

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: P935933

Luminaire Tested: SQ4-FA-150U-075D-92765-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935933
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-92765-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

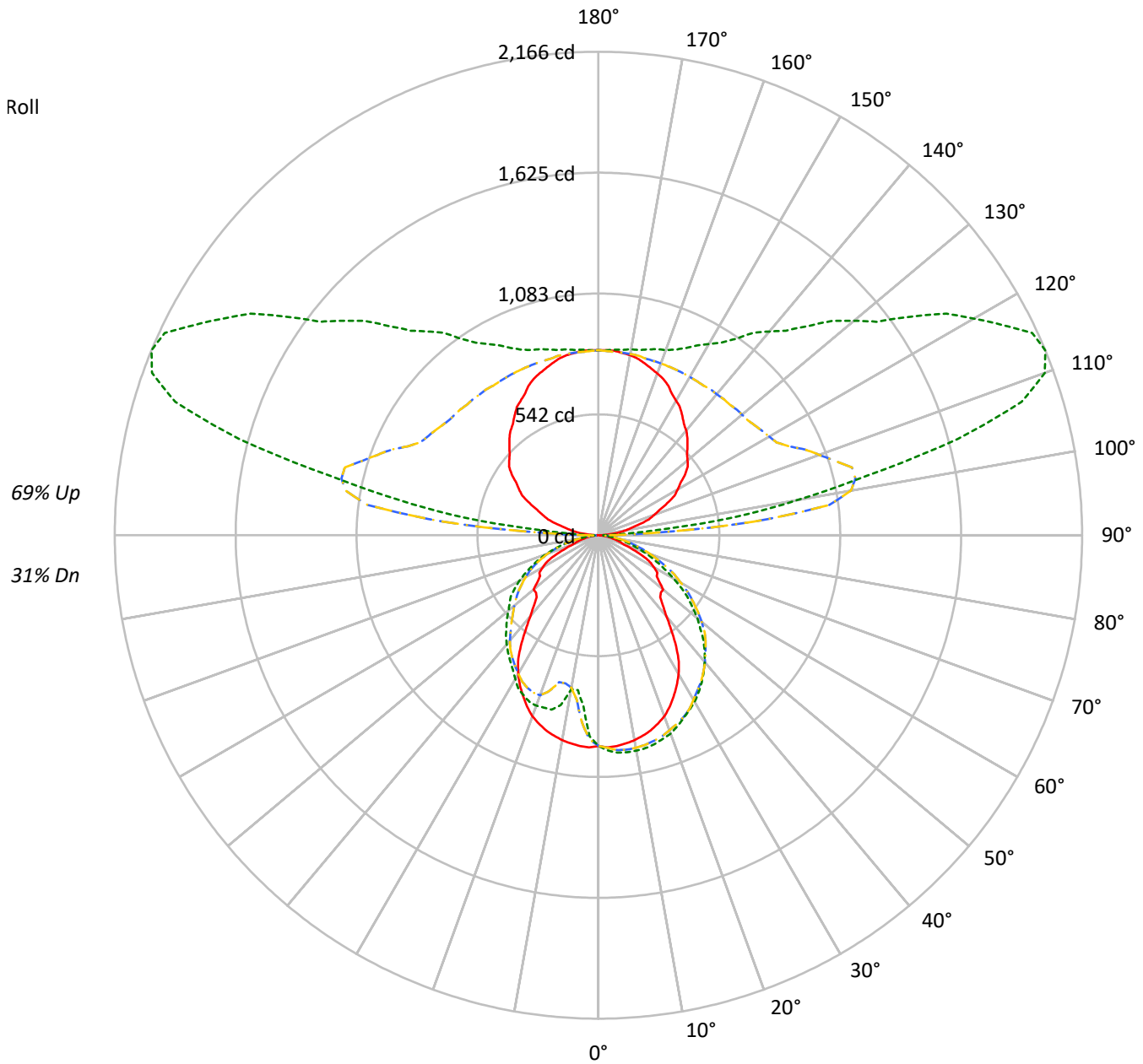
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7827.4 lumens
Efficiency: N/A
Efficacy: 123.1 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: P935933
CATALOG NUMBER: SQ4-FA-150U-075D-92765-1D-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	50	30	10	0
RCR																					
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	39	39	39	31
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	34	34	33	34	34	33	26
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	30	29	28	30	29	28	22
3	78	69	61	56	70	62	56	51	49	45	42	38	35	32	27	25	24	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	33	30	28	24	22	20	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	22	19	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	23	21	19	17	15	19	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	24	21	18	18	15	14	18	15	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	16	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	20	17	14	15	13	11	15	13	11	9
10	44	33	26	21	40	30	23	19	24	19	16	19	15	13	14	12	10	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8756	8756	8756	8756
5°	8812	8839	8812	6950
10°	8743	8707	8743	6225
15°	8638	8519	8638	7113
20°	8448	8295	8448	7128
25°	8068	7968	8068	6977
30°	7582	7698	7582	6645
35°	6749	7355	6749	6281
40°	5614	6953	5614	6005
45°	5007	6481	5007	5689
50°	5307	5919	5307	5370
55°	4980	5313	4980	5187
60°	5112	4513	5112	4751
65°	4614	3730	4614	4170
70°	3173	2972	3173	3494
75°	2751	2196	2751	2631
80°	2172	1452	2172	1582
85°	1184	769	1184	653

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 7688 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.2	1.1
10°-20°	241.8	3.1
20°-30°	373.8	4.8
30°-40°	446.3	5.7
40°-50°	448.9	5.7
50°-60°	390.6	5.0
60°-70°	276.9	3.5
70°-80°	146.5	1.9
80°-90°	39.6	0.5
90°-100°	404.4	5.2
100°-110°	1063.1	13.6
110°-120°	1102.3	14.1
120°-130°	884.2	11.3
130°-140°	693.8	8.9
140°-150°	532.5	6.8
150°-160°	383.5	4.9
160°-170°	234.6	3.0
170°-180°	79.3	1.0
0°-30°	700.9	9.0
0°-40°	1147.2	14.7
0°-60°	1986.7	25.4
0°-90°	2449.8	31.3
90°-120°	2569.7	32.8
90°-150°	4680.2	59.8
90°-180°	5378.0	68.7
0°-180°	7827.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	944	944	944	944	944	
5°	948	978	948	769	948	90
15°	905	969	905	809	905	255
25°	797	903	797	791	797	366
35°	606	806	606	688	606	375
45°	391	664	391	583	391	313
55°	319	490	319	478	319	293
65°	221	296	221	330	221	212
75°	84	140	84	168	84	88
85°	14	36	14	30	14	19
90°	6	21	6	21	6	5
95°	54	244	54	244	54	59
105°	192	1665	192	1665	192	203
115°	340	2143	340	2143	340	336
125°	473	1707	473	1707	473	420
135°	564	1324	564	1324	564	436
145°	654	1074	654	1074	654	410
155°	739	925	739	925	739	340
165°	798	862	798	862	798	225
175°	830	835	830	835	830	79
180°	830	830	830	830	830	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6
2.5°	951.6	951.6	957.1	958.9	958.9	956.2	953.5	956.2	964.2	966.9	966.0
5°	948.1	955.3	965.1	966.9	968.7	967.8	966.0	967.8	976.7	978.5	979.4
7.5°	940.9	954.4	966.9	969.6	972.2	969.6	968.7	970.5	979.4	981.2	981.2
10°	932.0	950.7	965.1	966.9	969.6	966.9	966.9	970.5	979.4	981.2	982.1
12.5°	919.5	945.4	958.9	960.6	964.2	963.3	962.4	966.0	974.9	976.7	976.7
15°	905.2	935.6	948.1	949.8	956.2	954.4	954.4	958.0	967.8	970.5	969.6
17.5°	885.6	923.1	937.3	940.0	944.5	943.6	944.5	948.1	957.1	958.9	959.7
20°	863.3	906.1	923.1	925.7	930.2	930.2	930.2	934.7	943.6	947.2	947.2
22.5°	832.9	888.2	906.1	907.9	913.2	913.2	915.0	921.3	929.3	930.2	930.2
25°	797.2	868.6	883.8	889.1	894.5	897.2	899.9	903.4	906.1	905.2	906.1
27.5°	759.7	843.6	863.3	866.8	874.0	876.6	880.2	881.1	882.0	884.7	882.9
30°	717.8	808.8	838.3	841.8	853.4	855.2	851.6	853.4	857.9	859.7	861.5
32.5°	670.4	757.0	812.4	820.4	831.1	825.8	824.9	827.5	834.7	834.7	836.5
35°	606.2	716.9	788.3	795.4	803.4	797.2	800.8	801.7	806.1	808.8	807.9
37.5°	535.7	682.1	763.3	768.6	774.9	766.8	772.2	774.9	778.5	776.7	776.7
40°	473.2	627.6	733.8	737.4	742.7	736.5	741.9	743.6	745.4	743.6	742.7
42.5°	426.8	567.8	702.6	707.0	703.5	707.9	709.7	713.3	710.6	707.0	707.0
45°	391.1	551.7	668.7	674.0	668.7	675.8	678.5	678.5	670.4	668.7	667.8
47.5°	379.5	519.6	634.7	634.7	632.1	641.0	645.5	639.2	631.2	628.5	628.5
50°	378.6	483.9	588.3	584.8	597.3	608.0	603.5	597.3	591.0	581.2	581.2
52.5°	343.7	440.2	528.5	541.9	561.5	567.8	560.7	554.4	543.7	539.2	535.7
55°	318.8	394.6	474.1	500.8	521.4	529.4	516.0	509.8	493.7	491.0	489.2
57.5°	313.3	328.6	424.1	458.0	483.0	482.1	474.1	462.5	449.1	446.4	445.5
60°	287.4	237.4	370.5	410.7	436.6	433.9	426.8	416.1	403.6	401.8	400.0
62.5°	260.6	172.3	309.7	355.4	391.9	391.1	384.8	368.7	359.8	355.4	351.8
65°	221.4	144.6	220.5	295.5	348.2	350.0	336.6	325.0	315.1	309.7	308.8
67.5°	168.7	117.8	149.1	246.4	306.2	304.4	287.4	282.1	269.6	266.9	261.5
70°	125.0	78.6	103.5	199.9	265.1	260.6	247.3	241.0	229.4	223.2	219.6
72.5°	103.5	63.4	75.9	155.3	223.2	217.8	206.2	199.1	189.2	183.9	180.3
75°	83.9	66.9	58.0	115.1	181.2	177.6	166.9	159.8	151.7	144.6	145.5
77.5°	61.6	62.5	46.4	84.8	143.7	138.4	132.1	123.2	119.6	112.5	112.5
80°	46.4	49.1	34.8	58.0	103.5	103.5	98.2	91.9	85.7	82.1	82.1
82.5°	31.2	31.2	25.9	36.6	70.5	67.8	64.3	62.5	58.9	57.1	57.1
85°	14.3	17.9	16.1	22.3	38.4	40.2	40.2	38.4	37.5	35.7	36.6
87.5°	4.5	8.0	9.8	12.5	19.6	20.5	21.4	21.4	21.4	22.3	22.3
90°	5.5	10.0	14.5	15.6	24.5	36.4	42.3	37.6	28.2	21.2	21.2
92.5°	22.2	60.1	98.0	107.5	151.0	209.1	238.2	208.8	150.0	105.8	101.6
95°	53.5	122.7	192.0	209.3	371.7	588.2	696.5	621.5	471.6	359.1	346.3
97.5°	92.4	153.5	214.7	229.9	500.7	861.7	1042.2	994.8	900.0	829.0	804.7
100°	122.5	177.9	233.3	247.2	547.6	948.2	1148.5	1152.0	1159.0	1164.2	1135.2
102.5°	148.1	199.9	251.5	264.5	569.2	975.5	1178.6	1239.0	1359.7	1450.3	1425.6
105°	191.6	235.4	279.1	290.1	585.1	978.5	1175.2	1310.5	1581.3	1784.3	1771.0
107.5°	236.1	276.9	317.8	327.9	588.1	935.0	1108.5	1297.2	1674.8	1958.1	1961.3
110°	266.1	303.0	339.9	349.1	583.7	896.4	1052.8	1263.9	1686.0	2002.6	2016.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	295.6	330.8	366.0	374.7	583.9	862.7	1002.1	1218.2	1650.2	1974.2	1995.5
115°	340.2	372.6	405.0	413.1	589.2	824.1	941.4	1149.5	1565.7	1877.9	1907.4
117.5°	384.2	413.6	443.1	450.4	600.2	799.9	899.7	1087.5	1463.1	1744.8	1777.6
120°	409.7	437.5	465.1	472.1	609.0	791.7	883.0	1054.5	1397.8	1655.2	1687.0
122.5°	434.8	462.7	490.8	497.7	621.9	787.5	870.2	1024.7	1333.8	1565.6	1596.9
125°	473.3	498.7	524.2	530.6	639.1	783.9	856.3	987.5	1250.0	1446.9	1475.9
127.5°	504.4	530.1	555.8	562.3	656.3	781.8	844.6	957.3	1182.7	1351.8	1376.2
130°	521.1	548.8	576.5	583.4	669.0	783.1	840.1	940.5	1141.1	1291.6	1314.1
132.5°	538.3	566.1	593.8	600.7	679.2	783.9	836.2	926.0	1105.7	1240.4	1260.6
135°	564.0	589.2	614.4	620.7	690.4	783.1	829.5	904.8	1055.2	1168.0	1185.4
137.5°	590.1	615.1	640.1	646.3	707.0	788.0	828.4	892.0	1019.2	1114.6	1128.8
140°	611.9	634.9	658.0	663.7	717.3	788.8	824.5	879.4	989.3	1071.7	1085.0
142.5°	628.6	649.8	671.1	676.4	725.8	791.6	824.5	872.8	969.3	1041.7	1053.1
145°	654.2	672.8	691.2	695.9	736.9	791.7	819.0	858.4	937.3	996.5	1005.2
147.5°	679.7	697.9	715.9	720.4	753.3	797.1	819.0	850.0	912.1	958.7	965.8
150°	696.5	712.8	729.1	733.2	761.8	799.9	819.0	845.2	897.6	937.0	942.8
152.5°	713.7	726.1	738.5	741.6	767.4	801.8	819.0	841.4	886.2	919.8	924.1
155°	739.4	748.6	757.7	760.0	779.6	805.9	819.0	836.8	872.4	899.1	902.1
157.5°	758.3	767.2	776.0	778.3	791.8	810.0	819.0	832.8	860.5	881.3	883.3
160°	771.0	778.0	785.0	786.7	797.5	811.8	819.0	830.9	854.6	872.4	873.5
162.5°	783.9	789.1	794.3	795.6	803.4	813.8	819.0	829.0	849.1	864.1	865.1
165°	797.8	802.5	807.2	808.4	811.9	816.7	819.0	826.1	840.5	851.2	852.4
167.5°	810.6	812.8	815.1	815.6	818.5	822.5	824.5	829.2	838.6	845.7	846.2
170°	819.0	821.2	823.4	824.0	824.2	824.4	824.5	829.2	838.6	845.7	845.7
172.5°	823.4	823.9	824.4	824.5	824.5	824.5	824.5	828.3	835.7	841.2	840.8
175°	829.5	829.5	829.5	829.5	827.8	825.6	824.5	826.8	831.6	835.1	835.1
177.5°	829.5	829.5	829.5	829.5	828.3	826.6	825.7	827.5	831.2	834.0	833.4
180°	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6
2.5°	967.8	965.1	967.8	966.0	966.9	964.2	956.2	953.5	956.2	958.9	958.9
5°	979.4	977.6	979.4	979.4	978.5	976.7	967.8	966.0	967.8	968.7	966.9
7.5°	983.0	980.3	983.0	981.2	981.2	979.4	970.5	968.7	969.6	972.2	969.6
10°	983.0	980.3	983.0	982.1	981.2	979.4	970.5	966.9	966.9	969.6	966.9
12.5°	978.5	976.7	978.5	976.7	976.7	974.9	966.0	962.4	963.3	964.2	960.6
15°	971.3	968.7	971.3	969.6	970.5	967.8	958.0	954.4	954.4	956.2	949.8
17.5°	960.6	957.1	960.6	959.7	958.9	957.1	948.1	944.5	943.6	944.5	940.0
20°	948.1	945.4	948.1	947.2	947.2	943.6	934.7	930.2	930.2	930.2	925.7
22.5°	928.4	925.7	928.4	930.2	930.2	929.3	921.3	915.0	913.2	913.2	907.9
25°	906.1	903.4	906.1	906.1	905.2	906.1	903.4	899.9	897.2	894.5	889.1
27.5°	884.7	882.9	884.7	882.9	884.7	882.0	881.1	880.2	876.6	874.0	866.8
30°	863.3	861.5	863.3	861.5	859.7	857.9	853.4	851.6	855.2	853.4	841.8
32.5°	836.5	834.7	836.5	836.5	834.7	834.7	827.5	824.9	825.8	831.1	820.4
35°	808.8	806.1	808.8	807.9	808.8	806.1	801.7	800.8	797.2	803.4	795.4
37.5°	776.7	774.0	776.7	776.7	776.7	778.5	774.9	772.2	766.8	774.9	768.6
40°	743.6	740.1	743.6	742.7	743.6	745.4	743.6	741.9	736.5	742.7	737.4
42.5°	706.2	705.3	706.2	707.0	707.0	710.6	713.3	709.7	707.9	703.5	707.0
45°	666.0	664.2	666.0	667.8	668.7	670.4	678.5	678.5	675.8	668.7	674.0
47.5°	623.1	618.7	623.1	628.5	628.5	631.2	639.2	645.5	641.0	632.1	634.7
50°	577.6	578.5	577.6	581.2	581.2	591.0	597.3	603.5	608.0	597.3	584.8
52.5°	533.0	532.1	533.0	535.7	539.2	543.7	554.4	560.7	567.8	561.5	541.9
55°	488.4	490.1	488.4	489.2	491.0	493.7	509.8	516.0	529.4	521.4	500.8
57.5°	443.7	441.0	443.7	445.5	446.4	449.1	462.5	474.1	482.1	483.0	458.0
60°	391.9	388.4	391.9	400.0	401.8	403.6	416.1	426.8	433.9	436.6	410.7
62.5°	346.4	340.2	346.4	351.8	355.4	359.8	368.7	384.8	391.1	391.9	355.4
65°	298.1	295.5	298.1	308.8	309.7	315.1	325.0	336.6	350.0	348.2	295.5
67.5°	254.4	254.4	254.4	261.5	266.9	269.6	282.1	287.4	304.4	306.2	246.4
70°	214.2	213.3	214.2	219.6	223.2	229.4	241.0	247.3	260.6	265.1	199.9
72.5°	175.8	175.0	175.8	180.3	183.9	189.2	199.1	206.2	217.8	223.2	155.3
75°	141.9	140.1	141.9	145.5	144.6	151.7	159.8	166.9	177.6	181.2	115.1
77.5°	108.9	108.9	108.9	112.5	112.5	119.6	123.2	132.1	138.4	143.7	84.8
80°	81.2	80.3	81.2	82.1	82.1	85.7	91.9	98.2	103.5	103.5	58.0
82.5°	57.1	55.3	57.1	57.1	57.1	58.9	62.5	64.3	67.8	70.5	36.6
85°	35.7	35.7	35.7	36.6	35.7	37.5	38.4	40.2	40.2	38.4	22.3
87.5°	23.2	22.3	23.2	22.3	22.3	21.4	21.4	21.4	20.5	19.6	12.5
90°	21.2	21.2	21.2	21.2	21.2	28.2	37.6	42.3	36.4	24.5	15.6
92.5°	84.7	67.9	84.7	101.6	105.8	150.0	208.8	238.2	209.1	151.0	107.5
95°	295.4	244.4	295.4	346.3	359.1	471.6	621.5	696.5	588.2	371.7	209.3
97.5°	707.8	610.7	707.8	804.7	829.0	900.0	994.8	1042.2	861.7	500.7	229.9
100°	1019.7	904.1	1019.7	1135.2	1164.2	1159.0	1152.0	1148.5	948.2	547.6	247.2
102.5°	1326.6	1227.6	1326.6	1425.6	1450.3	1359.7	1239.0	1178.6	975.5	569.2	264.5
105°	1717.8	1664.6	1717.8	1771.0	1784.3	1581.3	1310.5	1175.2	978.5	585.1	290.1
107.5°	1974.1	1987.0	1974.1	1961.3	1958.1	1674.8	1297.2	1108.5	935.0	588.1	327.9
110°	2071.9	2127.3	2071.9	2016.4	2002.6	1686.0	1263.9	1052.8	896.4	583.7	349.1



TEST NUMBER: P935933

CATALOG NUMBER: SQ4-FA-150U-075D-92765-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2080.6	2165.7	2080.6	1995.5	1974.2	1650.2	1218.2	1002.1	862.7	583.9	374.7
115°	2025.4	2143.4	2025.4	1907.4	1877.9	1565.7	1149.5	941.4	824.1	589.2	413.1
117.5°	1908.4	2039.3	1908.4	1777.6	1744.8	1463.1	1087.5	899.7	799.9	600.2	450.4
120°	1814.2	1941.4	1814.2	1687.0	1655.2	1397.8	1054.5	883.0	791.7	609.0	472.1
122.5°	1722.4	1847.8	1722.4	1596.9	1565.6	1333.8	1024.7	870.2	787.5	621.9	497.7
125°	1591.4	1707.0	1591.4	1475.9	1446.9	1250.0	987.5	856.3	783.9	639.1	530.6
127.5°	1473.6	1571.1	1473.6	1376.2	1351.8	1182.7	957.3	844.6	781.8	656.3	562.3
130°	1404.2	1494.2	1404.2	1314.1	1291.6	1141.1	940.5	840.1	783.1	669.0	583.4
132.5°	1341.2	1421.9	1341.2	1260.6	1240.4	1105.7	926.0	836.2	783.9	679.2	600.7
135°	1254.9	1324.5	1254.9	1185.4	1168.0	1055.2	904.8	829.5	783.1	690.4	620.7
137.5°	1185.8	1242.6	1185.8	1128.8	1114.6	1019.2	892.0	828.4	788.0	707.0	646.3
140°	1138.2	1191.4	1138.2	1085.0	1071.7	989.3	879.4	824.5	788.8	717.3	663.7
142.5°	1098.9	1144.6	1098.9	1053.1	1041.7	969.3	872.8	824.5	791.6	725.8	676.4
145°	1039.9	1074.5	1039.9	1005.2	996.5	937.3	858.4	819.0	791.7	736.9	695.9
147.5°	994.6	1023.3	994.6	965.8	958.7	912.1	850.0	819.0	797.1	753.3	720.4
150°	966.1	989.3	966.1	942.8	937.0	897.6	845.2	819.0	799.9	761.8	733.2
152.5°	941.7	959.2	941.7	924.1	919.8	886.2	841.4	819.0	801.8	767.4	741.6
155°	913.7	925.3	913.7	902.1	899.1	872.4	836.8	819.0	805.9	779.6	760.0
157.5°	891.5	899.7	891.5	883.3	881.3	860.5	832.8	819.0	810.0	791.8	778.3
160°	878.2	883.0	878.2	873.5	872.4	854.6	830.9	819.0	811.8	797.5	786.7
162.5°	869.6	874.1	869.6	865.1	864.1	849.1	829.0	819.0	813.8	803.4	795.6
165°	857.1	861.8	857.1	852.4	851.2	840.5	826.1	819.0	816.7	811.9	808.4
167.5°	848.2	850.1	848.2	846.2	845.7	838.6	829.2	824.5	822.5	818.5	815.6
170°	845.7	845.7	845.7	845.7	845.7	838.6	829.2	824.5	824.4	824.2	824.0
172.5°	839.1	837.4	839.1	840.8	841.2	835.7	828.3	824.5	824.5	824.5	824.5
175°	835.1	835.1	835.1	835.1	835.1	831.6	826.8	824.5	825.6	827.8	829.5
177.5°	831.5	829.5	831.5	833.4	834.0	831.2	827.5	825.7	826.6	828.3	829.5
180°	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5



TEST NUMBER: P935933

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CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6
2.5°	957.1	951.6	951.6	942.7	939.1	936.4	932.0	918.6	915.0	911.5	916.8
5°	965.1	955.3	948.1	932.0	918.6	913.2	896.3	864.1	842.7	826.7	817.7
7.5°	966.9	954.4	940.9	915.9	883.8	869.5	817.7	758.8	742.7	728.5	719.5
10°	965.1	950.7	932.0	894.5	818.6	793.6	741.9	703.5	693.7	691.0	693.7
12.5°	958.9	945.4	919.5	857.0	750.8	733.8	703.5	681.2	679.4	683.8	707.9
15°	948.1	935.6	905.2	807.0	713.3	700.8	679.4	671.3	681.2	712.4	784.7
17.5°	937.3	923.1	885.6	757.9	684.7	675.8	660.6	676.7	732.0	774.0	798.1
20°	923.1	906.1	863.3	722.2	664.2	656.2	649.0	721.3	763.3	778.5	791.8
22.5°	906.1	888.2	832.9	697.2	642.8	636.5	641.0	746.3	763.3	774.0	785.6
25°	883.8	868.6	797.2	677.6	625.8	618.7	635.6	743.6	753.5	756.1	779.3
27.5°	863.3	843.6	759.7	659.7	605.3	602.6	640.1	732.0	739.2	741.9	766.8
30°	838.3	808.8	717.8	641.0	583.9	583.0	641.0	717.8	716.0	723.1	748.1
32.5°	812.4	757.0	670.4	617.8	563.3	562.4	634.7	696.3	694.5	704.4	723.1
35°	788.3	716.9	606.2	591.0	537.4	538.3	619.6	671.3	672.2	681.2	692.8
37.5°	763.3	682.1	535.7	561.5	512.5	512.5	599.0	648.1	646.3	649.0	665.1
40°	733.8	627.6	473.2	523.2	489.2	486.6	574.0	623.1	616.9	616.0	638.3
42.5°	702.6	567.8	426.8	472.3	462.5	458.9	543.7	592.8	581.2	583.9	612.4
45°	668.7	551.7	391.1	399.1	434.8	432.1	510.7	558.0	549.9	557.1	586.5
47.5°	634.7	519.6	379.5	331.3	405.3	404.4	474.1	524.1	519.6	526.7	558.0
50°	588.3	483.9	378.6	283.9	372.3	375.9	430.3	491.0	491.0	497.3	530.3
52.5°	528.5	440.2	343.7	257.1	333.9	344.6	391.9	462.5	464.3	470.5	500.0
55°	474.1	394.6	318.8	236.5	288.3	311.5	354.5	433.0	436.6	442.8	469.6
57.5°	424.1	328.6	313.3	212.4	246.4	268.7	321.4	404.4	406.2	411.6	437.5
60°	370.5	237.4	287.4	186.6	209.8	226.7	291.0	370.5	376.8	380.3	402.7
62.5°	309.7	172.3	260.6	168.7	191.9	195.5	266.0	338.4	346.4	349.1	362.5
65°	220.5	144.6	221.4	153.5	173.2	174.1	239.2	305.3	312.4	316.9	326.8
67.5°	149.1	117.8	168.7	139.2	158.9	159.8	213.3	266.9	276.7	280.3	286.5
70°	103.5	78.6	125.0	124.1	142.8	144.6	185.7	232.1	241.0	243.7	247.3
72.5°	75.9	63.4	103.5	111.6	125.9	127.6	157.1	192.8	201.7	204.4	206.2
75°	58.0	66.9	83.9	97.3	107.1	108.0	128.5	157.1	163.3	165.1	166.0
77.5°	46.4	62.5	61.6	78.6	87.5	85.7	100.9	121.4	126.8	126.8	126.8
80°	34.8	49.1	46.4	56.2	64.3	62.5	72.3	86.6	88.4	90.2	89.3
82.5°	25.9	31.2	31.2	35.7	42.8	41.1	48.2	56.2	56.2	56.2	58.0
85°	16.1	17.9	14.3	18.7	24.1	23.2	26.8	30.3	31.2	31.2	29.5
87.5°	9.8	8.0	4.5	7.1	10.7	10.7	12.5	13.4	12.5	12.5	12.5
90°	14.5	10.0	5.5	10.0	14.5	15.6	24.5	36.4	42.3	37.6	28.2
92.5°	98.0	60.1	22.2	60.1	98.0	107.5	151.0	209.1	238.2	208.8	150.0
95°	192.0	122.7	53.5	122.7	192.0	209.3	371.7	588.2	696.5	621.5	471.6
97.5°	214.7	153.5	92.4	153.5	214.7	229.9	500.7	861.7	1042.2	994.8	900.0
100°	233.3	177.9	122.5	177.9	233.3	247.2	547.6	948.2	1148.5	1152.0	1159.0
102.5°	251.5	199.9	148.1	199.9	251.5	264.5	569.2	975.5	1178.6	1239.0	1359.7
105°	279.1	235.4	191.6	235.4	279.1	290.1	585.1	978.5	1175.2	1310.5	1581.3
107.5°	317.8	276.9	236.1	276.9	317.8	327.9	588.1	935.0	1108.5	1297.2	1674.8
110°	339.9	303.0	266.1	303.0	339.9	349.1	583.7	896.4	1052.8	1263.9	1686.0



TEST NUMBER: P935933

CATALOG NUMBER: SQ4-FA-150U-075D-92765-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	366.0	330.8	295.6	330.8	366.0	374.7	583.9	862.7	1002.1	1218.2	1650.2
115°	405.0	372.6	340.2	372.6	405.0	413.1	589.2	824.1	941.4	1149.5	1565.7
117.5°	443.1	413.6	384.2	413.6	443.1	450.4	600.2	799.9	899.7	1087.5	1463.1
120°	465.1	437.5	409.7	437.5	465.1	472.1	609.0	791.7	883.0	1054.5	1397.8
122.5°	490.8	462.7	434.8	462.7	490.8	497.7	621.9	787.5	870.2	1024.7	1333.8
125°	524.2	498.7	473.3	498.7	524.2	530.6	639.1	783.9	856.3	987.5	1250.0
127.5°	555.8	530.1	504.4	530.1	555.8	562.3	656.3	781.8	844.6	957.3	1182.7
130°	576.5	548.8	521.1	548.8	576.5	583.4	669.0	783.1	840.1	940.5	1141.1
132.5°	593.8	566.1	538.3	566.1	593.8	600.7	679.2	783.9	836.2	926.0	1105.7
135°	614.4	589.2	564.0	589.2	614.4	620.7	690.4	783.1	829.5	904.8	1055.2
137.5°	640.1	615.1	590.1	615.1	640.1	646.3	707.0	788.0	828.4	892.0	1019.2
140°	658.0	634.9	611.9	634.9	658.0	663.7	717.3	788.8	824.5	879.4	989.3
142.5°	671.1	649.8	628.6	649.8	671.1	676.4	725.8	791.6	824.5	872.8	969.3
145°	691.2	672.8	654.2	672.8	691.2	695.9	736.9	791.7	819.0	858.4	937.3
147.5°	715.9	697.9	679.7	697.9	715.9	720.4	753.3	797.1	819.0	850.0	912.1
150°	729.1	712.8	696.5	712.8	729.1	733.2	761.8	799.9	819.0	845.2	897.6
152.5°	738.5	726.1	713.7	726.1	738.5	741.6	767.4	801.8	819.0	841.4	886.2
155°	757.7	748.6	739.4	748.6	757.7	760.0	779.6	805.9	819.0	836.8	872.4
157.5°	776.0	767.2	758.3	767.2	776.0	778.3	791.8	810.0	819.0	832.8	860.5
160°	785.0	778.0	771.0	778.0	785.0	786.7	797.5	811.8	819.0	830.9	854.6
162.5°	794.3	789.1	783.9	789.1	794.3	795.6	803.4	813.8	819.0	829.0	849.1
165°	807.2	802.5	797.8	802.5	807.2	808.4	811.9	816.7	819.0	826.1	840.5
167.5°	815.1	812.8	810.6	812.8	815.1	815.6	818.5	822.5	824.5	829.2	838.6
170°	823.4	821.2	819.0	821.2	823.4	824.0	824.2	824.4	824.5	829.2	838.6
172.5°	824.4	823.9	823.4	823.9	824.4	824.5	824.5	824.5	824.5	828.3	835.7
175°	829.5	829.5	829.5	829.5	829.5	829.5	827.8	825.6	824.5	826.8	831.6
177.5°	829.5	829.5	829.5	829.5	829.5	829.5	828.3	826.6	825.7	827.5	831.2
180°	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5



TEST NUMBER: P935933

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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6	943.6
2.5°	910.6	907.9	911.5	901.6	911.5	907.9	910.6	916.8	911.5	915.0	918.6
5°	799.0	794.5	780.2	768.6	780.2	794.5	799.0	817.7	826.7	842.7	864.1
7.5°	714.2	710.6	707.0	699.9	707.0	710.6	714.2	719.5	728.5	742.7	758.8
10°	695.4	696.3	701.7	700.8	701.7	696.3	695.4	693.7	691.0	693.7	703.5
12.5°	743.6	751.7	781.1	779.3	781.1	751.7	743.6	707.9	683.8	679.4	681.2
15°	799.0	801.7	807.9	808.8	807.9	801.7	799.0	784.7	712.4	681.2	671.3
17.5°	804.3	805.2	809.7	809.7	809.7	805.2	804.3	798.1	774.0	732.0	676.7
20°	799.9	801.7	810.6	812.4	810.6	801.7	799.9	791.8	778.5	763.3	721.3
22.5°	798.1	801.7	808.8	807.9	808.8	801.7	798.1	785.6	774.0	763.3	746.3
25°	789.2	789.2	790.1	791.0	790.1	789.2	789.2	779.3	756.1	753.5	743.6
27.5°	770.4	772.2	777.6	776.7	777.6	772.2	770.4	766.8	741.9	739.2	732.0
30°	753.5	751.7	747.2	743.6	747.2	751.7	753.5	748.1	723.1	716.0	717.8
32.5°	724.9	720.4	716.0	713.3	716.0	720.4	724.9	723.1	704.4	694.5	696.3
35°	691.0	691.9	691.0	688.3	691.0	691.9	691.0	692.8	681.2	672.2	671.3
37.5°	666.9	668.7	667.8	664.2	667.8	668.7	666.9	665.1	649.0	646.3	648.1
40°	641.9	642.8	641.9	639.2	641.9	642.8	641.9	638.3	616.0	616.9	623.1
42.5°	617.8	616.9	614.2	612.4	614.2	616.9	617.8	612.4	583.9	581.2	592.8
45°	590.1	591.0	585.6	583.0	585.6	591.0	590.1	586.5	557.1	549.9	558.0
47.5°	562.4	562.4	558.0	555.3	558.0	562.4	562.4	558.0	526.7	519.6	524.1
50°	533.0	532.1	525.8	524.9	525.8	532.1	533.0	530.3	497.3	491.0	491.0
52.5°	499.1	499.1	500.0	501.7	500.0	499.1	499.1	500.0	470.5	464.3	462.5
55°	469.6	470.5	476.7	478.5	476.7	470.5	469.6	469.6	442.8	436.6	433.0
57.5°	439.3	439.3	443.7	443.7	443.7	439.3	439.3	437.5	411.6	406.2	404.4
60°	404.4	406.2	409.8	408.9	409.8	406.2	404.4	402.7	380.3	376.8	370.5
62.5°	367.8	369.6	370.5	368.7	370.5	369.6	367.8	362.5	349.1	346.4	338.4
65°	329.5	331.3	332.1	330.4	332.1	331.3	329.5	326.8	316.9	312.4	305.3
67.5°	290.1	289.2	288.3	291.9	288.3	289.2	290.1	286.5	280.3	276.7	266.9
70°	249.9	249.9	249.0	250.8	249.0	249.9	249.9	247.3	243.7	241.0	232.1
72.5°	207.1	206.2	209.8	207.1	209.8	206.2	207.1	206.2	204.4	201.7	192.8
75°	165.1	166.9	165.1	167.8	165.1	166.9	165.1	166.0	165.1	163.3	157.1
77.5°	125.9	127.6	125.9	125.9	125.9	127.6	125.9	126.8	126.8	126.8	121.4
80°	89.3	88.4	88.4	87.5	88.4	88.4	89.3	89.3	90.2	88.4	86.6
82.5°	57.1	56.2	56.2	58.0	56.2	56.2	57.1	58.0	56.2	56.2	56.2
85°	31.2	32.1	30.3	30.3	30.3	32.1	31.2	29.5	31.2	31.2	30.3
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	28.2	37.6	42.3	36.4
92.5°	105.8	101.6	84.7	67.9	84.7	101.6	105.8	150.0	208.8	238.2	209.1
95°	359.1	346.3	295.4	244.4	295.4	346.3	359.1	471.6	621.5	696.5	588.2
97.5°	829.0	804.7	707.8	610.7	707.8	804.7	829.0	900.0	994.8	1042.2	861.7
100°	1164.2	1135.2	1019.7	904.1	1019.7	1135.2	1164.2	1159.0	1152.0	1148.5	948.2
102.5°	1450.3	1425.6	1326.6	1227.6	1326.6	1425.6	1450.3	1359.7	1239.0	1178.6	975.5
105°	1784.3	1771.0	1717.8	1664.6	1717.8	1771.0	1784.3	1581.3	1310.5	1175.2	978.5
107.5°	1958.1	1961.3	1974.1	1987.0	1974.1	1961.3	1958.1	1674.8	1297.2	1108.5	935.0
110°	2002.6	2016.4	2071.9	2127.3	2071.9	2016.4	2002.6	1686.0	1263.9	1052.8	896.4



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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1974.2	1995.5	2080.6	2165.7	2080.6	1995.5	1974.2	1650.2	1218.2	1002.1	862.7
115°	1877.9	1907.4	2025.4	2143.4	2025.4	1907.4	1877.9	1565.7	1149.5	941.4	824.1
117.5°	1744.8	1777.6	1908.4	2039.3	1908.4	1777.6	1744.8	1463.1	1087.5	899.7	799.9
120°	1655.2	1687.0	1814.2	1941.4	1814.2	1687.0	1655.2	1397.8	1054.5	883.0	791.7
122.5°	1565.6	1596.9	1722.4	1847.8	1722.4	1596.9	1565.6	1333.8	1024.7	870.2	787.5
125°	1446.9	1475.9	1591.4	1707.0	1591.4	1475.9	1446.9	1250.0	987.5	856.3	783.9
127.5°	1351.8	1376.2	1473.6	1571.1	1473.6	1376.2	1351.8	1182.7	957.3	844.6	781.8
130°	1291.6	1314.1	1404.2	1494.2	1404.2	1314.1	1291.6	1141.1	940.5	840.1	783.1
132.5°	1240.4	1260.6	1341.2	1421.9	1341.2	1260.6	1240.4	1105.7	926.0	836.2	783.9
135°	1168.0	1185.4	1254.9	1324.5	1254.9	1185.4	1168.0	1055.2	904.8	829.5	783.1
137.5°	1114.6	1128.8	1185.8	1242.6	1185.8	1128.8	1114.6	1019.2	892.0	828.4	788.0
140°	1071.7	1085.0	1138.2	1191.4	1138.2	1085.0	1071.7	989.3	879.4	824.5	788.8
142.5°	1041.7	1053.1	1098.9	1144.6	1098.9	1053.1	1041.7	969.3	872.8	824.5	791.6
145°	996.5	1005.2	1039.9	1074.5	1039.9	1005.2	996.5	937.3	858.4	819.0	791.7
147.5°	958.7	965.8	994.6	1023.3	994.6	965.8	958.7	912.1	850.0	819.0	797.1
150°	937.0	942.8	966.1	989.3	966.1	942.8	937.0	897.6	845.2	819.0	799.9
152.5°	919.8	924.1	941.7	959.2	941.7	924.1	919.8	886.2	841.4	819.0	801.8
155°	899.1	902.1	913.7	925.3	913.7	902.1	899.1	872.4	836.8	819.0	805.9
157.5°	881.3	883.3	891.5	899.7	891.5	883.3	881.3	860.5	832.8	819.0	810.0
160°	872.4	873.5	878.2	883.0	878.2	873.5	872.4	854.6	830.9	819.0	811.8
162.5°	864.1	865.1	869.6	874.1	869.6	865.1	864.1	849.1	829.0	819.0	813.8
165°	851.2	852.4	857.1	861.8	857.1	852.4	851.2	840.5	826.1	819.0	816.7
167.5°	845.7	846.2	848.2	850.1	848.2	846.2	845.7	838.6	829.2	824.5	822.5
170°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	838.6	829.2	824.5	824.4
172.5°	841.2	840.8	839.1	837.4	839.1	840.8	841.2	835.7	828.3	824.5	824.5
175°	835.1	835.1	835.1	835.1	835.1	835.1	835.1	831.6	826.8	824.5	825.6
177.5°	834.0	833.4	831.5	829.5	831.5	833.4	834.0	831.2	827.5	825.7	826.6
180°	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	943.6	943.6	943.6	943.6	943.6
2.5°	932.0	936.4	939.1	942.7	951.6
5°	896.3	913.2	918.6	932.0	948.1
7.5°	817.7	869.5	883.8	915.9	940.9
10°	741.9	793.6	818.6	894.5	932.0
12.5°	703.5	733.8	750.8	857.0	919.5
15°	679.4	700.8	713.3	807.0	905.2
17.5°	660.6	675.8	684.7	757.9	885.6
20°	649.0	656.2	664.2	722.2	863.3
22.5°	641.0	636.5	642.8	697.2	832.9
25°	635.6	618.7	625.8	677.6	797.2
27.5°	640.1	602.6	605.3	659.7	759.7
30°	641.0	583.0	583.9	641.0	717.8
32.5°	634.7	562.4	563.3	617.8	670.4
35°	619.6	538.3	537.4	591.0	606.2
37.5°	599.0	512.5	512.5	561.5	535.7
40°	574.0	486.6	489.2	523.2	473.2
42.5°	543.7	458.9	462.5	472.3	426.8
45°	510.7	432.1	434.8	399.1	391.1
47.5°	474.1	404.4	405.3	331.3	379.5
50°	430.3	375.9	372.3	283.9	378.6
52.5°	391.9	344.6	333.9	257.1	343.7
55°	354.5	311.5	288.3	236.5	318.8
57.5°	321.4	268.7	246.4	212.4	313.3
60°	291.0	226.7	209.8	186.6	287.4
62.5°	266.0	195.5	191.9	168.7	260.6
65°	239.2	174.1	173.2	153.5	221.4
67.5°	213.3	159.8	158.9	139.2	168.7
70°	185.7	144.6	142.8	124.1	125.0
72.5°	157.1	127.6	125.9	111.6	103.5
75°	128.5	108.0	107.1	97.3	83.9
77.5°	100.9	85.7	87.5	78.6	61.6
80°	72.3	62.5	64.3	56.2	46.4
82.5°	48.2	41.1	42.8	35.7	31.2
85°	26.8	23.2	24.1	18.7	14.3
87.5°	12.5	10.7	10.7	7.1	4.5
90°	24.5	15.6	14.5	10.0	5.5
92.5°	151.0	107.5	98.0	60.1	22.2
95°	371.7	209.3	192.0	122.7	53.5
97.5°	500.7	229.9	214.7	153.5	92.4
100°	547.6	247.2	233.3	177.9	122.5
102.5°	569.2	264.5	251.5	199.9	148.1
105°	585.1	290.1	279.1	235.4	191.6
107.5°	588.1	327.9	317.8	276.9	236.1
110°	583.7	349.1	339.9	303.0	266.1



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CATALOG NUMBER: SQ4-FA-150U-075D-92765-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	583.9	374.7	366.0	330.8	295.6
115°	589.2	413.1	405.0	372.6	340.2
117.5°	600.2	450.4	443.1	413.6	384.2
120°	609.0	472.1	465.1	437.5	409.7
122.5°	621.9	497.7	490.8	462.7	434.8
125°	639.1	530.6	524.2	498.7	473.3
127.5°	656.3	562.3	555.8	530.1	504.4
130°	669.0	583.4	576.5	548.8	521.1
132.5°	679.2	600.7	593.8	566.1	538.3
135°	690.4	620.7	614.4	589.2	564.0
137.5°	707.0	646.3	640.1	615.1	590.1
140°	717.3	663.7	658.0	634.9	611.9
142.5°	725.8	676.4	671.1	649.8	628.6
145°	736.9	695.9	691.2	672.8	654.2
147.5°	753.3	720.4	715.9	697.9	679.7
150°	761.8	733.2	729.1	712.8	696.5
152.5°	767.4	741.6	738.5	726.1	713.7
155°	779.6	760.0	757.7	748.6	739.4
157.5°	791.8	778.3	776.0	767.2	758.3
160°	797.5	786.7	785.0	778.0	771.0
162.5°	803.4	795.6	794.3	789.1	783.9
165°	811.9	808.4	807.2	802.5	797.8
167.5°	818.5	815.6	815.1	812.8	810.6
170°	824.2	824.0	823.4	821.2	819.0
172.5°	824.5	824.5	824.4	823.9	823.4
175°	827.8	829.5	829.5	829.5	829.5
177.5°	828.3	829.5	829.5	829.5	829.5
180°	829.5	829.5	829.5	829.5	829.5



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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	10.29	11.01	11.40	12.11	13.62	13.09	13.81	14.19	14.90	16.42
	3H	10.76	11.40	11.87	12.51	14.04	14.41	15.05	15.53	16.16	17.69
	4H	10.94	11.55	12.06	12.66	14.20	14.84	15.45	15.97	16.56	18.10
	6H	11.05	11.61	12.18	12.72	14.27	15.11	15.67	16.24	16.78	18.33
	8H	11.05	11.58	12.18	12.71	14.25	15.18	15.71	16.31	16.84	18.38
	12H	11.02	11.52	12.15	12.64	14.21	15.21	15.71	16.35	16.83	18.40
4H	2H	11.30	11.91	12.43	13.02	14.55	13.48	14.09	14.61	15.20	16.74
	3H	12.31	12.82	13.45	13.95	15.50	14.96	15.47	16.10	16.61	18.16
	4H	12.58	13.05	13.72	14.17	15.74	15.48	15.94	16.62	17.07	18.64
	6H	12.70	13.10	13.84	14.24	15.81	15.83	16.23	16.97	17.37	18.94
	8H	12.70	13.07	13.85	14.21	15.79	15.93	16.30	17.07	17.44	19.02
	12H	12.66	13.00	13.82	14.15	15.73	15.97	16.31	17.13	17.46	19.04
8H	4H	13.02	13.39	14.16	14.53	16.11	15.59	15.96	16.74	17.10	18.68
	6H	13.27	13.58	14.44	14.76	16.34	16.01	16.32	17.18	17.50	19.08
	8H	13.31	13.58	14.49	14.74	16.34	16.16	16.43	17.33	17.59	19.18
	12H	13.29	13.53	14.47	14.68	16.31	16.25	16.48	17.42	17.64	19.27
12H	4H	13.02	13.35	14.18	14.50	16.09	15.55	15.89	16.71	17.04	18.62
	6H	13.33	13.60	14.50	14.76	16.35	16.01	16.28	17.18	17.44	19.03
	8H	13.39	13.63	14.57	14.78	16.41	16.16	16.40	17.33	17.55	19.18