

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: P935064

Luminaire Tested: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935064
REPORT IS A COMBINATION OF REPORTS P933739 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

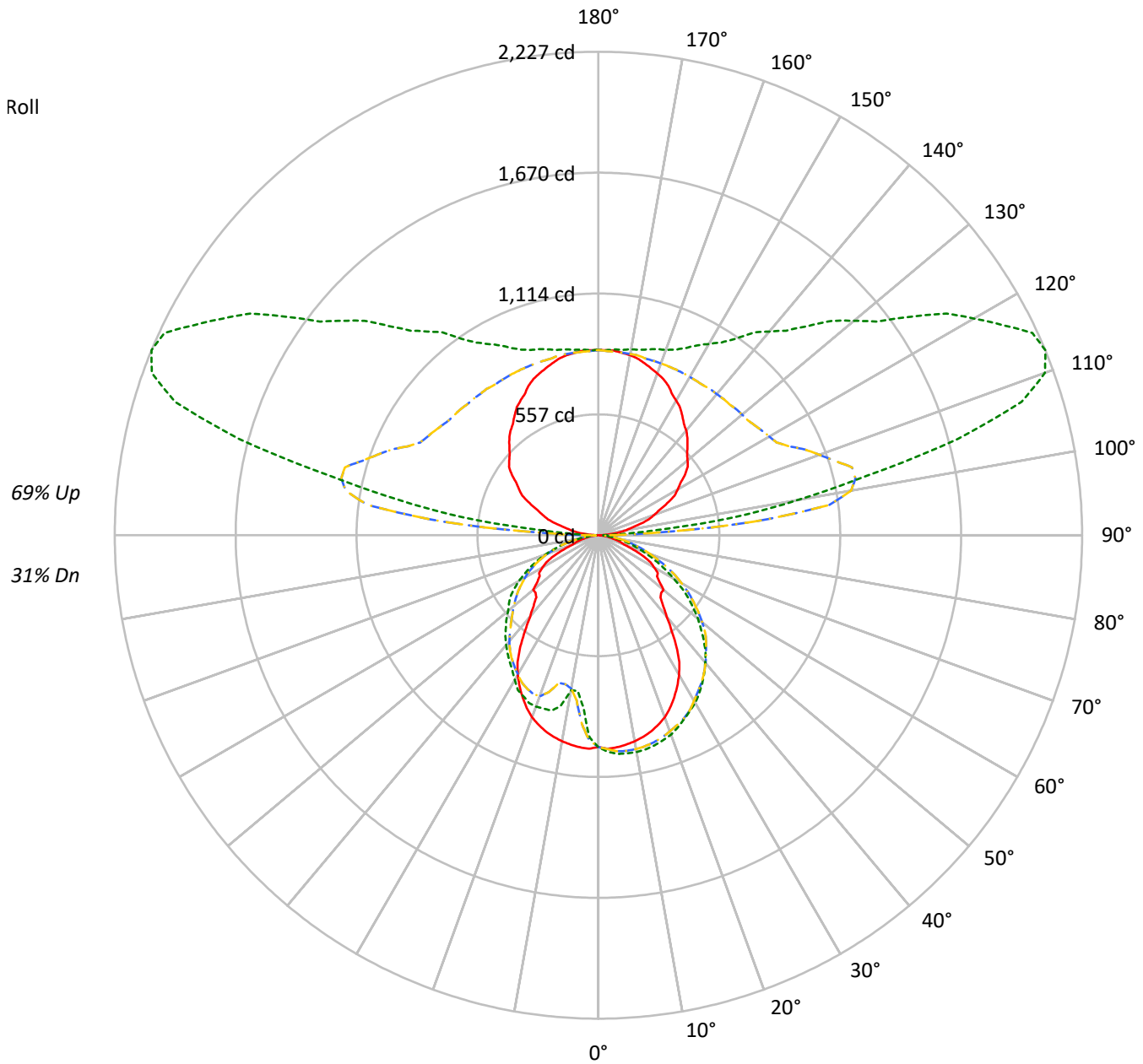
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8063.8 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 61.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P935064
CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-5000K

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	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	35	34	33	27
2	85	78	72	67	76	70	65	61	56	53	50	43	40	38	30	29	28	22
3	78	69	62	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	34	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	24	21	20	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	25	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	15	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°	6036	6036	6036	6036
5°	6079	6093	6079	4791
10°	6036	6003	6036	4291
15°	5968	5873	5968	4904
20°	5841	5718	5841	4914
25°	5584	5494	5584	4809
30°	5251	5307	5251	4581
35°	4680	5071	4680	4330
40°	3897	4794	3897	4140
45°	3479	4468	3479	3921
50°	3693	4080	3693	3702
55°	3471	3662	3471	3576
60°	3574	3111	3574	3275
65°	3236	2572	3236	2875
70°	2235	2049	2235	2409
75°	1953	1514	1953	1813
80°	1562	1002	1562	1091
85°	882	530	882	451

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5337 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.1	1.1
10°-20°	250.1	3.1
20°-30°	386.6	4.8
30°-40°	461.5	5.7
40°-50°	464.2	5.8
50°-60°	403.9	5.0
60°-70°	286.4	3.6
70°-80°	151.5	1.9
80°-90°	41.0	0.5
90°-100°	415.8	5.2
100°-110°	1093.3	13.6
110°-120°	1133.6	14.1
120°-130°	909.3	11.3
130°-140°	713.5	8.8
140°-150°	547.6	6.8
150°-160°	394.4	4.9
160°-170°	241.3	3.0
170°-180°	81.5	1.0
0°-30°	724.8	9.0
0°-40°	1186.3	14.7
0°-60°	2054.4	25.5
0°-90°	2533.3	31.4
90°-120°	2642.8	32.8
90°-150°	4813.2	59.7
90°-180°	5530.0	68.6
0°-180°	8063.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	976	976	976	976	976	
5°	980	1011	980	795	980	93
15°	936	1002	936	836	936	263
25°	824	934	824	818	824	379
35°	627	834	627	712	627	388
45°	404	687	404	603	404	324
55°	330	507	330	495	330	303
65°	229	306	229	342	229	219
75°	87	145	87	174	87	91
85°	15	37	15	31	15	20
90°	6	22	6	22	6	5
95°	55	251	55	251	55	61
105°	197	1712	197	1712	197	209
115°	350	2204	350	2204	350	346
125°	487	1756	487	1756	487	432
135°	580	1362	580	1362	580	449
145°	673	1105	673	1105	673	421
155°	760	952	760	952	760	349
165°	820	886	820	886	820	232
175°	853	853	853	853	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°	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8
2.5°	984.1	984.1	989.6	991.5	991.5	988.7	986.0	988.7	997.1	999.8	998.9
5°	980.4	987.8	998.0	999.8	1001.7	1000.7	998.9	1000.7	1009.9	1011.9	1012.8
7.5°	973.0	986.9	999.8	1002.6	1005.3	1002.6	1001.7	1003.5	1012.8	1014.6	1014.6
10°	963.8	983.2	998.0	999.8	1002.6	999.8	999.8	1003.5	1012.8	1014.6	1015.5
12.5°	950.9	977.6	991.5	993.3	997.1	996.2	995.1	998.9	1008.1	1009.9	1009.9
15°	936.1	967.5	980.4	982.3	988.7	986.9	986.9	990.6	1000.7	1003.5	1002.6
17.5°	915.8	954.6	969.4	972.1	976.7	975.8	976.7	980.4	989.6	991.5	992.4
20°	892.7	937.1	954.6	957.3	961.9	961.9	961.9	966.6	975.8	979.5	979.5
22.5°	861.3	918.5	937.1	938.9	944.4	944.4	946.2	952.8	961.0	961.9	961.9
25°	824.4	898.2	913.9	919.5	925.0	927.8	930.5	934.3	937.1	936.1	937.1
27.5°	785.6	872.4	892.7	896.4	903.8	906.6	910.3	911.2	912.1	914.9	913.0
30°	742.2	836.4	866.9	870.5	882.5	884.4	880.7	882.5	887.1	889.1	890.9
32.5°	693.3	782.9	840.1	848.4	859.5	853.9	853.0	855.8	863.2	863.2	865.0
35°	626.9	741.3	815.2	822.5	830.9	824.4	828.1	829.0	833.6	836.4	835.5
37.5°	553.9	705.3	789.3	794.8	801.3	793.0	798.6	801.3	805.0	803.2	803.2
40°	489.3	649.0	758.8	762.5	768.1	761.6	767.2	769.0	770.9	769.0	768.1
42.5°	441.3	587.1	726.5	731.1	727.5	732.0	734.0	737.6	734.9	731.1	731.1
45°	404.3	570.5	691.5	697.0	691.5	698.8	701.6	701.6	693.3	691.5	690.6
47.5°	392.3	537.3	656.4	656.4	653.6	662.9	667.4	661.0	652.7	649.9	649.9
50°	391.4	500.3	608.3	604.7	617.6	628.7	624.0	617.6	611.2	601.0	601.0
52.5°	355.4	455.1	546.5	560.3	580.7	587.1	579.8	573.3	562.2	557.6	553.9
55°	329.5	408.0	490.2	517.9	539.1	547.4	533.6	527.1	510.5	507.8	505.9
57.5°	324.0	339.7	438.5	473.6	499.4	498.5	490.2	478.2	464.4	461.6	460.7
60°	297.2	245.6	383.1	424.7	451.4	448.7	441.3	430.2	417.3	415.4	413.6
62.5°	269.5	178.2	320.4	367.4	405.3	404.3	397.9	381.3	372.0	367.4	363.8
65°	229.0	149.6	228.0	305.6	360.0	361.8	348.1	336.1	325.9	320.4	319.4
67.5°	174.5	121.9	154.2	254.8	316.7	314.8	297.2	291.7	278.8	276.0	270.5
70°	129.2	81.2	107.1	206.8	274.2	269.5	255.8	249.2	237.2	230.8	227.1
72.5°	107.1	65.5	78.5	160.6	230.8	225.3	213.3	205.8	195.7	190.1	186.5
75°	86.8	69.2	60.0	119.1	187.4	183.7	172.6	165.3	156.9	149.6	150.5
77.5°	63.7	64.6	48.0	87.7	148.7	143.1	136.6	127.4	123.7	116.4	116.4
80°	48.0	50.7	36.0	60.0	107.1	107.1	101.6	95.1	88.6	85.0	85.0
82.5°	32.3	32.3	26.8	37.8	73.0	70.2	66.4	64.6	60.9	59.1	59.1
85°	14.8	18.4	16.6	23.0	39.7	41.6	41.6	39.7	38.8	36.9	37.8
87.5°	4.6	8.4	10.2	12.9	20.3	21.2	22.1	22.1	22.1	23.0	23.0
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	61.9	100.8	110.5	155.4	215.1	245.0	214.7	154.2	108.7	104.4
95°	55.0	126.2	197.5	215.3	382.3	604.9	716.3	639.2	484.9	369.3	356.2
97.5°	95.1	157.9	220.8	236.5	514.9	886.2	1071.9	1023.1	925.7	852.5	827.6
100°	126.0	183.0	240.0	254.2	563.2	975.1	1181.2	1184.7	1191.9	1197.2	1167.5
102.5°	152.3	205.6	258.7	272.0	585.4	1003.2	1212.1	1274.2	1398.4	1491.5	1466.1
105°	196.9	242.0	287.1	298.3	601.8	1006.4	1208.7	1347.9	1626.2	1835.0	1821.3
107.5°	242.7	284.8	326.8	337.3	604.9	961.6	1140.0	1334.1	1722.4	2013.7	2017.0
110°	273.7	311.6	349.6	359.0	600.3	921.9	1082.7	1299.7	1733.9	2059.5	2073.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	304.0	340.2	376.3	385.3	600.4	887.2	1030.6	1252.7	1697.1	2030.3	2052.1
115°	349.8	383.1	416.4	424.8	606.0	847.4	968.2	1182.2	1610.3	1931.3	1961.7
117.5°	395.1	425.4	455.6	463.2	617.1	822.5	925.2	1118.4	1504.7	1794.4	1828.0
120°	421.4	449.9	478.4	485.6	626.4	814.2	908.1	1084.5	1437.5	1702.2	1734.9
122.5°	447.2	475.9	504.7	511.9	639.5	809.8	894.9	1053.9	1371.7	1610.0	1642.3
125°	486.7	512.9	539.1	545.7	657.3	806.2	880.6	1015.6	1285.6	1488.1	1517.9
127.5°	518.8	545.2	571.7	578.3	675.1	804.1	868.6	984.5	1216.3	1390.2	1415.3
130°	535.9	564.5	592.9	600.1	688.1	805.4	864.0	967.2	1173.5	1328.4	1351.5
132.5°	553.6	582.2	610.6	617.8	698.5	806.2	860.0	952.4	1137.1	1275.7	1296.4
135°	580.0	606.0	631.9	638.4	710.0	805.4	853.1	930.5	1085.2	1201.3	1219.2
137.5°	606.9	632.6	658.4	664.8	727.2	810.4	852.0	917.4	1048.2	1146.3	1160.9
140°	629.3	652.9	676.6	682.5	737.6	811.2	848.0	904.5	1017.4	1102.2	1115.8
142.5°	646.4	668.4	690.2	695.7	746.5	814.1	848.0	897.6	996.8	1071.2	1083.0
145°	672.8	691.9	710.9	715.7	757.9	814.2	842.3	882.8	964.0	1024.9	1033.8
147.5°	699.1	717.6	736.2	740.9	774.6	819.7	842.3	874.2	938.1	986.0	993.3
150°	716.3	733.1	749.8	754.1	783.4	822.6	842.3	869.2	923.1	963.6	969.5
152.5°	734.1	746.8	759.5	762.7	789.2	824.5	842.3	865.3	911.4	945.9	950.4
155°	760.4	769.8	779.1	781.5	801.8	828.8	842.3	860.6	897.2	924.7	927.7
157.5°	779.9	789.0	798.1	800.4	814.4	833.0	842.3	856.5	885.0	906.4	908.5
160°	793.0	800.1	807.3	809.0	820.1	834.9	842.3	854.5	878.9	897.2	898.4
162.5°	806.2	811.5	816.8	818.2	826.2	836.9	842.3	852.5	873.2	888.6	889.7
165°	820.5	825.3	830.1	831.3	835.0	839.9	842.3	849.6	864.4	875.5	876.7
167.5°	833.6	835.9	838.2	838.8	841.8	845.9	848.0	852.8	862.4	869.7	870.3
170°	842.3	844.6	846.8	847.4	847.6	847.9	848.0	852.8	862.4	869.7	869.7
172.5°	846.8	847.3	847.9	848.0	848.0	848.0	848.0	851.8	859.4	865.1	864.7
175°	853.1	853.1	853.1	853.1	851.3	849.1	848.0	850.3	855.2	858.9	858.9
177.5°	853.1	853.1	853.1	853.1	851.8	850.1	849.1	851.1	854.8	857.7	857.1
180°	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8
2.5°	1000.7	998.0	1000.7	998.9	999.8	997.1	988.7	986.0	988.7	991.5	991.5
5°	1012.8	1010.8	1012.8	1012.8	1011.9	1009.9	1000.7	998.9	1000.7	1001.7	999.8
7.5°	1016.4	1013.7	1016.4	1014.6	1014.6	1012.8	1003.5	1001.7	1002.6	1005.3	1002.6
10°	1016.4	1013.7	1016.4	1015.5	1014.6	1012.8	1003.5	999.8	999.8	1002.6	999.8
12.5°	1011.9	1009.9	1011.9	1009.9	1009.9	1008.1	998.9	995.1	996.2	997.1	993.3
15°	1004.4	1001.7	1004.4	1002.6	1003.5	1000.7	990.6	986.9	986.9	988.7	982.3
17.5°	993.3	989.6	993.3	992.4	991.5	989.6	980.4	976.7	975.8	976.7	972.1
20°	980.4	977.6	980.4	979.5	979.5	975.8	966.6	961.9	961.9	961.9	957.3
22.5°	960.1	957.3	960.1	961.9	961.9	961.0	952.8	946.2	944.4	944.4	938.9
25°	937.1	934.3	937.1	937.1	936.1	937.1	934.3	930.5	927.8	925.0	919.5
27.5°	914.9	913.0	914.9	913.0	914.9	912.1	911.2	910.3	906.6	903.8	896.4
30°	892.7	890.9	892.7	890.9	889.1	887.1	882.5	880.7	884.4	882.5	870.5
32.5°	865.0	863.2	865.0	865.0	863.2	863.2	855.8	853.0	853.9	859.5	848.4
35°	836.4	833.6	836.4	835.5	836.4	833.6	829.0	828.1	824.4	830.9	822.5
37.5°	803.2	800.4	803.2	803.2	803.2	805.0	801.3	798.6	793.0	801.3	794.8
40°	769.0	765.4	769.0	768.1	769.0	770.9	769.0	767.2	761.6	768.1	762.5
42.5°	730.2	729.3	730.2	731.1	731.1	734.9	737.6	734.0	732.0	727.5	731.1
45°	688.7	686.8	688.7	690.6	691.5	693.3	701.6	701.6	698.8	691.5	697.0
47.5°	644.4	639.7	644.4	649.9	649.9	652.7	661.0	667.4	662.9	653.6	656.4
50°	597.3	598.2	597.3	601.0	601.0	611.2	617.6	624.0	628.7	617.6	604.7
52.5°	551.2	550.2	551.2	553.9	557.6	562.2	573.3	579.8	587.1	580.7	560.3
55°	505.0	506.8	505.0	505.9	507.8	510.5	527.1	533.6	547.4	539.1	517.9
57.5°	458.8	456.1	458.8	460.7	461.6	464.4	478.2	490.2	498.5	499.4	473.6
60°	405.3	401.6	405.3	413.6	415.4	417.3	430.2	441.3	448.7	451.4	424.7
62.5°	358.2	351.8	358.2	363.8	367.4	372.0	381.3	397.9	404.3	405.3	367.4
65°	308.3	305.6	308.3	319.4	320.4	325.9	336.1	348.1	361.8	360.0	305.6
67.5°	263.1	263.1	263.1	270.5	276.0	278.8	291.7	297.2	314.8	316.7	254.8
70°	221.5	220.6	221.5	227.1	230.8	237.2	249.2	255.8	269.5	274.2	206.8
72.5°	181.9	181.0	181.9	186.5	190.1	195.7	205.8	213.3	225.3	230.8	160.6
75°	146.8	144.9	146.8	150.5	149.6	156.9	165.3	172.6	183.7	187.4	119.1
77.5°	112.6	112.6	112.6	116.4	116.4	123.7	127.4	136.6	143.1	148.7	87.7
80°	84.0	83.1	84.0	85.0	85.0	88.6	95.1	101.6	107.1	107.1	60.0
82.5°	59.1	57.3	59.1	59.1	59.1	60.9	64.6	66.4	70.2	73.0	37.8
85°	36.9	36.9	36.9	37.8	36.9	38.8	39.7	41.6	41.6	39.7	23.0
87.5°	24.0	23.0	24.0	23.0	23.0	22.1	22.1	22.1	21.2	20.3	12.9
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	214.7	245.0	215.1	155.4	110.5
95°	303.8	251.4	303.8	356.2	369.3	484.9	639.2	716.3	604.9	382.3	215.3
97.5°	727.8	628.1	727.8	827.6	852.5	925.7	1023.1	1071.9	886.2	514.9	236.5
100°	1048.7	929.8	1048.7	1167.5	1197.2	1191.9	1184.7	1181.2	975.1	563.2	254.2
102.5°	1364.2	1262.5	1364.2	1466.1	1491.5	1398.4	1274.2	1212.1	1003.2	585.4	272.0
105°	1766.7	1712.0	1766.7	1821.3	1835.0	1626.2	1347.9	1208.7	1006.4	601.8	298.3
107.5°	2030.3	2043.5	2030.3	2017.0	2013.7	1722.4	1334.1	1140.0	961.6	604.9	337.3
110°	2130.8	2187.8	2130.8	2073.7	2059.5	1733.9	1299.7	1082.7	921.9	600.3	359.0



TEST NUMBER: P935064

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2139.7	2227.2	2139.7	2052.1	2030.3	1697.1	1252.7	1030.6	887.2	600.4	385.3
115°	2083.0	2204.4	2083.0	1961.7	1931.3	1610.3	1182.2	968.2	847.4	606.0	424.8
117.5°	1962.7	2097.3	1962.7	1828.0	1794.4	1504.7	1118.4	925.2	822.5	617.1	463.2
120°	1865.8	1996.5	1865.8	1734.9	1702.2	1437.5	1084.5	908.1	814.2	626.4	485.6
122.5°	1771.3	1900.4	1771.3	1642.3	1610.0	1371.7	1053.9	894.9	809.8	639.5	511.9
125°	1636.6	1755.5	1636.6	1517.9	1488.1	1285.6	1015.6	880.6	806.2	657.3	545.7
127.5°	1515.6	1615.8	1515.6	1415.3	1390.2	1216.3	984.5	868.6	804.1	675.1	578.3
130°	1444.2	1536.8	1444.2	1351.5	1328.4	1173.5	967.2	864.0	805.4	688.1	600.1
132.5°	1379.4	1462.3	1379.4	1296.4	1275.7	1137.1	952.4	860.0	806.2	698.5	617.8
135°	1290.6	1362.1	1290.6	1219.2	1201.3	1085.2	930.5	853.1	805.4	710.0	638.4
137.5°	1219.4	1278.0	1219.4	1160.9	1146.3	1048.2	917.4	852.0	810.4	727.2	664.8
140°	1170.6	1225.3	1170.6	1115.8	1102.2	1017.4	904.5	848.0	811.2	737.6	682.5
142.5°	1130.1	1177.2	1130.1	1083.0	1071.2	996.8	897.6	848.0	814.1	746.5	695.7
145°	1069.5	1105.1	1069.5	1033.8	1024.9	964.0	882.8	842.3	814.2	757.9	715.7
147.5°	1022.9	1052.4	1022.9	993.3	986.0	938.1	874.2	842.3	819.7	774.6	740.9
150°	993.5	1017.4	993.5	969.5	963.6	923.1	869.2	842.3	822.6	783.4	754.1
152.5°	968.4	986.5	968.4	950.4	945.9	911.4	865.3	842.3	824.5	789.2	762.7
155°	939.6	951.6	939.6	927.7	924.7	897.2	860.6	842.3	828.8	801.8	781.5
157.5°	916.9	925.2	916.9	908.5	906.4	885.0	856.5	842.3	833.0	814.4	800.4
160°	903.3	908.1	903.3	898.4	897.2	878.9	854.5	842.3	834.9	820.1	809.0
162.5°	894.3	898.9	894.3	889.7	888.6	873.2	852.5	842.3	836.9	826.2	818.2
165°	881.5	886.3	881.5	876.7	875.5	864.4	849.6	842.3	839.9	835.0	831.3
167.5°	872.3	874.3	872.3	870.3	869.7	862.4	852.8	848.0	845.9	841.8	838.8
170°	869.7	869.7	869.7	869.7	869.7	862.4	852.8	848.0	847.9	847.6	847.4
172.5°	862.9	861.2	862.9	864.7	865.1	859.4	851.8	848.0	848.0	848.0	848.0
175°	858.9	858.9	858.9	858.9	858.9	855.2	850.3	848.0	849.1	851.3	853.1
177.5°	855.1	853.1	855.1	857.1	857.7	854.8	851.1	849.1	850.1	851.8	853.1
180°	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1



TEST NUMBER: P935064

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-5000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8
2.5°	989.6	984.1	984.1	974.9	971.2	968.4	963.8	950.0	946.2	942.6	948.1
5°	998.0	987.8	980.4	963.8	950.0	944.4	926.9	893.7	871.4	854.8	845.7
7.5°	999.8	986.9	973.0	947.2	913.9	899.2	845.7	784.7	768.1	753.3	744.1
10°	998.0	983.2	963.8	925.0	846.6	820.7	767.2	727.5	717.3	714.5	717.3
12.5°	991.5	977.6	950.9	886.2	776.4	758.8	727.5	704.4	702.5	707.2	732.0
15°	980.4	967.5	936.1	834.6	737.6	724.7	702.5	694.2	704.4	736.7	811.5
17.5°	969.4	954.6	915.8	783.8	708.1	698.8	683.1	699.7	757.0	800.4	825.3
20°	954.6	937.1	892.7	746.8	686.8	678.5	671.1	745.9	789.3	805.0	818.9
22.5°	937.1	918.5	861.3	721.0	664.7	658.3	662.9	771.8	789.3	800.4	812.4
25°	913.9	898.2	824.4	700.7	647.2	639.7	657.3	769.0	779.1	782.0	805.9
27.5°	892.7	872.4	785.6	682.2	626.0	623.1	661.9	757.0	764.4	767.2	793.0
30°	866.9	836.4	742.2	662.9	603.8	602.8	662.9	742.2	740.4	747.7	773.6
32.5°	840.1	782.9	693.3	638.8	582.6	581.6	656.4	720.1	718.3	728.4	747.7
35°	815.2	741.3	626.9	611.2	555.8	556.7	640.6	694.2	695.2	704.4	716.4
37.5°	789.3	705.3	553.9	580.7	529.9	529.9	619.4	670.2	668.4	671.1	687.8
40°	758.8	649.0	489.3	541.0	505.9	503.2	593.6	644.4	637.9	637.0	660.1
42.5°	726.5	587.1	441.3	488.4	478.2	474.5	562.2	613.0	601.0	603.8	633.3
45°	691.5	570.5	404.3	412.7	449.6	446.8	528.0	577.0	568.7	576.0	606.5
47.5°	656.4	537.3	392.3	342.5	419.1	418.2	490.2	541.9	537.3	544.7	577.0
50°	608.3	500.3	391.4	293.6	385.0	388.6	445.0	507.8	507.8	514.2	548.4
52.5°	546.5	455.1	355.4	265.9	345.2	356.3	405.3	478.2	480.0	486.6	516.9
55°	490.2	408.0	329.5	244.7	298.2	322.2	366.5	447.7	451.4	457.9	485.6
57.5°	438.5	339.7	324.0	219.7	254.8	277.9	332.4	418.2	420.0	425.6	452.3
60°	383.1	245.6	297.2	192.9	216.9	234.5	300.9	383.1	389.6	393.2	416.4
62.5°	320.4	178.2	269.5	174.5	198.5	202.2	275.1	349.9	358.2	360.9	374.8
65°	228.0	149.6	229.0	158.8	179.1	180.1	247.4	315.7	323.1	327.7	337.9
67.5°	154.2	121.9	174.5	144.0	164.4	165.3	220.6	276.0	286.2	289.9	296.3
70°	107.1	81.2	129.2	128.3	147.7	149.6	192.0	240.1	249.2	252.0	255.8
72.5°	78.5	65.5	107.1	115.4	130.1	132.1	162.5	199.4	208.7	211.4	213.3
75°	60.0	69.2	86.8	100.7	110.8	111.7	133.0	162.5	168.9	170.8	171.7
77.5°	48.0	64.6	63.7	81.2	90.5	88.6	104.3	125.5	131.0	131.0	131.0
80°	36.0	50.7	48.0	58.2	66.4	64.6	74.8	89.6	91.4	93.2	92.3
82.5°	26.8	32.3	32.3	36.9	44.3	42.5	49.8	58.2	58.2	58.2	60.0
85°	16.6	18.4	14.8	19.4	25.0	24.0	27.7	31.4	32.3	32.3	30.5
87.5°	10.2	8.4	4.6	7.3	11.1	11.1	12.9	13.9	12.9	12.9	12.9
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	61.9	22.9	61.9	100.8	110.5	155.4	215.1	245.0	214.7	154.2
95°	197.5	126.2	55.0	126.2	197.5	215.3	382.3	604.9	716.3	639.2	484.9
97.5°	220.8	157.9	95.1	157.9	220.8	236.5	514.9	886.2	1071.9	1023.1	925.7
100°	240.0	183.0	126.0	183.0	240.0	254.2	563.2	975.1	1181.2	1184.7	1191.9
102.5°	258.7	205.6	152.3	205.6	258.7	272.0	585.4	1003.2	1212.1	1274.2	1398.4
105°	287.1	242.0	196.9	242.0	287.1	298.3	601.8	1006.4	1208.7	1347.9	1626.2
107.5°	326.8	284.8	242.7	284.8	326.8	337.3	604.9	961.6	1140.0	1334.1	1722.4
110°	349.6	311.6	273.7	311.6	349.6	359.0	600.3	921.9	1082.7	1299.7	1733.9



TEST NUMBER: P935064

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-5000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	376.3	340.2	304.0	340.2	376.3	385.3	600.4	887.2	1030.6	1252.7	1697.1
115°	416.4	383.1	349.8	383.1	416.4	424.8	606.0	847.4	968.2	1182.2	1610.3
117.5°	455.6	425.4	395.1	425.4	455.6	463.2	617.1	822.5	925.2	1118.4	1504.7
120°	478.4	449.9	421.4	449.9	478.4	485.6	626.4	814.2	908.1	1084.5	1437.5
122.5°	504.7	475.9	447.2	475.9	504.7	511.9	639.5	809.8	894.9	1053.9	1371.7
125°	539.1	512.9	486.7	512.9	539.1	545.7	657.3	806.2	880.6	1015.6	1285.6
127.5°	571.7	545.2	518.8	545.2	571.7	578.3	675.1	804.1	868.6	984.5	1216.3
130°	592.9	564.5	535.9	564.5	592.9	600.1	688.1	805.4	864.0	967.2	1173.5
132.5°	610.6	582.2	553.6	582.2	610.6	617.8	698.5	806.2	860.0	952.4	1137.1
135°	631.9	606.0	580.0	606.0	631.9	638.4	710.0	805.4	853.1	930.5	1085.2
137.5°	658.4	632.6	606.9	632.6	658.4	664.8	727.2	810.4	852.0	917.4	1048.2
140°	676.6	652.9	629.3	652.9	676.6	682.5	737.6	811.2	848.0	904.5	1017.4
142.5°	690.2	668.4	646.4	668.4	690.2	695.7	746.5	814.1	848.0	897.6	996.8
145°	710.9	691.9	672.8	691.9	710.9	715.7	757.9	814.2	842.3	882.8	964.0
147.5°	736.2	717.6	699.1	717.6	736.2	740.9	774.6	819.7	842.3	874.2	938.1
150°	749.8	733.1	716.3	733.1	749.8	754.1	783.4	822.6	842.3	869.2	923.1
152.5°	759.5	746.8	734.1	746.8	759.5	762.7	789.2	824.5	842.3	865.3	911.4
155°	779.1	769.8	760.4	769.8	779.1	781.5	801.8	828.8	842.3	860.6	897.2
157.5°	798.1	789.0	779.9	789.0	798.1	800.4	814.4	833.0	842.3	856.5	885.0
160°	807.3	800.1	793.0	800.1	807.3	809.0	820.1	834.9	842.3	854.5	878.9
162.5°	816.8	811.5	806.2	811.5	816.8	818.2	826.2	836.9	842.3	852.5	873.2
165°	830.1	825.3	820.5	825.3	830.1	831.3	835.0	839.9	842.3	849.6	864.4
167.5°	838.2	835.9	833.6	835.9	838.2	838.8	841.8	845.9	848.0	852.8	862.4
170°	846.8	844.6	842.3	844.6	846.8	847.4	847.6	847.9	848.0	852.8	862.4
172.5°	847.9	847.3	846.8	847.3	847.9	848.0	848.0	848.0	848.0	851.8	859.4
175°	853.1	853.1	853.1	853.1	853.1	853.1	851.3	849.1	848.0	850.3	855.2
177.5°	853.1	853.1	853.1	853.1	853.1	853.1	851.8	850.1	849.1	851.1	854.8
180°	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1



TEST NUMBER: P935064

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8	975.8
2.5°	941.6	938.9	942.6	932.4	942.6	938.9	941.6	948.1	942.6	946.2	950.0
5°	826.3	821.6	806.8	794.8	806.8	821.6	826.3	845.7	854.8	871.4	893.7
7.5°	738.6	734.9	731.1	723.8	731.1	734.9	738.6	744.1	753.3	768.1	784.7
10°	719.2	720.1	725.6	724.7	725.6	720.1	719.2	717.3	714.5	717.3	727.5
12.5°	769.0	777.3	807.8	805.9	807.8	777.3	769.0	732.0	707.2	702.5	704.4
15°	826.3	829.0	835.5	836.4	835.5	829.0	826.3	811.5	736.7	704.4	694.2
17.5°	831.8	832.7	837.3	837.3	837.3	832.7	831.8	825.3	800.4	757.0	699.7
20°	827.2	829.0	838.2	840.1	838.2	829.0	827.2	818.9	805.0	789.3	745.9
22.5°	825.3	829.0	836.4	835.5	836.4	829.0	825.3	812.4	800.4	789.3	771.8
25°	816.1	816.1	817.0	817.9	817.0	816.1	816.1	805.9	782.0	779.1	769.0
27.5°	796.7	798.6	804.1	803.2	804.1	798.6	796.7	793.0	767.2	764.4	757.0
30°	779.1	777.3	772.7	769.0	772.7	777.3	779.1	773.6	747.7	740.4	742.2
32.5°	749.7	745.0	740.4	737.6	740.4	745.0	749.7	747.7	728.4	718.3	720.1
35°	714.5	715.4	714.5	711.8	714.5	715.4	714.5	716.4	704.4	695.2	694.2
37.5°	689.6	691.5	690.6	686.8	690.6	691.5	689.6	687.8	671.1	668.4	670.2
40°	663.8	664.7	663.8	661.0	663.8	664.7	663.8	660.1	637.0	637.9	644.4
42.5°	638.8	637.9	635.1	633.3	635.1	637.9	638.8	633.3	603.8	601.0	613.0
45°	610.3	611.2	605.6	602.8	605.6	611.2	610.3	606.5	576.0	568.7	577.0
47.5°	581.6	581.6	577.0	574.2	577.0	581.6	581.6	577.0	544.7	537.3	541.9
50°	551.2	550.2	543.7	542.8	543.7	550.2	551.2	548.4	514.2	507.8	507.8
52.5°	516.0	516.0	516.9	518.9	516.9	516.0	516.0	516.9	486.6	480.0	478.2
55°	485.6	486.6	493.0	494.8	493.0	486.6	485.6	485.6	457.9	451.4	447.7
57.5°	454.2	454.2	458.8	458.8	458.8	454.2	454.2	452.3	425.6	420.0	418.2
60°	418.2	420.0	423.7	422.8	423.7	420.0	418.2	416.4	393.2	389.6	383.1
62.5°	380.4	382.2	383.1	381.3	383.1	382.2	380.4	374.8	360.9	358.2	349.9
65°	340.6	342.5	343.4	341.6	343.4	342.5	340.6	337.9	327.7	323.1	315.7
67.5°	300.0	299.1	298.2	301.9	298.2	299.1	300.0	296.3	289.9	286.2	276.0
70°	258.5	258.5	257.6	259.4	257.6	258.5	258.5	255.8	252.0	249.2	240.1
72.5°	214.2	213.3	216.9	214.2	216.9	213.3	214.2	213.3	211.4	208.7	199.4
75°	170.8	172.6	170.8	173.5	170.8	172.6	170.8	171.7	170.8	168.9	162.5
77.5°	130.1	132.1	130.1	130.1	130.1	132.1	130.1	131.0	131.0	131.0	125.5
80°	92.3	91.4	91.4	90.5	91.4	91.4	92.3	92.3	93.2	91.4	89.6
82.5°	59.1	58.2	58.2	60.0	58.2	58.2	59.1	60.0	58.2	58.2	58.2
85°	32.3	33.2	31.4	31.4	31.4	33.2	32.3	30.5	32.3	32.3	31.4
87.5°	12.0	11.1	11.1	11.1	11.1	11.1	12.0	12.9	12.9	12.9	13.9
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	214.7	245.0	215.1
95°	369.3	356.2	303.8	251.4	303.8	356.2	369.3	484.9	639.2	716.3	604.9
97.5°	852.5	827.6	727.8	628.1	727.8	827.6	852.5	925.7	1023.1	1071.9	886.2
100°	1197.2	1167.5	1048.7	929.8	1048.7	1167.5	1197.2	1191.9	1184.7	1181.2	975.1
102.5°	1491.5	1466.1	1364.2	1262.5	1364.2	1466.1	1491.5	1398.4	1274.2	1212.1	1003.2
105°	1835.0	1821.3	1766.7	1712.0	1766.7	1821.3	1835.0	1626.2	1347.9	1208.7	1006.4
107.5°	2013.7	2017.0	2030.3	2043.5	2030.3	2017.0	2013.7	1722.4	1334.1	1140.0	961.6
110°	2059.5	2073.7	2130.8	2187.8	2130.8	2073.7	2059.5	1733.9	1299.7	1082.7	921.9



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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	2030.3	2052.1	2139.7	2227.2	2139.7	2052.1	2030.3	1697.1	1252.7	1030.6	887.2
115°	1931.3	1961.7	2083.0	2204.4	2083.0	1961.7	1931.3	1610.3	1182.2	968.2	847.4
117.5°	1794.4	1828.0	1962.7	2097.3	1962.7	1828.0	1794.4	1504.7	1118.4	925.2	822.5
120°	1702.2	1734.9	1865.8	1996.5	1865.8	1734.9	1702.2	1437.5	1084.5	908.1	814.2
122.5°	1610.0	1642.3	1771.3	1900.4	1771.3	1642.3	1610.0	1371.7	1053.9	894.9	809.8
125°	1488.1	1517.9	1636.6	1755.5	1636.6	1517.9	1488.1	1285.6	1015.6	880.6	806.2
127.5°	1390.2	1415.3	1515.6	1615.8	1515.6	1415.3	1390.2	1216.3	984.5	868.6	804.1
130°	1328.4	1351.5	1444.2	1536.8	1444.2	1351.5	1328.4	1173.5	967.2	864.0	805.4
132.5°	1275.7	1296.4	1379.4	1462.3	1379.4	1296.4	1275.7	1137.1	952.4	860.0	806.2
135°	1201.3	1219.2	1290.6	1362.1	1290.6	1219.2	1201.3	1085.2	930.5	853.1	805.4
137.5°	1146.3	1160.9	1219.4	1278.0	1219.4	1160.9	1146.3	1048.2	917.4	852.0	810.4
140°	1102.2	1115.8	1170.6	1225.3	1170.6	1115.8	1102.2	1017.4	904.5	848.0	811.2
142.5°	1071.2	1083.0	1130.1	1177.2	1130.1	1083.0	1071.2	996.8	897.6	848.0	814.1
145°	1024.9	1033.8	1069.5	1105.1	1069.5	1033.8	1024.9	964.0	882.8	842.3	814.2
147.5°	986.0	993.3	1022.9	1052.4	1022.9	993.3	986.0	938.1	874.2	842.3	819.7
150°	963.6	969.5	993.5	1017.4	993.5	969.5	963.6	923.1	869.2	842.3	822.6
152.5°	945.9	950.4	968.4	986.5	968.4	950.4	945.9	911.4	865.3	842.3	824.5
155°	924.7	927.7	939.6	951.6	939.6	927.7	924.7	897.2	860.6	842.3	828.8
157.5°	906.4	908.5	916.9	925.2	916.9	908.5	906.4	885.0	856.5	842.3	833.0
160°	897.2	898.4	903.3	908.1	903.3	898.4	897.2	878.9	854.5	842.3	834.9
162.5°	888.6	889.7	894.3	898.9	894.3	889.7	888.6	873.2	852.5	842.3	836.9
165°	875.5	876.7	881.5	886.3	881.5	876.7	875.5	864.4	849.6	842.3	839.9
167.5°	869.7	870.3	872.3	874.3	872.3	870.3	869.7	862.4	852.8	848.0	845.9
170°	869.7	869.7	869.7	869.7	869.7	869.7	869.7	862.4	852.8	848.0	847.9
172.5°	865.1	864.7	862.9	861.2	862.9	864.7	865.1	859.4	851.8	848.0	848.0
175°	858.9	858.9	858.9	858.9	858.9	858.9	858.9	855.2	850.3	848.0	849.1
177.5°	857.7	857.1	855.1	853.1	855.1	857.1	857.7	854.8	851.1	849.1	850.1
180°	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	975.8	975.8	975.8	975.8	975.8
2.5°	963.8	968.4	971.2	974.9	984.1
5°	926.9	944.4	950.0	963.8	980.4
7.5°	845.7	899.2	913.9	947.2	973.0
10°	767.2	820.7	846.6	925.0	963.8
12.5°	727.5	758.8	776.4	886.2	950.9
15°	702.5	724.7	737.6	834.6	936.1
17.5°	683.1	698.8	708.1	783.8	915.8
20°	671.1	678.5	686.8	746.8	892.7
22.5°	662.9	658.3	664.7	721.0	861.3
25°	657.3	639.7	647.2	700.7	824.4
27.5°	661.9	623.1	626.0	682.2	785.6
30°	662.9	602.8	603.8	662.9	742.2
32.5°	656.4	581.6	582.6	638.8	693.3
35°	640.6	556.7	555.8	611.2	626.9
37.5°	619.4	529.9	529.9	580.7	553.9
40°	593.6	503.2	505.9	541.0	489.3
42.5°	562.2	474.5	478.2	488.4	441.3
45°	528.0	446.8	449.6	412.7	404.3
47.5°	490.2	418.2	419.1	342.5	392.3
50°	445.0	388.6	385.0	293.6	391.4
52.5°	405.3	356.3	345.2	265.9	355.4
55°	366.5	322.2	298.2	244.7	329.5
57.5°	332.4	277.9	254.8	219.7	324.0
60°	300.9	234.5	216.9	192.9	297.2
62.5°	275.1	202.2	198.5	174.5	269.5
65°	247.4	180.1	179.1	158.8	229.0
67.5°	220.6	165.3	164.4	144.0	174.5
70°	192.0	149.6	147.7	128.3	129.2
72.5°	162.5	132.1	130.1	115.4	107.1
75°	133.0	111.7	110.8	100.7	86.8
77.5°	104.3	88.6	90.5	81.2	63.7
80°	74.8	64.6	66.4	58.2	48.0
82.5°	49.8	42.5	44.3	36.9	32.3
85°	27.7	24.0	25.0	19.4	14.8
87.5°	12.9	11.1	11.1	7.3	4.6
90°	25.2	16.1	14.9	10.3	5.7
92.5°	155.4	110.5	100.8	61.9	22.9
95°	382.3	215.3	197.5	126.2	55.0
97.5°	514.9	236.5	220.8	157.9	95.1
100°	563.2	254.2	240.0	183.0	126.0
102.5°	585.4	272.0	258.7	205.6	152.3
105°	601.8	298.3	287.1	242.0	196.9
107.5°	604.9	337.3	326.8	284.8	242.7
110°	600.3	359.0	349.6	311.6	273.7



TEST NUMBER: P935064

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-6-5000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	600.4	385.3	376.3	340.2	304.0
115°	606.0	424.8	416.4	383.1	349.8
117.5°	617.1	463.2	455.6	425.4	395.1
120°	626.4	485.6	478.4	449.9	421.4
122.5°	639.5	511.9	504.7	475.9	447.2
125°	657.3	545.7	539.1	512.9	486.7
127.5°	675.1	578.3	571.7	545.2	518.8
130°	688.1	600.1	592.9	564.5	535.9
132.5°	698.5	617.8	610.6	582.2	553.6
135°	710.0	638.4	631.9	606.0	580.0
137.5°	727.2	664.8	658.4	632.6	606.9
140°	737.6	682.5	676.6	652.9	629.3
142.5°	746.5	695.7	690.2	668.4	646.4
145°	757.9	715.7	710.9	691.9	672.8
147.5°	774.6	740.9	736.2	717.6	699.1
150°	783.4	754.1	749.8	733.1	716.3
152.5°	789.2	762.7	759.5	746.8	734.1
155°	801.8	781.5	779.1	769.8	760.4
157.5°	814.4	800.4	798.1	789.0	779.9
160°	820.1	809.0	807.3	800.1	793.0
162.5°	826.2	818.2	816.8	811.5	806.2
165°	835.0	831.3	830.1	825.3	820.5
167.5°	841.8	838.8	838.2	835.9	833.6
170°	847.6	847.4	846.8	844.6	842.3
172.5°	848.0	848.0	847.9	847.3	846.8
175°	851.3	853.1	853.1	853.1	853.1
177.5°	851.8	853.1	853.1	853.1	853.1
180°	853.1	853.1	853.1	853.1	853.1



TEST NUMBER: P935064
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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	9.02	9.74	10.13	10.84	12.35	11.85	12.57	12.95	13.66	15.18
	3H	9.49	10.13	10.60	11.24	12.77	13.18	13.82	14.29	14.93	16.46
	4H	9.67	10.28	10.80	11.39	12.93	13.62	14.23	14.74	15.33	16.87
	6H	9.79	10.35	10.92	11.46	13.00	13.89	14.45	15.02	15.56	17.11
	8H	9.78	10.32	10.92	11.44	12.98	13.96	14.50	15.10	15.62	17.16
	12H	9.75	10.25	10.89	11.37	12.94	14.00	14.50	15.13	15.62	17.19
4H	2H	10.04	10.65	11.17	11.75	13.29	12.24	12.85	13.37	13.96	15.49
	3H	11.05	11.56	12.19	12.69	14.24	13.73	14.24	14.86	15.37	16.92
	4H	11.32	11.79	12.46	12.91	14.48	14.25	14.72	15.39	15.84	17.41
	6H	11.44	11.84	12.58	12.98	14.54	14.61	15.01	15.75	16.15	17.71
	8H	11.44	11.81	12.58	12.95	14.53	14.71	15.08	15.85	16.22	17.80
	12H	11.40	11.74	12.56	12.89	14.47	14.76	15.10	15.92	16.25	17.83
8H	4H	11.76	12.13	12.91	13.27	14.85	14.36	14.74	15.51	15.87	17.45
	6H	12.02	12.32	13.18	13.51	15.08	14.79	15.10	15.96	16.28	17.85
	8H	12.06	12.33	13.23	13.49	15.08	14.94	15.21	16.11	16.37	17.96
	12H	12.04	12.27	13.21	13.43	15.06	15.03	15.27	16.21	16.43	18.05
12H	4H	11.76	12.10	12.92	13.25	14.83	14.32	14.66	15.48	15.81	17.39
	6H	12.08	12.35	13.25	13.50	15.10	14.79	15.06	15.96	16.22	17.81
	8H	12.14	12.37	13.31	13.53	15.16	14.94	15.18	16.12	16.34	17.96