

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: P935834

Luminaire Tested: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

**Test Information**

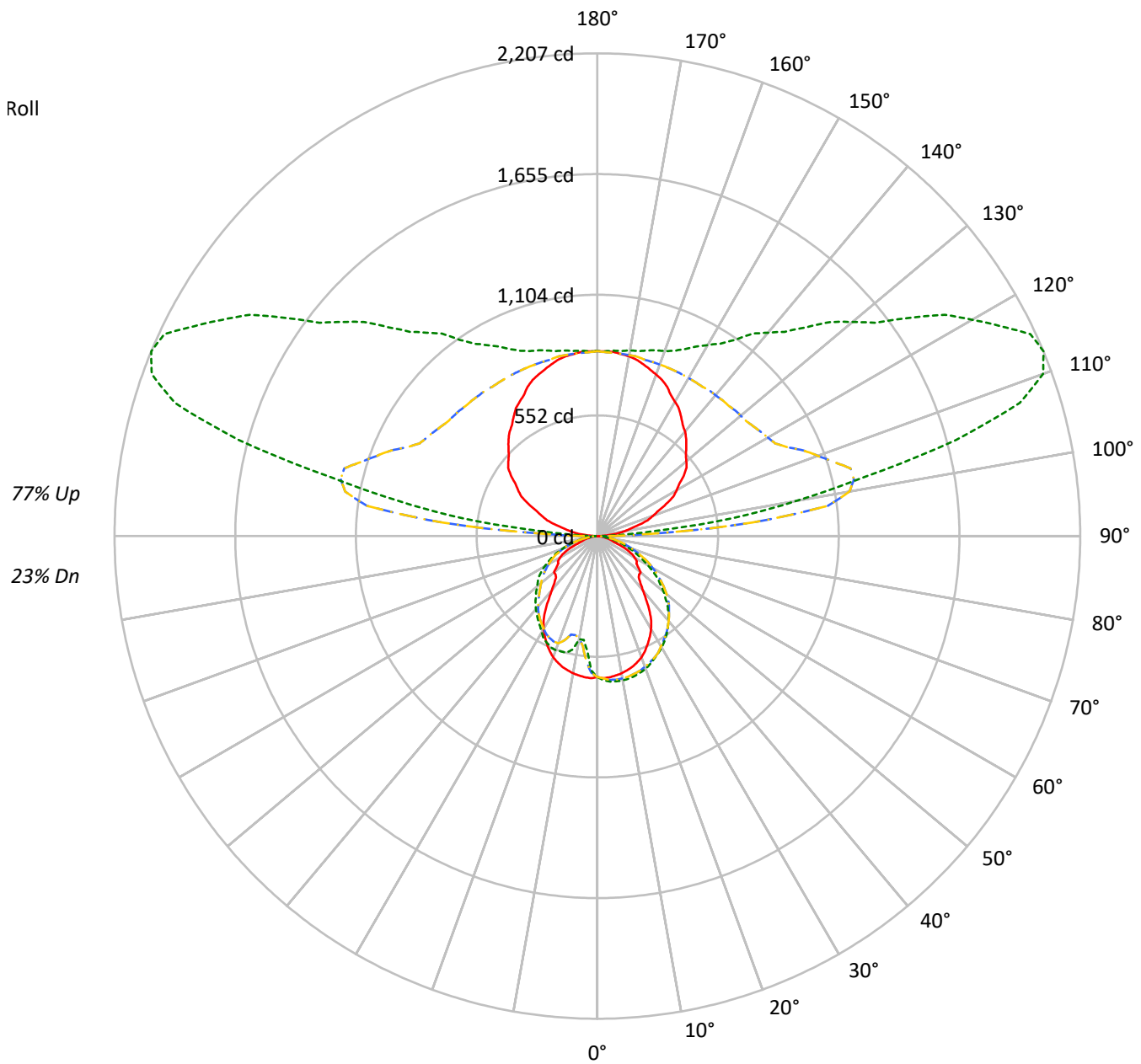
Test Method: LM-79-2019  
Report Number: P935834  
REPORT IS A COMBINATION OF REPORTS P933770 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7155.3 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 55.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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CATALOG NUMBER: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-4000K

### 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
RCR																				
0	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	23		
1	92	88	84	81	81	78	75	72	60	58	56	43	42	41	28	27	27	20		
2	84	77	71	66	74	68	63	59	52	49	46	38	36	34	25	24	23	17		
3	76	67	60	55	67	60	54	49	46	42	39	34	31	29	22	20	19	14		
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	19	18	16	12		
5	64	53	45	39	56	47	40	36	36	32	28	27	24	21	17	16	14	10		
6	59	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12	9		
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	14	12	11	8		
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7		
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6		
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	9	8	6		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	5983	5983	5983	5983
5°	6021	6040	6021	4749
10°	5975	5950	5975	4254
15°	5903	5821	5903	4860
20°	5773	5668	5773	4871
25°	5514	5446	5514	4767
30°	5181	5260	5181	4541
35°	4611	5027	4611	4292
40°	3836	4752	3836	4104
45°	3421	4429	3421	3887
50°	3627	4044	3627	3670
55°	3402	3630	3402	3545
60°	3495	3083	3495	3246
65°	3153	2548	3153	2849
70°	2168	2031	2168	2389
75°	1879	1502	1879	1798
80°	1484	993	1484	1081
85°	803	526	803	446

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 5253 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.2	0.8
10°-20°	165.3	2.3
20°-30°	255.5	3.6
30°-40°	305.0	4.3
40°-50°	306.8	4.3
50°-60°	266.9	3.7
60°-70°	189.3	2.6
70°-80°	100.1	1.4
80°-90°	28.2	0.4
90°-100°	412.1	5.8
100°-110°	1083.4	15.1
110°-120°	1123.3	15.7
120°-130°	901.0	12.6
130°-140°	707.0	9.9
140°-150°	542.6	7.6
150°-160°	390.8	5.5
160°-170°	239.1	3.3
170°-180°	80.8	1.1
0°-30°	478.9	6.7
0°-40°	783.9	11.0
0°-60°	1357.6	19.0
0°-90°	1675.2	23.4
90°-120°	2618.8	36.6
90°-150°	4769.4	66.7
90°-180°	5480.0	76.6
0°-180°	7155.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	645	645	645	645	645	
5°	648	668	648	525	648	61
15°	619	662	619	553	619	174
25°	545	617	545	540	545	250
35°	414	551	414	470	414	256
45°	267	454	267	398	267	214
55°	218	335	218	327	218	200
65°	151	202	151	226	151	145
75°	57	96	57	115	57	60
85°	10	24	10	21	10	13
90°	6	22	6	22	6	5
95°	54	249	54	249	54	60
105°	195	1696	195	1696	195	207
115°	347	2184	347	2184	347	342
125°	482	1740	482	1740	482	428
135°	575	1350	575	1350	575	445
145°	667	1095	667	1095	667	418
155°	754	943	754	943	754	346
165°	813	878	813	878	813	229
175°	845	851	845	851	845	80
180°	845	845	845	845	845	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8
2.5°	650.3	650.3	653.9	655.2	655.2	653.4	651.6	653.4	658.9	660.7	660.0
5°	647.8	652.8	659.5	660.7	661.9	661.3	660.0	661.3	667.4	668.6	669.2
7.5°	643.0	652.1	660.7	662.5	664.3	662.5	661.9	663.1	669.2	670.4	670.4
10°	636.9	649.7	659.5	660.7	662.5	660.7	660.7	663.1	669.2	670.4	671.0
12.5°	628.4	646.0	655.2	656.4	658.9	658.2	657.7	660.0	666.2	667.4	667.4
15°	618.6	639.3	647.8	649.1	653.4	652.1	652.1	654.6	661.3	663.1	662.5
17.5°	605.2	630.8	640.6	642.4	645.5	644.8	645.5	647.8	653.9	655.2	655.8
20°	589.9	619.2	630.8	632.7	635.7	635.7	635.7	638.7	644.8	647.3	647.3
22.5°	569.2	607.0	619.2	620.5	624.1	624.1	625.3	629.6	635.0	635.7	635.7
25°	544.8	593.5	603.9	607.6	611.3	613.1	614.9	617.4	619.2	618.6	619.2
27.5°	519.1	576.5	589.9	592.4	597.3	599.1	601.5	602.1	602.7	604.5	603.4
30°	490.5	552.7	572.8	575.3	583.2	584.4	582.0	583.2	586.3	587.4	588.7
32.5°	458.2	517.3	555.2	560.6	568.0	564.3	563.7	565.5	570.4	570.4	571.6
35°	414.2	489.8	538.7	543.6	549.1	544.8	547.2	547.8	550.9	552.7	552.1
37.5°	366.0	466.1	521.6	525.2	529.5	524.0	527.7	529.5	532.0	530.8	530.8
40°	323.3	428.9	501.5	503.9	507.6	503.3	506.9	508.2	509.4	508.2	507.6
42.5°	291.6	388.0	480.1	483.2	480.7	483.7	485.0	487.5	485.6	483.2	483.2
45°	267.2	377.0	456.9	460.5	456.9	461.8	463.6	463.6	458.2	456.9	456.3
47.5°	259.2	355.0	433.7	433.7	431.9	438.0	441.1	436.8	431.3	429.4	429.4
50°	258.7	330.7	402.1	399.6	408.2	415.4	412.4	408.2	403.9	397.1	397.1
52.5°	234.9	300.7	361.1	370.3	383.7	388.0	383.1	378.9	371.5	368.5	366.0
55°	217.8	269.6	323.9	342.2	356.3	361.8	352.6	348.3	337.4	335.6	334.3
57.5°	214.1	224.5	289.8	312.9	330.0	329.5	323.9	316.0	306.8	305.0	304.5
60°	196.5	162.3	253.2	280.6	298.3	296.5	291.6	284.3	275.7	274.5	273.3
62.5°	178.1	117.7	211.7	242.8	267.8	267.2	263.0	252.0	245.9	242.8	240.3
65°	151.3	98.8	150.7	201.9	238.0	239.1	230.0	222.0	215.3	211.7	211.0
67.5°	115.3	80.5	101.9	168.4	209.2	208.0	196.5	192.8	184.2	182.4	178.7
70°	85.4	53.7	70.8	136.6	181.2	178.1	169.0	164.7	156.8	152.5	150.1
72.5°	70.8	43.3	51.8	106.2	152.5	148.8	140.9	136.1	129.4	125.7	123.3
75°	57.3	45.8	39.7	78.7	123.8	121.4	114.1	109.2	103.7	98.8	99.4
77.5°	42.1	42.7	31.7	57.9	98.2	94.6	90.3	84.2	81.8	76.9	76.9
80°	31.7	33.6	23.8	39.7	70.8	70.8	67.1	62.9	58.6	56.1	56.1
82.5°	21.4	21.4	17.6	25.0	48.2	46.4	43.9	42.7	40.3	39.0	39.0
85°	9.7	12.2	11.0	15.3	26.2	27.5	27.5	26.2	25.7	24.4	25.0
87.5°	3.1	5.5	6.7	8.6	13.5	14.0	14.6	14.6	14.6	15.3	15.3
90°	5.6	10.2	14.7	15.9	25.0	37.1	43.1	38.3	28.7	21.6	21.6
92.5°	22.6	61.2	99.9	109.5	153.9	213.1	242.8	212.8	152.8	107.8	103.5
95°	54.5	125.1	195.7	213.3	378.8	599.5	709.8	633.4	480.6	365.9	352.9
97.5°	94.1	156.5	218.8	234.3	510.2	878.2	1062.1	1013.8	917.2	844.8	820.0
100°	124.8	181.3	237.8	251.9	558.1	966.3	1170.4	1174.0	1181.1	1186.3	1156.9
102.5°	150.9	203.7	256.3	269.5	580.1	994.1	1201.1	1262.6	1385.7	1478.0	1452.8
105°	195.2	239.9	284.4	295.6	596.3	997.1	1197.6	1335.5	1611.4	1818.4	1804.8
107.5°	240.6	282.2	323.8	334.2	599.4	952.8	1129.6	1322.0	1706.8	1995.4	1998.7
110°	271.2	308.7	346.4	355.8	594.8	913.5	1072.8	1288.0	1718.1	2040.8	2054.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	301.3	337.1	373.0	381.9	595.0	879.2	1021.2	1241.4	1681.6	2011.8	2033.5
115°	346.7	379.7	412.7	421.0	600.5	839.8	959.4	1171.4	1595.6	1913.7	1943.8
117.5°	391.5	421.5	451.5	459.0	611.6	815.1	916.8	1108.2	1491.0	1778.1	1811.5
120°	417.5	445.8	474.0	481.1	620.6	806.8	899.8	1074.6	1424.4	1686.7	1719.1
122.5°	443.1	471.6	500.1	507.2	633.7	802.5	886.8	1044.3	1359.2	1595.4	1627.3
125°	482.3	508.2	534.2	540.7	651.3	798.8	872.6	1006.3	1273.9	1474.5	1504.0
127.5°	514.0	540.2	566.4	573.0	668.9	796.8	860.7	975.6	1205.3	1377.6	1402.4
130°	531.0	559.2	587.4	594.5	681.8	798.0	856.2	958.4	1162.9	1316.2	1339.2
132.5°	548.6	576.9	605.1	612.2	692.1	798.8	852.1	943.7	1126.8	1264.0	1284.6
135°	574.7	600.5	626.1	632.6	703.5	798.0	845.3	922.0	1075.3	1190.3	1208.0
137.5°	601.4	626.8	652.3	658.7	720.5	803.0	844.2	909.0	1038.6	1135.9	1150.3
140°	623.6	647.0	670.5	676.3	731.0	803.8	840.2	896.2	1008.2	1092.1	1105.7
142.5°	640.6	662.2	683.9	689.3	739.6	806.7	840.2	889.4	987.8	1061.5	1073.2
145°	666.7	685.6	704.4	709.2	751.0	806.8	834.6	874.8	955.2	1015.5	1024.3
147.5°	692.7	711.2	729.5	734.2	767.6	812.3	834.6	866.2	929.5	977.0	984.2
150°	709.8	726.4	743.0	747.2	776.3	815.1	834.6	861.3	914.7	954.8	960.8
152.5°	727.3	740.0	752.5	755.7	782.0	817.0	834.6	857.4	903.1	937.3	941.7
155°	753.5	762.8	772.1	774.5	794.5	821.2	834.6	852.8	889.1	916.3	919.3
157.5°	772.7	781.8	790.8	793.1	806.9	825.4	834.6	848.7	876.9	898.1	900.2
160°	785.7	792.8	799.9	801.7	812.7	827.3	834.6	846.7	870.9	889.0	890.2
162.5°	798.8	804.1	809.4	810.8	818.7	829.3	834.6	844.8	865.2	880.5	881.6
165°	813.0	817.8	822.6	823.8	827.4	832.2	834.6	841.9	856.5	867.4	868.6
167.5°	826.0	828.3	830.6	831.1	834.1	838.2	840.2	845.1	854.6	861.8	862.3
170°	834.6	836.9	839.1	839.7	839.9	840.1	840.2	845.1	854.6	861.8	861.8
172.5°	839.1	839.6	840.1	840.2	840.2	840.2	840.2	844.1	851.6	857.2	856.8
175°	845.3	845.3	845.3	845.3	843.6	841.3	840.2	842.6	847.4	851.1	851.1
177.5°	845.3	845.3	845.3	845.3	844.1	842.3	841.4	843.3	847.1	849.9	849.3
180°	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8
2.5°	661.3	659.5	661.3	660.0	660.7	658.9	653.4	651.6	653.4	655.2	655.2
5°	669.2	668.0	669.2	669.2	668.6	667.4	661.3	660.0	661.3	661.9	660.7
7.5°	671.7	669.9	671.7	670.4	670.4	669.2	663.1	661.9	662.5	664.3	662.5
10°	671.7	669.9	671.7	671.0	670.4	669.2	663.1	660.7	660.7	662.5	660.7
12.5°	668.6	667.4	668.6	667.4	667.4	666.2	660.0	657.7	658.2	658.9	656.4
15°	663.8	661.9	663.8	662.5	663.1	661.3	654.6	652.1	652.1	653.4	649.1
17.5°	656.4	653.9	656.4	655.8	655.2	653.9	647.8	645.5	644.8	645.5	642.4
20°	647.8	646.0	647.8	647.3	647.3	644.8	638.7	635.7	635.7	635.7	632.7
22.5°	634.5	632.7	634.5	635.7	635.7	635.0	629.6	625.3	624.1	624.1	620.5
25°	619.2	617.4	619.2	619.2	618.6	619.2	617.4	614.9	613.1	611.3	607.6
27.5°	604.5	603.4	604.5	603.4	604.5	602.7	602.1	601.5	599.1	597.3	592.4
30°	589.9	588.7	589.9	588.7	587.4	586.3	583.2	582.0	584.4	583.2	575.3
32.5°	571.6	570.4	571.6	571.6	570.4	570.4	565.5	563.7	564.3	568.0	560.6
35°	552.7	550.9	552.7	552.1	552.7	550.9	547.8	547.2	544.8	549.1	543.6
37.5°	530.8	529.0	530.8	530.8	530.8	532.0	529.5	527.7	524.0	529.5	525.2
40°	508.2	505.8	508.2	507.6	508.2	509.4	508.2	506.9	503.3	507.6	503.9
42.5°	482.6	481.9	482.6	483.2	483.2	485.6	487.5	485.0	483.7	480.7	483.2
45°	455.1	453.9	455.1	456.3	456.9	458.2	463.6	463.6	461.8	456.9	460.5
47.5°	425.8	422.8	425.8	429.4	429.4	431.3	436.8	441.1	438.0	431.9	433.7
50°	394.7	395.3	394.7	397.1	397.1	403.9	408.2	412.4	415.4	408.2	399.6
52.5°	364.2	363.6	364.2	366.0	368.5	371.5	378.9	383.1	388.0	383.7	370.3
55°	333.7	334.9	333.7	334.3	335.6	337.4	348.3	352.6	361.8	356.3	342.2
57.5°	303.2	301.4	303.2	304.5	305.0	306.8	316.0	323.9	329.5	330.0	312.9
60°	267.8	265.3	267.8	273.3	274.5	275.7	284.3	291.6	296.5	298.3	280.6
62.5°	236.7	232.4	236.7	240.3	242.8	245.9	252.0	263.0	267.2	267.8	242.8
65°	203.8	201.9	203.8	211.0	211.7	215.3	222.0	230.0	239.1	238.0	201.9
67.5°	173.8	173.8	173.8	178.7	182.4	184.2	192.8	196.5	208.0	209.2	168.4
70°	146.5	145.8	146.5	150.1	152.5	156.8	164.7	169.0	178.1	181.2	136.6
72.5°	120.2	119.5	120.2	123.3	125.7	129.4	136.1	140.9	148.8	152.5	106.2
75°	97.0	95.8	97.0	99.4	98.8	103.7	109.2	114.1	121.4	123.8	78.7
77.5°	74.4	74.4	74.4	76.9	76.9	81.8	84.2	90.3	94.6	98.2	57.9
80°	55.5	54.9	55.5	56.1	56.1	58.6	62.9	67.1	70.8	70.8	39.7
82.5°	39.0	37.8	39.0	39.0	39.0	40.3	42.7	43.9	46.4	48.2	25.0
85°	24.4	24.4	24.4	25.0	24.4	25.7	26.2	27.5	27.5	26.2	15.3
87.5°	15.8	15.3	15.8	15.3	15.3	14.6	14.6	14.6	14.0	13.5	8.6
90°	21.6	21.6	21.6	21.6	21.6	28.7	38.3	43.1	37.1	25.0	15.9
92.5°	86.3	69.2	86.3	103.5	107.8	152.8	212.8	242.8	213.1	153.9	109.5
95°	301.0	249.1	301.0	352.9	365.9	480.6	633.4	709.8	599.5	378.8	213.3
97.5°	721.3	622.4	721.3	820.0	844.8	917.2	1013.8	1062.1	878.2	510.2	234.3
100°	1039.2	921.4	1039.2	1156.9	1186.3	1181.1	1174.0	1170.4	966.3	558.1	251.9
102.5°	1351.9	1251.0	1351.9	1452.8	1478.0	1385.7	1262.6	1201.1	994.1	580.1	269.5
105°	1750.6	1696.4	1750.6	1804.8	1818.4	1611.4	1335.5	1197.6	997.1	596.3	295.6
107.5°	2011.8	2024.9	2011.8	1998.7	1995.4	1706.8	1322.0	1129.6	952.8	599.4	334.2
110°	2111.4	2167.8	2111.4	2054.9	2040.8	1718.1	1288.0	1072.8	913.5	594.8	355.8





TEST NUMBER: P935834

CATALOG NUMBER: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2120.3	2207.0	2120.3	2033.5	2011.8	1681.6	1241.4	1021.2	879.2	595.0	381.9
115°	2064.1	2184.3	2064.1	1943.8	1913.7	1595.6	1171.4	959.4	839.8	600.5	421.0
117.5°	1944.8	2078.2	1944.8	1811.5	1778.1	1491.0	1108.2	916.8	815.1	611.6	459.0
120°	1848.7	1978.4	1848.7	1719.1	1686.7	1424.4	1074.6	899.8	806.8	620.6	481.1
122.5°	1755.2	1883.0	1755.2	1627.3	1595.4	1359.2	1044.3	886.8	802.5	633.7	507.2
125°	1621.7	1739.5	1621.7	1504.0	1474.5	1273.9	1006.3	872.6	798.8	651.3	540.7
127.5°	1501.7	1601.1	1501.7	1402.4	1377.6	1205.3	975.6	860.7	796.8	668.9	573.0
130°	1430.9	1522.7	1430.9	1339.2	1316.2	1162.9	958.4	856.2	798.0	681.8	594.5
132.5°	1366.7	1449.0	1366.7	1284.6	1264.0	1126.8	943.7	852.1	798.8	692.1	612.2
135°	1278.9	1349.7	1278.9	1208.0	1190.3	1075.3	922.0	845.3	798.0	703.5	632.6
137.5°	1208.4	1266.3	1208.4	1150.3	1135.9	1038.6	909.0	844.2	803.0	720.5	658.7
140°	1159.9	1214.1	1159.9	1105.7	1092.1	1008.2	896.2	840.2	803.8	731.0	676.3
142.5°	1119.9	1166.4	1119.9	1073.2	1061.5	987.8	889.4	840.2	806.7	739.6	689.3
145°	1059.7	1095.0	1059.7	1024.3	1015.5	955.2	874.8	834.6	806.8	751.0	709.2
147.5°	1013.5	1042.8	1013.5	984.2	977.0	929.5	866.2	834.6	812.3	767.6	734.2
150°	984.5	1008.2	984.5	960.8	954.8	914.7	861.3	834.6	815.1	776.3	747.2
152.5°	959.7	977.5	959.7	941.7	937.3	903.1	857.4	834.6	817.0	782.0	755.7
155°	931.1	942.9	931.1	919.3	916.3	889.1	852.8	834.6	821.2	794.5	774.5
157.5°	908.5	916.8	908.5	900.2	898.1	876.9	848.7	834.6	825.4	806.9	793.1
160°	895.0	899.8	895.0	890.2	889.0	870.9	846.7	834.6	827.3	812.7	801.7
162.5°	886.2	890.7	886.2	881.6	880.5	865.2	844.8	834.6	829.3	818.7	810.8
165°	873.4	878.3	873.4	868.6	867.4	856.5	841.9	834.6	832.2	827.4	823.8
167.5°	864.3	866.3	864.3	862.3	861.8	854.6	845.1	840.2	838.2	834.1	831.1
170°	861.8	861.8	861.8	861.8	861.8	854.6	845.1	840.2	840.1	839.9	839.7
172.5°	855.1	853.3	855.1	856.8	857.2	851.6	844.1	840.2	840.2	840.2	840.2
175°	851.1	851.1	851.1	851.1	851.1	847.4	842.6	840.2	841.3	843.6	845.3
177.5°	847.3	845.3	847.3	849.3	849.9	847.1	843.3	841.4	842.3	844.1	845.3
180°	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3



TEST NUMBER: P935834

CATALOG NUMBER: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8
2.5°	653.9	650.3	650.3	644.2	641.7	639.9	636.9	627.7	625.3	622.8	626.6
5°	659.5	652.8	647.8	636.9	627.7	624.1	612.5	590.5	575.9	564.9	558.8
7.5°	660.7	652.1	643.0	625.9	603.9	594.2	558.8	518.6	507.6	497.8	491.7
10°	659.5	649.7	636.9	611.3	559.4	542.3	506.9	480.7	474.0	472.2	474.0
12.5°	655.2	646.0	628.4	585.6	513.0	501.5	480.7	465.5	464.3	467.3	483.7
15°	647.8	639.3	618.6	551.5	487.5	478.9	464.3	458.7	465.5	486.8	536.2
17.5°	640.6	630.8	605.2	517.9	467.9	461.8	451.5	462.5	500.2	529.0	545.4
20°	630.8	619.2	589.9	493.6	453.9	448.4	443.5	492.9	521.6	532.0	541.1
22.5°	619.2	607.0	569.2	476.5	439.3	435.0	438.0	510.0	521.6	529.0	536.9
25°	603.9	593.5	544.8	463.0	427.6	422.8	434.4	508.2	514.9	516.7	532.6
27.5°	589.9	576.5	519.1	450.8	413.6	411.8	437.4	500.2	505.1	506.9	524.0
30°	572.8	552.7	490.5	438.0	399.0	398.3	438.0	490.5	489.3	494.1	511.2
32.5°	555.2	517.3	458.2	422.2	385.0	384.3	433.7	475.8	474.6	481.3	494.1
35°	538.7	489.8	414.2	403.9	367.2	367.9	423.3	458.7	459.4	465.5	473.4
37.5°	521.6	466.1	366.0	383.7	350.2	350.2	409.3	442.9	441.7	443.5	454.5
40°	501.5	428.9	323.3	357.5	334.3	332.5	392.2	425.8	421.5	421.0	436.2
42.5°	480.1	388.0	291.6	322.7	316.0	313.6	371.5	405.1	397.1	399.0	418.5
45°	456.9	377.0	267.2	272.7	297.1	295.3	348.9	381.3	375.8	380.7	400.8
47.5°	433.7	355.0	259.2	226.3	277.0	276.3	323.9	358.1	355.0	359.9	381.3
50°	402.1	330.7	258.7	194.0	254.4	256.8	294.1	335.6	335.6	339.8	362.4
52.5°	361.1	300.7	234.9	175.7	228.1	235.5	267.8	316.0	317.2	321.5	341.7
55°	323.9	269.6	217.8	161.6	197.0	212.9	242.1	295.9	298.3	302.5	320.9
57.5°	289.8	224.5	214.1	145.2	168.4	183.7	219.6	276.3	277.5	281.3	298.9
60°	253.2	162.3	196.5	127.5	143.4	154.9	198.8	253.2	257.4	259.9	275.2
62.5°	211.7	117.7	178.1	115.3	131.2	133.6	181.8	231.2	236.7	238.5	247.7
65°	150.7	98.8	151.3	105.0	118.3	119.0	163.5	208.7	213.5	216.6	223.3
67.5°	101.9	80.5	115.3	95.1	108.6	109.2	145.8	182.4	189.1	191.6	195.8
70°	70.8	53.7	85.4	84.8	97.6	98.8	126.9	158.6	164.7	166.6	169.0
72.5°	51.8	43.3	70.8	76.2	86.1	87.2	107.3	131.8	137.9	139.7	140.9
75°	39.7	45.8	57.3	66.5	73.2	73.8	87.9	107.3	111.6	112.9	113.4
77.5°	31.7	42.7	42.1	53.7	59.8	58.6	69.0	83.0	86.6	86.6	86.6
80°	23.8	33.6	31.7	38.5	43.9	42.7	49.4	59.2	60.4	61.6	61.0
82.5°	17.6	21.4	21.4	24.4	29.3	28.1	32.9	38.5	38.5	38.5	39.7
85°	11.0	12.2	9.7	12.8	16.5	15.8	18.3	20.7	21.4	21.4	20.1
87.5°	6.7	5.5	3.1	4.9	7.3	7.3	8.6	9.2	8.6	8.6	8.6
90°	14.7	10.2	5.6	10.2	14.7	15.9	25.0	37.1	43.1	38.3	28.7
92.5°	99.9	61.2	22.6	61.2	99.9	109.5	153.9	213.1	242.8	212.8	152.8
95°	195.7	125.1	54.5	125.1	195.7	213.3	378.8	599.5	709.8	633.4	480.6
97.5°	218.8	156.5	94.1	156.5	218.8	234.3	510.2	878.2	1062.1	1013.8	917.2
100°	237.8	181.3	124.8	181.3	237.8	251.9	558.1	966.3	1170.4	1174.0	1181.1
102.5°	256.3	203.7	150.9	203.7	256.3	269.5	580.1	994.1	1201.1	1262.6	1385.7
105°	284.4	239.9	195.2	239.9	284.4	295.6	596.3	997.1	1197.6	1335.5	1611.4
107.5°	323.8	282.2	240.6	282.2	323.8	334.2	599.4	952.8	1129.6	1322.0	1706.8
110°	346.4	308.7	271.2	308.7	346.4	355.8	594.8	913.5	1072.8	1288.0	1718.1



TEST NUMBER: P935834

CATALOG NUMBER: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	373.0	337.1	301.3	337.1	373.0	381.9	595.0	879.2	1021.2	1241.4	1681.6
115°	412.7	379.7	346.7	379.7	412.7	421.0	600.5	839.8	959.4	1171.4	1595.6
117.5°	451.5	421.5	391.5	421.5	451.5	459.0	611.6	815.1	916.8	1108.2	1491.0
120°	474.0	445.8	417.5	445.8	474.0	481.1	620.6	806.8	899.8	1074.6	1424.4
122.5°	500.1	471.6	443.1	471.6	500.1	507.2	633.7	802.5	886.8	1044.3	1359.2
125°	534.2	508.2	482.3	508.2	534.2	540.7	651.3	798.8	872.6	1006.3	1273.9
127.5°	566.4	540.2	514.0	540.2	566.4	573.0	668.9	796.8	860.7	975.6	1205.3
130°	587.4	559.2	531.0	559.2	587.4	594.5	681.8	798.0	856.2	958.4	1162.9
132.5°	605.1	576.9	548.6	576.9	605.1	612.2	692.1	798.8	852.1	943.7	1126.8
135°	626.1	600.5	574.7	600.5	626.1	632.6	703.5	798.0	845.3	922.0	1075.3
137.5°	652.3	626.8	601.4	626.8	652.3	658.7	720.5	803.0	844.2	909.0	1038.6
140°	670.5	647.0	623.6	647.0	670.5	676.3	731.0	803.8	840.2	896.2	1008.2
142.5°	683.9	662.2	640.6	662.2	683.9	689.3	739.6	806.7	840.2	889.4	987.8
145°	704.4	685.6	666.7	685.6	704.4	709.2	751.0	806.8	834.6	874.8	955.2
147.5°	729.5	711.2	692.7	711.2	729.5	734.2	767.6	812.3	834.6	866.2	929.5
150°	743.0	726.4	709.8	726.4	743.0	747.2	776.3	815.1	834.6	861.3	914.7
152.5°	752.5	740.0	727.3	740.0	752.5	755.7	782.0	817.0	834.6	857.4	903.1
155°	772.1	762.8	753.5	762.8	772.1	774.5	794.5	821.2	834.6	852.8	889.1
157.5°	790.8	781.8	772.7	781.8	790.8	793.1	806.9	825.4	834.6	848.7	876.9
160°	799.9	792.8	785.7	792.8	799.9	801.7	812.7	827.3	834.6	846.7	870.9
162.5°	809.4	804.1	798.8	804.1	809.4	810.8	818.7	829.3	834.6	844.8	865.2
165°	822.6	817.8	813.0	817.8	822.6	823.8	827.4	832.2	834.6	841.9	856.5
167.5°	830.6	828.3	826.0	828.3	830.6	831.1	834.1	838.2	840.2	845.1	854.6
170°	839.1	836.9	834.6	836.9	839.1	839.7	839.9	840.1	840.2	845.1	854.6
172.5°	840.1	839.6	839.1	839.6	840.1	840.2	840.2	840.2	840.2	844.1	851.6
175°	845.3	845.3	845.3	845.3	845.3	845.3	843.6	841.3	840.2	842.6	847.4
177.5°	845.3	845.3	845.3	845.3	845.3	845.3	844.1	842.3	841.4	843.3	847.1
180°	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3



TEST NUMBER: P935834

CATALOG NUMBER: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8	644.8
2.5°	622.3	620.5	622.8	616.2	622.8	620.5	622.3	626.6	622.8	625.3	627.7
5°	546.0	543.0	533.2	525.2	533.2	543.0	546.0	558.8	564.9	575.9	590.5
7.5°	488.0	485.6	483.2	478.3	483.2	485.6	488.0	491.7	497.8	507.6	518.6
10°	475.2	475.8	479.5	478.9	479.5	475.8	475.2	474.0	472.2	474.0	480.7
12.5°	508.2	513.7	533.8	532.6	533.8	513.7	508.2	483.7	467.3	464.3	465.5
15°	546.0	547.8	552.1	552.7	552.1	547.8	546.0	536.2	486.8	465.5	458.7
17.5°	549.7	550.2	553.3	553.3	553.3	550.2	549.7	545.4	529.0	500.2	462.5
20°	546.6	547.8	554.0	555.2	554.0	547.8	546.6	541.1	532.0	521.6	492.9
22.5°	545.4	547.8	552.7	552.1	552.7	547.8	545.4	536.9	529.0	521.6	510.0
25°	539.3	539.3	539.9	540.5	539.9	539.3	539.3	532.6	516.7	514.9	508.2
27.5°	526.5	527.7	531.3	530.8	531.3	527.7	526.5	524.0	506.9	505.1	500.2
30°	514.9	513.7	510.6	508.2	510.6	513.7	514.9	511.2	494.1	489.3	490.5
32.5°	495.4	492.3	489.3	487.5	489.3	492.3	495.4	494.1	481.3	474.6	475.8
35°	472.2	472.8	472.2	470.4	472.2	472.8	472.2	473.4	465.5	459.4	458.7
37.5°	455.7	456.9	456.3	453.9	456.3	456.9	455.7	454.5	443.5	441.7	442.9
40°	438.6	439.3	438.6	436.8	438.6	439.3	438.6	436.2	421.0	421.5	425.8
42.5°	422.2	421.5	419.7	418.5	419.7	421.5	422.2	418.5	399.0	397.1	405.1
45°	403.2	403.9	400.1	398.3	400.1	403.9	403.2	400.8	380.7	375.8	381.3
47.5°	384.3	384.3	381.3	379.4	381.3	384.3	384.3	381.3	359.9	355.0	358.1
50°	364.2	363.6	359.3	358.7	359.3	363.6	364.2	362.4	339.8	335.6	335.6
52.5°	341.0	341.0	341.7	342.8	341.7	341.0	341.0	341.7	321.5	317.2	316.0
55°	320.9	321.5	325.7	327.0	325.7	321.5	320.9	320.9	302.5	298.3	295.9
57.5°	300.2	300.2	303.2	303.2	303.2	300.2	300.2	298.9	281.3	277.5	276.3
60°	276.3	277.5	280.0	279.4	280.0	277.5	276.3	275.2	259.9	257.4	253.2
62.5°	251.3	252.6	253.2	252.0	253.2	252.6	251.3	247.7	238.5	236.7	231.2
65°	225.1	226.3	227.0	225.7	227.0	226.3	225.1	223.3	216.6	213.5	208.7
67.5°	198.3	197.7	197.0	199.5	197.0	197.7	198.3	195.8	191.6	189.1	182.4
70°	170.8	170.8	170.2	171.5	170.2	170.8	170.8	169.0	166.6	164.7	158.6
72.5°	141.5	140.9	143.4	141.5	143.4	140.9	141.5	140.9	139.7	137.9	131.8
75°	112.9	114.1	112.9	114.7	112.9	114.1	112.9	113.4	112.9	111.6	107.3
77.5°	86.1	87.2	86.1	86.1	86.1	87.2	86.1	86.6	86.6	86.6	83.0
80°	61.0	60.4	60.4	59.8	60.4	60.4	61.0	61.0	61.6	60.4	59.2
82.5°	39.0	38.5	38.5	39.7	38.5	38.5	39.0	39.7	38.5	38.5	38.5
85°	21.4	21.9	20.7	20.7	20.7	21.9	21.4	20.1	21.4	21.4	20.7
87.5°	7.9	7.3	7.3	7.3	7.3	7.3	7.9	8.6	8.6	8.6	9.2
90°	21.6	21.6	21.6	21.6	21.6	21.6	21.6	28.7	38.3	43.1	37.1
92.5°	107.8	103.5	86.3	69.2	86.3	103.5	107.8	152.8	212.8	242.8	213.1
95°	365.9	352.9	301.0	249.1	301.0	352.9	365.9	480.6	633.4	709.8	599.5
97.5°	844.8	820.0	721.3	622.4	721.3	820.0	844.8	917.2	1013.8	1062.1	878.2
100°	1186.3	1156.9	1039.2	921.4	1039.2	1156.9	1186.3	1181.1	1174.0	1170.4	966.3
102.5°	1478.0	1452.8	1351.9	1251.0	1351.9	1452.8	1478.0	1385.7	1262.6	1201.1	994.1
105°	1818.4	1804.8	1750.6	1696.4	1750.6	1804.8	1818.4	1611.4	1335.5	1197.6	997.1
107.5°	1995.4	1998.7	2011.8	2024.9	2011.8	1998.7	1995.4	1706.8	1322.0	1129.6	952.8
110°	2040.8	2054.9	2111.4	2167.8	2111.4	2054.9	2040.8	1718.1	1288.0	1072.8	913.5



TEST NUMBER: P935834

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**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	2011.8	2033.5	2120.3	2207.0	2120.3	2033.5	2011.8	1681.6	1241.4	1021.2	879.2
115°	1913.7	1943.8	2064.1	2184.3	2064.1	1943.8	1913.7	1595.6	1171.4	959.4	839.8
117.5°	1778.1	1811.5	1944.8	2078.2	1944.8	1811.5	1778.1	1491.0	1108.2	916.8	815.1
120°	1686.7	1719.1	1848.7	1978.4	1848.7	1719.1	1686.7	1424.4	1074.6	899.8	806.8
122.5°	1595.4	1627.3	1755.2	1883.0	1755.2	1627.3	1595.4	1359.2	1044.3	886.8	802.5
125°	1474.5	1504.0	1621.7	1739.5	1621.7	1504.0	1474.5	1273.9	1006.3	872.6	798.8
127.5°	1377.6	1402.4	1501.7	1601.1	1501.7	1402.4	1377.6	1205.3	975.6	860.7	796.8
130°	1316.2	1339.2	1430.9	1522.7	1430.9	1339.2	1316.2	1162.9	958.4	856.2	798.0
132.5°	1264.0	1284.6	1366.7	1449.0	1366.7	1284.6	1264.0	1126.8	943.7	852.1	798.8
135°	1190.3	1208.0	1278.9	1349.7	1278.9	1208.0	1190.3	1075.3	922.0	845.3	798.0
137.5°	1135.9	1150.3	1208.4	1266.3	1208.4	1150.3	1135.9	1038.6	909.0	844.2	803.0
140°	1092.1	1105.7	1159.9	1214.1	1159.9	1105.7	1092.1	1008.2	896.2	840.2	803.8
142.5°	1061.5	1073.2	1119.9	1166.4	1119.9	1073.2	1061.5	987.8	889.4	840.2	806.7
145°	1015.5	1024.3	1059.7	1095.0	1059.7	1024.3	1015.5	955.2	874.8	834.6	806.8
147.5°	977.0	984.2	1013.5	1042.8	1013.5	984.2	977.0	929.5	866.2	834.6	812.3
150°	954.8	960.8	984.5	1008.2	984.5	960.8	954.8	914.7	861.3	834.6	815.1
152.5°	937.3	941.7	959.7	977.5	959.7	941.7	937.3	903.1	857.4	834.6	817.0
155°	916.3	919.3	931.1	942.9	931.1	919.3	916.3	889.1	852.8	834.6	821.2
157.5°	898.1	900.2	908.5	916.8	908.5	900.2	898.1	876.9	848.7	834.6	825.4
160°	889.0	890.2	895.0	899.8	895.0	890.2	889.0	870.9	846.7	834.6	827.3
162.5°	880.5	881.6	886.2	890.7	886.2	881.6	880.5	865.2	844.8	834.6	829.3
165°	867.4	868.6	873.4	878.3	873.4	868.6	867.4	856.5	841.9	834.6	832.2
167.5°	861.8	862.3	864.3	866.3	864.3	862.3	861.8	854.6	845.1	840.2	838.2
170°	861.8	861.8	861.8	861.8	861.8	861.8	861.8	854.6	845.1	840.2	840.1
172.5°	857.2	856.8	855.1	853.3	855.1	856.8	857.2	851.6	844.1	840.2	840.2
175°	851.1	851.1	851.1	851.1	851.1	851.1	851.1	847.4	842.6	840.2	841.3
177.5°	849.9	849.3	847.3	845.3	847.3	849.3	849.9	847.1	843.3	841.4	842.3
180°	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3



TEST NUMBER: P935834

CATALOG NUMBER: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	644.8	644.8	644.8	644.8	644.8
2.5°	636.9	639.9	641.7	644.2	650.3
5°	612.5	624.1	627.7	636.9	647.8
7.5°	558.8	594.2	603.9	625.9	643.0
10°	506.9	542.3	559.4	611.3	636.9
12.5°	480.7	501.5	513.0	585.6	628.4
15°	464.3	478.9	487.5	551.5	618.6
17.5°	451.5	461.8	467.9	517.9	605.2
20°	443.5	448.4	453.9	493.6	589.9
22.5°	438.0	435.0	439.3	476.5	569.2
25°	434.4	422.8	427.6	463.0	544.8
27.5°	437.4	411.8	413.6	450.8	519.1
30°	438.0	398.3	399.0	438.0	490.5
32.5°	433.7	384.3	385.0	422.2	458.2
35°	423.3	367.9	367.2	403.9	414.2
37.5°	409.3	350.2	350.2	383.7	366.0
40°	392.2	332.5	334.3	357.5	323.3
42.5°	371.5	313.6	316.0	322.7	291.6
45°	348.9	295.3	297.1	272.7	267.2
47.5°	323.9	276.3	277.0	226.3	259.2
50°	294.1	256.8	254.4	194.0	258.7
52.5°	267.8	235.5	228.1	175.7	234.9
55°	242.1	212.9	197.0	161.6	217.8
57.5°	219.6	183.7	168.4	145.2	214.1
60°	198.8	154.9	143.4	127.5	196.5
62.5°	181.8	133.6	131.2	115.3	178.1
65°	163.5	119.0	118.3	105.0	151.3
67.5°	145.8	109.2	108.6	95.1	115.3
70°	126.9	98.8	97.6	84.8	85.4
72.5°	107.3	87.2	86.1	76.2	70.8
75°	87.9	73.8	73.2	66.5	57.3
77.5°	69.0	58.6	59.8	53.7	42.1
80°	49.4	42.7	43.9	38.5	31.7
82.5°	32.9	28.1	29.3	24.4	21.4
85°	18.3	15.8	16.5	12.8	9.7
87.5°	8.6	7.3	7.3	4.9	3.1
90°	25.0	15.9	14.7	10.2	5.6
92.5°	153.9	109.5	99.9	61.2	22.6
95°	378.8	213.3	195.7	125.1	54.5
97.5°	510.2	234.3	218.8	156.5	94.1
100°	558.1	251.9	237.8	181.3	124.8
102.5°	580.1	269.5	256.3	203.7	150.9
105°	596.3	295.6	284.4	239.9	195.2
107.5°	599.4	334.2	323.8	282.2	240.6
110°	594.8	355.8	346.4	308.7	271.2



TEST NUMBER: P935834

CATALOG NUMBER: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	595.0	381.9	373.0	337.1	301.3
115°	600.5	421.0	412.7	379.7	346.7
117.5°	611.6	459.0	451.5	421.5	391.5
120°	620.6	481.1	474.0	445.8	417.5
122.5°	633.7	507.2	500.1	471.6	443.1
125°	651.3	540.7	534.2	508.2	482.3
127.5°	668.9	573.0	566.4	540.2	514.0
130°	681.8	594.5	587.4	559.2	531.0
132.5°	692.1	612.2	605.1	576.9	548.6
135°	703.5	632.6	626.1	600.5	574.7
137.5°	720.5	658.7	652.3	626.8	601.4
140°	731.0	676.3	670.5	647.0	623.6
142.5°	739.6	689.3	683.9	662.2	640.6
145°	751.0	709.2	704.4	685.6	666.7
147.5°	767.6	734.2	729.5	711.2	692.7
150°	776.3	747.2	743.0	726.4	709.8
152.5°	782.0	755.7	752.5	740.0	727.3
155°	794.5	774.5	772.1	762.8	753.5
157.5°	806.9	793.1	790.8	781.8	772.7
160°	812.7	801.7	799.9	792.8	785.7
162.5°	818.7	810.8	809.4	804.1	798.8
165°	827.4	823.8	822.6	817.8	813.0
167.5°	834.1	831.1	830.6	828.3	826.0
170°	839.9	839.7	839.1	836.9	834.6
172.5°	840.2	840.2	840.1	839.6	839.1
175°	843.6	845.3	845.3	845.3	845.3
177.5°	844.1	845.3	845.3	845.3	845.3
180°	845.3	845.3	845.3	845.3	845.3



TEST NUMBER: P935834

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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	7.80	8.46	8.96	9.61	11.21	10.60	11.26	11.75	12.41	14.01
	3H	8.26	8.86	9.43	10.01	11.63	11.92	12.51	13.08	13.66	15.28
	4H	8.44	9.01	9.62	10.16	11.79	12.35	12.91	13.52	14.06	15.69
	6H	8.55	9.07	9.73	10.22	11.86	12.61	13.13	13.79	14.29	15.92
	8H	8.55	9.04	9.73	10.21	11.84	12.68	13.17	13.86	14.34	15.97
	12H	8.51	8.98	9.70	10.14	11.79	12.70	13.17	13.89	14.33	15.99
4H	2H	8.80	9.37	9.98	10.52	12.14	10.98	11.55	12.16	12.70	14.33
	3H	9.81	10.28	10.99	11.45	13.09	12.46	12.93	13.65	14.11	15.75
	4H	10.08	10.51	11.26	11.67	13.33	12.97	13.41	14.16	14.57	16.23
	6H	10.19	10.56	11.38	11.75	13.39	13.32	13.69	14.51	14.88	16.52
	8H	10.19	10.54	11.38	11.72	13.38	13.42	13.76	14.61	14.94	16.60
	12H	10.15	10.46	11.35	11.65	13.32	13.46	13.77	14.66	14.96	16.63
8H	4H	10.51	10.85	11.70	12.03	13.70	13.08	13.43	14.27	14.61	16.27
	6H	10.76	11.05	11.97	12.27	13.93	13.50	13.79	14.71	15.01	16.67
	8H	10.80	11.05	12.02	12.25	13.93	13.65	13.90	14.86	15.09	16.77
	12H	10.78	11.00	11.99	12.19	13.90	13.73	13.95	14.95	15.15	16.86
12H	4H	10.50	10.82	11.71	12.01	13.67	13.04	13.35	14.24	14.54	16.21
	6H	10.82	11.07	12.03	12.27	13.94	13.50	13.75	14.71	14.94	16.62
	8H	10.88	11.09	12.09	12.29	14.00	13.65	13.86	14.86	15.06	16.77