7	406.6	332.3	380.6
50°	431.6	377.0	373.4	284.7	379.7
52.5°	393.1	345.7	334.9	257.8	344.8
55°	355.5	312.5	289.2	237.3	319.7
57.5°	322.4	269.5	247.1	213.1	314.3
60°	291.9	227.4	210.4	187.1	288.3
62.5°	266.8	196.1	192.5	169.2	261.4
65°	239.9	174.6	173.7	154.0	222.0
67.5°	214.0	160.3	159.4	139.7	169.2
70°	186.2	145.0	143.2	124.4	125.3
72.5°	157.6	128.0	126.2	111.9	103.9
75°	128.9	108.3	107.4	97.6	84.2
77.5°	101.2	85.9	87.7	78.8	61.8
80°	72.5	62.7	64.5	56.4	46.6
82.5°	48.3	41.2	43.0	35.8	31.3
85°	26.9	23.3	24.2	18.8	14.3
87.5°	12.5	10.7	10.7	7.2	4.5
90°	24.6	15.7	14.5	10.0	5.6
92.5°	151.5	107.8	98.3	60.3	22.3
95°	372.8	210.0	192.6	123.1	53.6
97.5°	502.2	230.6	215.3	154.0	92.7
100°	549.3	247.9	234.0	178.4	122.8
102.5°	570.9	265.3	252.3	200.5	148.5
105°	586.9	291.0	280.0	236.1	192.1
107.5°	589.9	328.9	318.7	277.7	236.8
110°	585.4	350.2	340.9	303.9	266.9



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CATALOG NUMBER: SQ4-FA-150U-075D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	585.6	375.9	367.1	331.8	296.5
115°	591.0	414.4	406.2	373.7	341.2
117.5°	602.0	451.8	444.4	414.9	385.3
120°	610.9	473.5	466.5	438.8	410.9
122.5°	623.8	499.2	492.2	464.1	436.1
125°	641.0	532.2	525.8	500.2	474.7
127.5°	658.3	564.0	557.5	531.7	505.9
130°	671.0	585.2	578.2	550.4	522.7
132.5°	681.2	602.5	595.6	567.8	540.0
135°	692.4	622.6	616.2	591.0	565.7
137.5°	709.2	648.3	642.0	617.0	591.9
140°	719.5	665.7	659.9	636.8	613.7
142.5°	728.0	678.5	673.1	651.8	630.5
145°	739.2	698.0	693.3	674.8	656.2
147.5°	755.6	722.6	718.0	700.0	681.8
150°	764.1	735.4	731.3	715.0	698.6
152.5°	769.7	743.8	740.7	728.3	715.9
155°	782.0	762.3	759.9	750.8	741.6
157.5°	794.2	780.6	778.4	769.5	760.6
160°	799.9	789.0	787.3	780.4	773.4
162.5°	805.8	798.0	796.6	791.5	786.3
165°	814.4	810.8	809.6	804.9	800.2
167.5°	821.0	818.0	817.5	815.3	813.0
170°	826.6	826.5	825.9	823.7	821.4
172.5°	827.0	827.0	826.9	826.4	825.9
175°	830.3	832.0	832.0	832.0	832.0
177.5°	830.8	832.0	832.0	832.0	832.0
180°	832.0	832.0	832.0	832.0	832.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	10.30	11.02	11.41	12.12	13.63	13.10	13.82	14.20	14.92	16.43
	3H	10.77	11.41	11.88	12.52	14.05	14.43	15.07	15.54	16.17	17.71
	4H	10.95	11.56	12.07	12.67	14.21	14.86	15.46	15.98	16.57	18.11
	6H	11.06	11.62	12.19	12.74	14.28	15.13	15.68	16.26	16.80	18.35
	8H	11.06	11.59	12.20	12.72	14.26	15.19	15.72	16.32	16.85	18.39
	12H	11.03	11.53	12.17	12.65	14.22	15.22	15.72	16.36	16.85	18.41
4H	2H	11.31	11.92	12.44	13.03	14.56	13.49	14.10	14.62	15.21	16.75
	3H	12.32	12.83	13.46	13.96	15.51	14.98	15.48	16.11	16.62	18.17
	4H	12.59	13.06	13.73	14.18	15.75	15.49	15.96	16.63	17.08	18.65
	6H	12.71	13.11	13.85	14.26	15.82	15.84	16.24	16.98	17.39	18.95
	8H	12.71	13.08	13.86	14.22	15.80	15.94	16.31	17.08	17.45	19.03
	12H	12.67	13.01	13.83	14.16	15.74	15.98	16.32	17.14	17.47	19.05
8H	4H	13.03	13.40	14.17	14.54	16.12	15.60	15.98	16.75	17.11	18.69
	6H	13.28	13.59	14.45	14.77	16.35	16.03	16.33	17.19	17.51	19.09
	8H	13.33	13.59	14.50	14.75	16.35	16.17	16.44	17.34	17.60	19.19
	12H	13.30	13.54	14.48	14.70	16.32	16.26	16.49	17.43	17.65	19.28
12H	4H	13.03	13.36	14.19	14.51	16.10	15.56	15.90	16.72	17.05	18.63
	6H	13.34	13.61	14.51	14.77	16.37	16.02	16.29	17.19	17.45	19.05
	8H	13.40	13.64	14.58	14.79	16.42	16.17	16.41	17.35	17.56	19.19