

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: P934486

Luminaire Tested: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934486
REPORT IS A COMBINATION OF REPORTS P933698 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

Summary

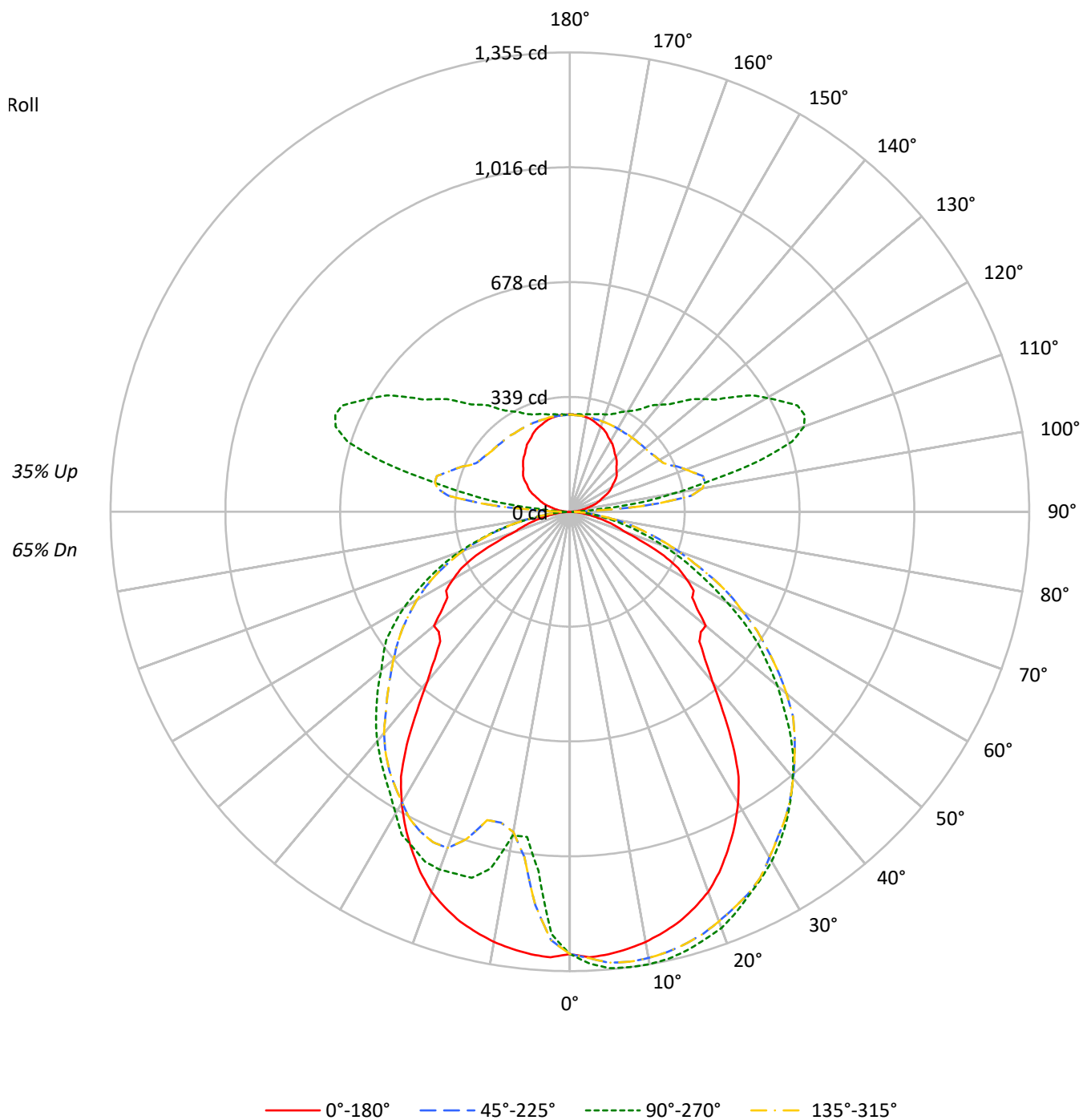
Lumens per Lamp: N/A
Luminaire Lumens: 5242.5 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
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: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

Luminous Intensity Polar Plot



TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	65		
1	101	97	93	89	95	91	88	84	80	78	75	71	69	67	62	60	59	55		
2	92	85	78	73	86	80	74	69	70	66	63	62	59	56	54	52	50	46		
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	42	39		
4	77	66	58	52	72	62	55	49	55	49	45	49	44	41	43	39	36	33		
5	71	59	50	44	66	56	48	42	49	43	39	44	39	35	39	35	32	29		
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25		
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25	22		
8	56	43	35	30	52	41	34	29	37	31	27	33	28	24	29	25	22	20		
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	18		
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	16		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12103	12103	12103	12103
5°	12181	12218	12181	9607
10°	12087	12036	12087	8604
15°	11941	11774	11941	9832
20°	11677	11466	11677	9852
25°	11153	11016	11153	9643
30°	10480	10642	10480	9186
35°	9328	10169	9328	8682
40°	7760	9611	7760	8301
45°	6920	8959	6920	7864
50°	7334	8182	7334	7424
55°	6882	7344	6882	7170
60°	7067	6237	7067	6567
65°	6379	5155	6379	5763
70°	4387	4110	4387	4832
75°	3804	3037	3804	3637
80°	3005	2009	3005	2188
85°	1631	1062	1631	903

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°

Vertical Angle: 45°

Luminance: 10627 cd/sqm

TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.7	2.2
10°-20°	334.3	6.4
20°-30°	516.8	9.9
30°-40°	616.9	11.8
40°-50°	620.5	11.8
50°-60°	539.9	10.3
60°-70°	382.8	7.3
70°-80°	202.5	3.9
80°-90°	51.5	1.0
90°-100°	139.8	2.7
100°-110°	367.6	7.0
110°-120°	381.1	7.3
120°-130°	305.7	5.8
130°-140°	239.9	4.6
140°-150°	184.1	3.5
150°-160°	132.6	2.5
160°-170°	81.1	1.5
170°-180°	27.4	0.5
0°-30°	968.8	18.5
0°-40°	1585.7	30.2
0°-60°	2746.2	52.4
0°-90°	3383.1	64.5
90°-120°	888.5	16.9
90°-150°	1618.3	30.9
90°-180°	1859.0	35.5
0°-180°	5242.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1304	1304	1304	1304	1304	
5°	1311	1351	1311	1062	1311	124
15°	1251	1339	1251	1118	1251	352
25°	1102	1249	1102	1093	1102	506
35°	838	1114	838	952	838	518
45°	540	918	540	806	540	433
55°	441	678	441	662	441	405
65°	306	408	306	457	306	292
75°	116	194	116	232	116	122
85°	20	49	20	42	20	27
90°	2	7	2	7	2	2
95°	18	84	18	84	18	21
105°	66	576	66	576	66	70
115°	118	741	118	741	118	116
125°	164	590	164	590	164	145
135°	195	458	195	458	195	151
145°	226	372	226	372	226	142
155°	256	320	256	320	256	117
165°	276	298	276	298	276	78
175°	287	289	287	289	287	27
180°	287	287	287	287	287	

TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3
2.5°	1315.4	1315.4	1322.9	1325.3	1325.3	1321.6	1318.0	1321.6	1332.7	1336.5	1335.2
5°	1310.6	1320.4	1334.0	1336.5	1338.9	1337.7	1335.2	1337.7	1350.0	1352.5	1353.7
7.5°	1300.7	1319.2	1336.5	1340.2	1343.8	1340.2	1338.9	1341.4	1353.7	1356.2	1356.2
10°	1288.4	1314.2	1334.0	1336.5	1340.2	1336.5	1336.5	1341.4	1353.7	1356.2	1357.5
12.5°	1271.1	1306.9	1325.3	1327.9	1332.7	1331.5	1330.3	1335.2	1347.6	1350.0	1350.0
15°	1251.3	1293.3	1310.6	1313.0	1321.6	1319.2	1319.2	1324.1	1337.7	1341.4	1340.2
17.5°	1224.2	1276.0	1295.7	1299.5	1305.6	1304.3	1305.6	1310.6	1322.9	1325.3	1326.6
20°	1193.3	1252.6	1276.0	1279.7	1285.8	1285.8	1285.8	1292.0	1304.3	1309.3	1309.3
22.5°	1151.3	1227.8	1252.6	1255.0	1262.4	1262.4	1264.9	1273.5	1284.6	1285.8	1285.8
25°	1102.0	1200.8	1221.7	1229.1	1236.5	1240.2	1243.9	1248.9	1252.6	1251.3	1252.6
27.5°	1050.2	1166.2	1193.3	1198.2	1208.1	1211.9	1216.7	1218.0	1219.2	1222.9	1220.5
30°	992.2	1118.0	1158.7	1163.7	1179.7	1182.2	1177.3	1179.7	1185.9	1188.4	1190.9
32.5°	926.7	1046.5	1122.9	1134.1	1148.9	1141.4	1140.2	1144.0	1153.9	1153.9	1156.3
35°	837.9	991.0	1089.7	1099.5	1110.6	1102.0	1106.9	1108.2	1114.4	1118.0	1116.8
37.5°	740.4	942.8	1055.1	1062.5	1071.1	1060.0	1067.5	1071.1	1076.1	1073.6	1073.6
40°	654.1	867.5	1014.4	1019.3	1026.7	1018.1	1025.4	1028.0	1030.4	1028.0	1026.7
42.5°	589.9	784.8	971.2	977.3	972.4	978.6	981.1	986.0	982.3	977.3	977.3
45°	540.5	762.6	924.3	931.7	924.3	934.2	937.8	937.8	926.7	924.3	923.1
47.5°	524.4	718.2	877.4	877.4	873.7	886.0	892.3	883.6	872.4	868.8	868.8
50°	523.2	668.8	813.2	808.3	825.6	840.4	834.2	825.6	817.0	803.3	803.3
52.5°	475.1	608.4	730.6	749.1	776.2	784.8	774.9	766.3	751.5	745.3	740.4
55°	440.6	545.5	655.3	692.3	720.7	731.8	713.3	704.6	682.4	678.7	676.2
57.5°	433.2	454.1	586.2	633.1	667.6	666.4	655.3	639.2	620.7	617.0	615.8
60°	397.3	328.2	512.1	567.7	603.5	599.7	589.9	575.1	557.8	555.4	552.8
62.5°	360.3	238.2	428.2	491.2	541.7	540.5	531.9	509.7	497.4	491.2	486.2
65°	306.1	199.9	304.8	408.4	481.3	483.7	465.2	449.2	435.6	428.2	426.9
67.5°	233.2	162.9	206.0	340.6	423.3	420.8	397.3	389.9	372.7	368.9	361.6
70°	172.8	108.6	143.2	276.5	366.5	360.3	341.8	333.2	317.2	308.5	303.6
72.5°	143.2	87.6	104.9	214.7	308.5	301.1	285.1	275.2	261.6	254.2	249.3
75°	116.0	92.6	80.2	159.2	250.5	245.5	230.8	220.9	209.8	199.9	201.2
77.5°	85.2	86.4	64.2	117.2	198.7	191.3	182.6	170.3	165.3	155.5	155.5
80°	64.2	67.9	48.1	80.2	143.2	143.2	135.7	127.1	118.4	113.6	113.6
82.5°	43.2	43.2	35.8	50.6	97.5	93.8	88.8	86.4	81.4	79.0	79.0
85°	19.7	24.7	22.2	30.8	53.1	55.6	55.6	53.1	51.8	49.3	50.6
87.5°	6.2	11.1	13.5	17.3	27.2	28.4	29.6	29.6	29.6	30.8	30.8
90°	2.0	3.5	5.0	5.4	8.5	12.6	14.7	13.0	9.7	7.3	7.3
92.5°	7.7	20.7	33.9	37.2	52.2	72.3	82.4	72.2	51.8	36.6	35.1
95°	18.5	42.4	66.4	72.4	128.5	203.3	240.8	214.8	163.0	124.1	119.7
97.5°	31.9	53.1	74.2	79.5	173.1	297.9	360.3	344.0	311.2	286.6	278.2
100°	42.3	61.5	80.7	85.5	189.3	327.8	397.1	398.4	400.8	402.6	392.6
102.5°	51.2	69.1	87.0	91.4	196.8	337.3	407.5	428.4	470.2	501.5	492.9
105°	66.2	81.4	96.5	100.3	202.3	338.4	406.4	453.2	546.8	617.0	612.4
107.5°	81.6	95.7	109.8	113.4	203.3	323.4	383.3	448.6	579.2	677.1	678.2
110°	92.0	104.7	117.5	120.7	201.8	310.0	364.1	437.0	583.0	692.5	697.2

TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	102.2	114.3	126.5	129.5	201.8	298.3	346.5	421.2	570.6	682.7	690.0
115°	117.6	128.8	140.0	142.8	203.7	284.9	325.5	397.4	541.3	649.3	659.5
117.5°	132.8	143.0	153.2	155.7	207.5	276.6	311.1	376.0	505.9	603.3	614.6
120°	141.7	151.3	160.8	163.3	210.6	273.8	305.3	364.6	483.3	572.4	583.4
122.5°	150.4	160.1	169.7	172.1	215.0	272.3	300.8	354.3	461.2	541.3	552.2
125°	163.6	172.4	181.2	183.4	221.0	271.0	296.1	341.5	432.3	500.3	510.3
127.5°	174.4	183.3	192.2	194.5	227.0	270.4	292.1	331.0	408.9	467.4	475.8
130°	180.2	189.8	199.3	201.7	231.4	270.8	290.5	325.2	394.6	446.6	454.4
132.5°	186.1	195.8	205.3	207.7	234.9	271.0	289.2	320.2	382.3	428.9	435.9
135°	195.0	203.7	212.5	214.6	238.7	270.8	286.8	312.8	364.8	403.9	409.8
137.5°	204.1	212.7	221.4	223.5	244.5	272.4	286.5	308.4	352.4	385.4	390.3
140°	211.6	219.5	227.5	229.5	248.0	272.7	285.1	304.1	342.1	370.6	375.2
142.5°	217.3	224.7	232.0	233.9	251.0	273.7	285.1	301.8	335.1	360.2	364.1
145°	226.2	232.6	239.0	240.6	254.8	273.8	283.2	296.8	324.1	344.6	347.5
147.5°	235.1	241.3	247.5	249.1	260.5	275.6	283.2	293.9	315.4	331.5	334.0
150°	240.8	246.4	252.1	253.5	263.4	276.6	283.2	292.2	310.4	324.0	326.1
152.5°	246.8	251.1	255.4	256.4	265.3	277.2	283.2	290.9	306.4	318.0	319.5
155°	255.6	258.8	262.0	262.7	269.6	278.6	283.2	289.4	301.7	310.9	312.0
157.5°	262.2	265.3	268.3	269.1	273.8	280.0	283.2	288.0	297.6	304.8	305.5
160°	266.7	269.0	271.4	272.0	275.7	280.7	283.2	287.3	295.5	301.7	302.1
162.5°	271.0	272.8	274.6	275.1	277.8	281.4	283.2	286.6	293.6	298.8	299.2
165°	275.9	277.5	279.2	279.5	280.8	282.3	283.2	285.6	290.6	294.3	294.7
167.5°	280.3	281.0	281.8	282.0	283.0	284.4	285.1	286.7	290.0	292.4	292.6
170°	283.2	283.9	284.7	284.9	285.0	285.1	285.1	286.7	290.0	292.4	292.4
172.5°	284.7	284.9	285.1	285.1	285.1	285.1	285.1	286.4	288.9	290.8	290.7
175°	286.8	286.8	286.8	286.8	286.3	285.4	285.1	285.9	287.6	288.8	288.8
177.5°	286.8	286.8	286.8	286.8	286.4	285.8	285.5	286.2	287.5	288.4	288.2
180°	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8

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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3
2.5°	1337.7	1334.0	1337.7	1335.2	1336.5	1332.7	1321.6	1318.0	1321.6	1325.3	1325.3
5°	1353.7	1351.3	1353.7	1353.7	1352.5	1350.0	1337.7	1335.2	1337.7	1338.9	1336.5
7.5°	1358.7	1355.0	1358.7	1356.2	1356.2	1353.7	1341.4	1338.9	1340.2	1343.8	1340.2
10°	1358.7	1355.0	1358.7	1357.5	1356.2	1353.7	1341.4	1336.5	1336.5	1340.2	1336.5
12.5°	1352.5	1350.0	1352.5	1350.0	1350.0	1347.6	1335.2	1330.3	1331.5	1332.7	1327.9
15°	1342.6	1338.9	1342.6	1340.2	1341.4	1337.7	1324.1	1319.2	1319.2	1321.6	1313.0
17.5°	1327.9	1322.9	1327.9	1326.6	1325.3	1322.9	1310.6	1305.6	1304.3	1305.6	1299.5
20°	1310.6	1306.9	1310.6	1309.3	1309.3	1304.3	1292.0	1285.8	1285.8	1285.8	1279.7
22.5°	1283.4	1279.7	1283.4	1285.8	1285.8	1284.6	1273.5	1264.9	1262.4	1262.4	1255.0
25°	1252.6	1248.9	1252.6	1252.6	1251.3	1252.6	1248.9	1243.9	1240.2	1236.5	1229.1
27.5°	1222.9	1220.5	1222.9	1220.5	1222.9	1219.2	1218.0	1216.7	1211.9	1208.1	1198.2
30°	1193.3	1190.9	1193.3	1190.9	1188.4	1185.9	1179.7	1177.3	1182.2	1179.7	1163.7
32.5°	1156.3	1153.9	1156.3	1156.3	1153.9	1153.9	1144.0	1140.2	1141.4	1148.9	1134.1
35°	1118.0	1114.4	1118.0	1116.8	1118.0	1114.4	1108.2	1106.9	1102.0	1110.6	1099.5
37.5°	1073.6	1069.9	1073.6	1073.6	1073.6	1076.1	1071.1	1067.5	1060.0	1071.1	1062.5
40°	1028.0	1023.0	1028.0	1026.7	1028.0	1030.4	1028.0	1025.4	1018.1	1026.7	1019.3
42.5°	976.1	974.9	976.1	977.3	977.3	982.3	986.0	981.1	978.6	972.4	977.3
45°	920.6	918.1	920.6	923.1	924.3	926.7	937.8	937.8	934.2	924.3	931.7
47.5°	861.3	855.2	861.3	868.8	868.8	872.4	883.6	892.3	886.0	873.7	877.4
50°	798.4	799.7	798.4	803.3	803.3	817.0	825.6	834.2	840.4	825.6	808.3
52.5°	736.7	735.5	736.7	740.4	745.3	751.5	766.3	774.9	784.8	776.2	749.1
55°	675.0	677.5	675.0	676.2	678.7	682.4	704.6	713.3	731.8	720.7	692.3
57.5°	613.4	609.6	613.4	615.8	617.0	620.7	639.2	655.3	666.4	667.6	633.1
60°	541.7	536.8	541.7	552.8	555.4	557.8	575.1	589.9	599.7	603.5	567.7
62.5°	478.8	470.2	478.8	486.2	491.2	497.4	509.7	531.9	540.5	541.7	491.2
65°	412.2	408.4	412.2	426.9	428.2	435.6	449.2	465.2	483.7	481.3	408.4
67.5°	351.7	351.7	351.7	361.6	368.9	372.7	389.9	397.3	420.8	423.3	340.6
70°	296.2	295.0	296.2	303.6	308.5	317.2	333.2	341.8	360.3	366.5	276.5
72.5°	243.1	241.9	243.1	249.3	254.2	261.6	275.2	285.1	301.1	308.5	214.7
75°	196.2	193.7	196.2	201.2	199.9	209.8	220.9	230.8	245.5	250.5	159.2
77.5°	150.6	150.6	150.6	155.5	155.5	165.3	170.3	182.6	191.3	198.7	117.2
80°	112.3	111.1	112.3	113.6	113.6	118.4	127.1	135.7	143.2	143.2	80.2
82.5°	79.0	76.5	79.0	79.0	79.0	81.4	86.4	88.8	93.8	97.5	50.6
85°	49.3	49.3	49.3	50.6	49.3	51.8	53.1	55.6	55.6	53.1	30.8
87.5°	32.1	30.8	32.1	30.8	30.8	29.6	29.6	29.6	28.4	27.2	17.3
90°	7.3	7.3	7.3	7.3	7.3	9.7	13.0	14.7	12.6	8.5	5.4
92.5°	29.3	23.4	29.3	35.1	36.6	51.8	72.2	82.4	72.3	52.2	37.2
95°	102.1	84.5	102.1	119.7	124.1	163.0	214.8	240.8	203.3	128.5	72.4
97.5°	244.7	211.2	244.7	278.2	286.6	311.2	344.0	360.3	297.9	173.1	79.5
100°	352.6	312.6	352.6	392.6	402.6	400.8	398.4	397.1	327.8	189.3	85.5
102.5°	458.7	424.5	458.7	492.9	501.5	470.2	428.4	407.5	337.3	196.8	91.4
105°	594.0	575.6	594.0	612.4	617.0	546.8	453.2	406.4	338.4	202.3	100.3
107.5°	682.6	687.1	682.6	678.2	677.1	579.2	448.6	383.3	323.4	203.3	113.4
110°	716.4	735.5	716.4	697.2	692.5	583.0	437.0	364.1	310.0	201.8	120.7

TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	719.5	748.9	719.5	690.0	682.7	570.6	421.2	346.5	298.3	201.8	129.5
115°	700.3	741.1	700.3	659.5	649.3	541.3	397.4	325.5	284.9	203.7	142.8
117.5°	659.9	705.2	659.9	614.6	603.3	505.9	376.0	311.1	276.6	207.5	155.7
120°	627.3	671.3	627.3	583.4	572.4	483.3	364.6	305.3	273.8	210.6	163.3
122.5°	595.6	638.9	595.6	552.2	541.3	461.2	354.3	300.8	272.3	215.0	172.1
125°	550.2	590.2	550.2	510.3	500.3	432.3	341.5	296.1	271.0	221.0	183.4
127.5°	509.5	543.2	509.5	475.8	467.4	408.9	331.0	292.1	270.4	227.0	194.5
130°	485.6	516.7	485.6	454.4	446.6	394.6	325.2	290.5	270.8	231.4	201.7
132.5°	463.7	491.7	463.7	435.9	428.9	382.3	320.2	289.2	271.0	234.9	207.7
135°	433.9	457.9	433.9	409.8	403.9	364.8	312.8	286.8	270.8	238.7	214.6
137.5°	409.9	429.6	409.9	390.3	385.4	352.4	308.4	286.5	272.4	244.5	223.5
140°	393.6	412.0	393.6	375.2	370.6	342.1	304.1	285.1	272.7	248.0	229.5
142.5°	380.0	395.8	380.0	364.1	360.2	335.1	301.8	285.1	273.7	251.0	233.9
145°	359.6	371.5	359.6	347.5	344.6	324.1	296.8	283.2	273.8	254.8	240.6
147.5°	343.9	353.8	343.9	334.0	331.5	315.4	293.9	283.2	275.6	260.5	249.1
150°	334.1	342.1	334.1	326.1	324.0	310.4	292.2	283.2	276.6	263.4	253.5
152.5°	325.6	331.7	325.6	319.5	318.0	306.4	290.9	283.2	277.2	265.3	256.4
155°	316.0	320.0	316.0	312.0	310.9	301.7	289.4	283.2	278.6	269.6	262.7
157.5°	308.3	311.1	308.3	305.5	304.8	297.6	288.0	283.2	280.0	273.8	269.1
160°	303.7	305.3	303.7	302.1	301.7	295.5	287.3	283.2	280.7	275.7	272.0
162.5°	300.7	302.2	300.7	299.2	298.8	293.6	286.6	283.2	281.4	277.8	275.1
165°	296.4	298.0	296.4	294.7	294.3	290.6	285.6	283.2	282.3	280.8	279.5
167.5°	293.3	293.9	293.3	292.6	292.4	290.0	286.7	285.1	284.4	283.0	282.0
170°	292.4	292.4	292.4	292.4	292.4	290.0	286.7	285.1	285.1	285.0	284.9
172.5°	290.1	289.5	290.1	290.7	290.8	288.9	286.4	285.1	285.1	285.1	285.1
175°	288.8	288.8	288.8	288.8	288.8	287.6	285.9	285.1	285.4	286.3	286.8
177.5°	287.6	286.8	287.6	288.2	288.4	287.5	286.2	285.5	285.8	286.4	286.8
180°	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8

TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3
2.5°	1322.9	1315.4	1315.4	1303.1	1298.2	1294.5	1288.4	1269.9	1264.9	1260.0	1267.3
5°	1334.0	1320.4	1310.6	1288.4	1269.9	1262.4	1239.0	1194.6	1164.9	1142.7	1130.4
7.5°	1336.5	1319.2	1300.7	1266.1	1221.7	1202.0	1130.4	1049.0	1026.7	1006.9	994.6
10°	1334.0	1314.2	1288.4	1236.5	1131.6	1097.1	1025.4	972.4	958.8	955.1	958.8
12.5°	1325.3	1306.9	1271.1	1184.7	1037.9	1014.4	972.4	941.6	939.1	945.3	978.6
15°	1310.6	1293.3	1251.3	1115.6	986.0	968.7	939.1	928.0	941.6	984.7	1084.7
17.5°	1295.7	1276.0	1224.2	1047.7	946.5	934.2	913.2	935.4	1011.9	1069.9	1103.2
20°	1276.0	1252.6	1193.3	998.4	918.1	907.0	897.1	997.1	1055.1	1076.1	1094.6
22.5°	1252.6	1227.8	1151.3	963.8	888.5	879.8	886.0	1031.7	1055.1	1069.9	1086.0
25°	1221.7	1200.8	1102.0	936.6	865.1	855.2	878.6	1028.0	1041.5	1045.2	1077.3
27.5°	1193.3	1166.2	1050.2	912.0	836.7	832.9	884.8	1011.9	1021.8	1025.4	1060.0
30°	1158.7	1118.0	992.2	886.0	807.1	805.9	886.0	992.2	989.7	999.6	1034.1
32.5°	1122.9	1046.5	926.7	854.0	778.7	777.5	877.4	962.6	960.1	973.7	999.6
35°	1089.7	991.0	837.9	817.0	742.9	744.1	856.4	928.0	929.2	941.6	957.6
37.5°	1055.1	942.8	740.4	776.2	708.3	708.3	828.0	895.9	893.5	897.1	919.3
40°	1014.4	867.5	654.1	723.1	676.2	672.6	793.5	861.3	852.7	851.5	882.3
42.5°	971.2	784.8	589.9	652.8	639.2	634.3	751.5	819.4	803.3	807.1	846.6
45°	924.3	762.6	540.5	551.6	600.9	597.3	705.8	771.3	760.2	770.1	810.8
47.5°	877.4	718.2	524.4	457.8	560.2	559.0	655.3	724.4	718.2	728.1	771.3
50°	813.2	668.8	523.2	392.5	514.6	519.5	594.8	678.7	678.7	687.3	733.0
52.5°	730.6	608.4	475.1	355.4	461.5	476.3	541.7	639.2	641.7	650.3	691.1
55°	655.3	545.5	440.6	327.0	398.6	430.7	489.9	598.5	603.5	612.1	649.1
57.5°	586.2	454.1	433.2	293.7	340.6	371.5	444.2	559.0	561.5	568.9	604.7
60°	512.1	328.2	397.3	257.9	290.0	313.5	402.3	512.1	520.8	525.7	556.6
62.5°	428.2	238.2	360.3	233.2	265.3	270.3	367.7	467.7	478.8	482.5	501.0
65°	304.8	199.9	306.1	212.3	239.4	240.6	330.7	422.1	431.9	438.0	451.7
67.5°	206.0	162.9	233.2	192.5	219.7	220.9	295.0	368.9	382.6	387.5	396.1
70°	143.2	108.6	172.8	171.6	197.4	199.9	256.7	320.8	333.2	336.9	341.8
72.5°	104.9	87.6	143.2	154.3	174.0	176.4	217.2	266.6	278.9	282.6	285.1
75°	80.2	92.6	116.0	134.5	148.0	149.3	177.7	217.2	225.8	228.3	229.5
77.5°	64.2	86.4	85.2	108.6	121.0	118.4	139.4	167.8	175.2	175.2	175.2
80°	48.1	67.9	64.2	77.7	88.8	86.4	99.9	119.7	122.2	124.6	123.4
82.5°	35.8	43.2	43.2	49.3	59.2	56.8	66.6	77.7	77.7	77.7	80.2
85°	22.2	24.7	19.7	25.9	33.3	32.1	37.0	41.9	43.2	43.2	40.7
87.5°	13.5	11.1	6.2	9.9	14.9	14.9	17.3	18.5	17.3	17.3	17.3
90°	5.0	3.5	2.0	3.5	5.0	5.4	8.5	12.6	14.7	13.0	9.7
92.5°	33.9	20.7	7.7	20.7	33.9	37.2	52.2	72.3	82.4	72.2	51.8
95°	66.4	42.4	18.5	42.4	66.4	72.4	128.5	203.3	240.8	214.8	163.0
97.5°	74.2	53.1	31.9	53.1	74.2	79.5	173.1	297.9	360.3	344.0	311.2
100°	80.7	61.5	42.3	61.5	80.7	85.5	189.3	327.8	397.1	398.4	400.8
102.5°	87.0	69.1	51.2	69.1	87.0	91.4	196.8	337.3	407.5	428.4	470.2
105°	96.5	81.4	66.2	81.4	96.5	100.3	202.3	338.4	406.4	453.2	546.8
107.5°	109.8	95.7	81.6	95.7	109.8	113.4	203.3	323.4	383.3	448.6	579.2
110°	117.5	104.7	92.0	104.7	117.5	120.7	201.8	310.0	364.1	437.0	583.0

TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	126.5	114.3	102.2	114.3	126.5	129.5	201.8	298.3	346.5	421.2	570.6
115°	140.0	128.8	117.6	128.8	140.0	142.8	203.7	284.9	325.5	397.4	541.3
117.5°	153.2	143.0	132.8	143.0	153.2	155.7	207.5	276.6	311.1	376.0	505.9
120°	160.8	151.3	141.7	151.3	160.8	163.3	210.6	273.8	305.3	364.6	483.3
122.5°	169.7	160.1	150.4	160.1	169.7	172.1	215.0	272.3	300.8	354.3	461.2
125°	181.2	172.4	163.6	172.4	181.2	183.4	221.0	271.0	296.1	341.5	432.3
127.5°	192.2	183.3	174.4	183.3	192.2	194.5	227.0	270.4	292.1	331.0	408.9
130°	199.3	189.8	180.2	189.8	199.3	201.7	231.4	270.8	290.5	325.2	394.6
132.5°	205.3	195.8	186.1	195.8	205.3	207.7	234.9	271.0	289.2	320.2	382.3
135°	212.5	203.7	195.0	203.7	212.5	214.6	238.7	270.8	286.8	312.8	364.8
137.5°	221.4	212.7	204.1	212.7	221.4	223.5	244.5	272.4	286.5	308.4	352.4
140°	227.5	219.5	211.6	219.5	227.5	229.5	248.0	272.7	285.1	304.1	342.1
142.5°	232.0	224.7	217.3	224.7	232.0	233.9	251.0	273.7	285.1	301.8	335.1
145°	239.0	232.6	226.2	232.6	239.0	240.6	254.8	273.8	283.2	296.8	324.1
147.5°	247.5	241.3	235.1	241.3	247.5	249.1	260.5	275.6	283.2	293.9	315.4
150°	252.1	246.4	240.8	246.4	252.1	253.5	263.4	276.6	283.2	292.2	310.4
152.5°	255.4	251.1	246.8	251.1	255.4	256.4	265.3	277.2	283.2	290.9	306.4
155°	262.0	258.8	255.6	258.8	262.0	262.7	269.6	278.6	283.2	289.4	301.7
157.5°	268.3	265.3	262.2	265.3	268.3	269.1	273.8	280.0	283.2	288.0	297.6
160°	271.4	269.0	266.7	269.0	271.4	272.0	275.7	280.7	283.2	287.3	295.5
162.5°	274.6	272.8	271.0	272.8	274.6	275.1	277.8	281.4	283.2	286.6	293.6
165°	279.2	277.5	275.9	277.5	279.2	279.5	280.8	282.3	283.2	285.6	290.6
167.5°	281.8	281.0	280.3	281.0	281.8	282.0	283.0	284.4	285.1	286.7	290.0
170°	284.7	283.9	283.2	283.9	284.7	284.9	285.0	285.1	285.1	286.7	290.0
172.5°	285.1	284.9	284.7	284.9	285.1	285.1	285.1	285.1	285.1	286.4	288.9
175°	286.8	286.8	286.8	286.8	286.8	286.8	286.3	285.4	285.1	285.9	287.6
177.5°	286.8	286.8	286.8	286.8	286.8	286.8	286.4	285.8	285.5	286.2	287.5
180°	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8

TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3	1304.3
2.5°	1258.8	1255.0	1260.0	1246.3	1260.0	1255.0	1258.8	1267.3	1260.0	1264.9	1269.9
5°	1104.5	1098.3	1078.6	1062.5	1078.6	1098.3	1104.5	1130.4	1142.7	1164.9	1194.6
7.5°	987.2	982.3	977.3	967.4	977.3	982.3	987.2	994.6	1006.9	1026.7	1049.0
10°	961.3	962.6	970.0	968.7	970.0	962.6	961.3	958.8	955.1	958.8	972.4
12.5°	1028.0	1039.1	1079.8	1077.3	1079.8	1039.1	1028.0	978.6	945.3	939.1	941.6
15°	1104.5	1108.2	1116.8	1118.0	1116.8	1108.2	1104.5	1084.7	984.7	941.6	928.0
17.5°	1111.8	1113.1	1119.3	1119.3	1119.3	1113.1	1111.8	1103.2	1069.9	1011.9	935.4
20°	1105.7	1108.2	1120.5	1122.9	1120.5	1108.2	1105.7	1094.6	1076.1	1055.1	997.1
22.5°	1103.2	1108.2	1118.0	1116.8	1118.0	1108.2	1103.2	1086.0	1069.9	1055.1	1031.7
25°	1090.9	1090.9	1092.1	1093.3	1092.1	1090.9	1090.9	1077.3	1045.2	1041.5	1028.0
27.5°	1064.9	1067.5	1074.8	1073.6	1074.8	1067.5	1064.9	1060.0	1025.4	1021.8	1011.9
30°	1041.5	1039.1	1032.9	1028.0	1032.9	1039.1	1041.5	1034.1	999.6	989.7	992.2
32.5°	1002.0	995.8	989.7	986.0	989.7	995.8	1002.0	999.6	973.7	960.1	962.6
35°	955.1	956.4	955.1	951.5	955.1	956.4	955.1	957.6	941.6	929.2	928.0
37.5°	921.9	924.3	923.1	918.1	923.1	924.3	921.9	919.3	897.1	893.5	895.9
40°	887.3	888.5	887.3	883.6	887.3	888.5	887.3	882.3	851.5	852.7	861.3
42.5°	854.0	852.7	849.0	846.6	849.0	852.7	854.0	846.6	807.1	803.3	819.4
45°	815.7	817.0	809.5	805.9	809.5	817.0	815.7	810.8	770.1	760.2	771.3
47.5°	777.5	777.5	771.3	767.6	771.3	777.5	777.5	771.3	728.1	718.2	724.4
50°	736.7	735.5	726.8	725.6	726.8	735.5	736.7	733.0	687.3	678.7	678.7
52.5°	689.9	689.9	691.1	693.5	691.1	689.9	689.9	691.1	650.3	641.7	639.2
55°	649.1	650.3	658.9	661.5	658.9	650.3	649.1	649.1	612.1	603.5	598.5
57.5°	607.1	607.1	613.4	613.4	613.4	607.1	607.1	604.7	568.9	561.5	559.0
60°	559.0	561.5	566.4	565.2	566.4	561.5	559.0	556.6	525.7	520.8	512.1
62.5°	508.4	510.9	512.1	509.7	512.1	510.9	508.4	501.0	482.5	478.8	467.7
65°	455.3	457.8	459.1	456.6	459.1	457.8	455.3	451.7	438.0	431.9	422.1
67.5°	401.1	399.8	398.6	403.5	398.6	399.8	401.1	396.1	387.5	382.6	368.9
70°	345.5	345.5	344.3	346.8	344.3	345.5	345.5	341.8	336.9	333.2	320.8
72.5°	286.3	285.1	290.0	286.3	290.0	285.1	286.3	285.1	282.6	278.9	266.6
75°	228.3	230.8	228.3	232.0	228.3	230.8	228.3	229.5	228.3	225.8	217.2
77.5°	174.0	176.4	174.0	174.0	174.0	176.4	174.0	175.2	175.2	175.2	167.8
80°	123.4	122.2	122.2	121.0	122.2	122.2	123.4	123.4	124.6	122.2	119.7
82.5°	79.0	77.7	77.7	80.2	77.7	77.7	79.0	80.2	77.7	77.7	77.7
85°	43.2	44.5	41.9	41.9	41.9	44.5	43.2	40.7	43.2	43.2	41.9
87.5°	16.1	14.9	14.9	14.9	14.9	14.9	16.1	17.3	17.3	17.3	18.5
90°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	9.7	13.0	14.7	12.6
92.5°	36.6	35.1	29.3	23.4	29.3	35.1	36.6	51.8	72.2	82.4	72.3
95°	124.1	119.7	102.1	84.5	102.1	119.7	124.1	163.0	214.8	240.8	203.3
97.5°	286.6	278.2	244.7	211.2	244.7	278.2	286.6	311.2	344.0	360.3	297.9
100°	402.6	392.6	352.6	312.6	352.6	392.6	402.6	400.8	398.4	397.1	327.8
102.5°	501.5	492.9	458.7	424.5	458.7	492.9	501.5	470.2	428.4	407.5	337.3
105°	617.0	612.4	594.0	575.6	594.0	612.4	617.0	546.8	453.2	406.4	338.4
107.5°	677.1	678.2	682.6	687.1	682.6	678.2	677.1	579.2	448.6	383.3	323.4
110°	692.5	697.2	716.4	735.5	716.4	697.2	692.5	583.0	437.0	364.1	310.0

TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	682.7	690.0	719.5	748.9	719.5	690.0	682.7	570.6	421.2	346.5	298.3
115°	649.3	659.5	700.3	741.1	700.3	659.5	649.3	541.3	397.4	325.5	284.9
117.5°	603.3	614.6	659.9	705.2	659.9	614.6	603.3	505.9	376.0	311.1	276.6
120°	572.4	583.4	627.3	671.3	627.3	583.4	572.4	483.3	364.6	305.3	273.8
122.5°	541.3	552.2	595.6	638.9	595.6	552.2	541.3	461.2	354.3	300.8	272.3
125°	500.3	510.3	550.2	590.2	550.2	510.3	500.3	432.3	341.5	296.1	271.0
127.5°	467.4	475.8	509.5	543.2	509.5	475.8	467.4	408.9	331.0	292.1	270.4
130°	446.6	454.4	485.6	516.7	485.6	454.4	446.6	394.6	325.2	290.5	270.8
132.5°	428.9	435.9	463.7	491.7	463.7	435.9	428.9	382.3	320.2	289.2	271.0
135°	403.9	409.8	433.9	457.9	433.9	409.8	403.9	364.8	312.8	286.8	270.8
137.5°	385.4	390.3	409.9	429.6	409.9	390.3	385.4	352.4	308.4	286.5	272.4
140°	370.6	375.2	393.6	412.0	393.6	375.2	370.6	342.1	304.1	285.1	272.7
142.5°	360.2	364.1	380.0	395.8	380.0	364.1	360.2	335.1	301.8	285.1	273.7
145°	344.6	347.5	359.6	371.5	359.6	347.5	344.6	324.1	296.8	283.2	273.8
147.5°	331.5	334.0	343.9	353.8	343.9	334.0	331.5	315.4	293.9	283.2	275.6
150°	324.0	326.1	334.1	342.1	334.1	326.1	324.0	310.4	292.2	283.2	276.6
152.5°	318.0	319.5	325.6	331.7	325.6	319.5	318.0	306.4	290.9	283.2	277.2
155°	310.9	312.0	316.0	320.0	316.0	312.0	310.9	301.7	289.4	283.2	278.6
157.5°	304.8	305.5	308.3	311.1	308.3	305.5	304.8	297.6	288.0	283.2	280.0
160°	301.7	302.1	303.7	305.3	303.7	302.1	301.7	295.5	287.3	283.2	280.7
162.5°	298.8	299.2	300.7	302.2	300.7	299.2	298.8	293.6	286.6	283.2	281.4
165°	294.3	294.7	296.4	298.0	296.4	294.7	294.3	290.6	285.6	283.2	282.3
167.5°	292.4	292.6	293.3	293.9	293.3	292.6	292.4	290.0	286.7	285.1	284.4
170°	292.4	292.4	292.4	292.4	292.4	292.4	292.4	290.0	286.7	285.1	285.1
172.5°	290.8	290.7	290.1	289.5	290.1	290.7	290.8	288.9	286.4	285.1	285.1
175°	288.8	288.8	288.8	288.8	288.8	288.8	288.8	287.6	285.9	285.1	285.4
177.5°	288.4	288.2	287.6	286.8	287.6	288.2	288.4	287.5	286.2	285.5	285.8
180°	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8

TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1304.3	1304.3	1304.3	1304.3	1304.3
2.5°	1288.4	1294.5	1298.2	1303.1	1315.4
5°	1239.0	1262.4	1269.9	1288.4	1310.6
7.5°	1130.4	1202.0	1221.7	1266.1	1300.7
10°	1025.4	1097.1	1131.6	1236.5	1288.4
12.5°	972.4	1014.4	1037.9	1184.7	1271.1
15°	939.1	968.7	986.0	1115.6	1251.3
17.5°	913.2	934.2	946.5	1047.7	1224.2
20°	897.1	907.0	918.1	998.4	1193.3
22.5°	886.0	879.8	888.5	963.8	1151.3
25°	878.6	855.2	865.1	936.6	1102.0
27.5°	884.8	832.9	836.7	912.0	1050.2
30°	886.0	805.9	807.1	886.0	992.2
32.5°	877.4	777.5	778.7	854.0	926.7
35°	856.4	744.1	742.9	817.0	837.9
37.5°	828.0	708.3	708.3	776.2	740.4
40°	793.5	672.6	676.2	723.1	654.1
42.5°	751.5	634.3	639.2	652.8	589.9
45°	705.8	597.3	600.9	551.6	540.5
47.5°	655.3	559.0	560.2	457.8	524.4
50°	594.8	519.5	514.6	392.5	523.2
52.5°	541.7	476.3	461.5	355.4	475.1
55°	489.9	430.7	398.6	327.0	440.6
57.5°	444.2	371.5	340.6	293.7	433.2
60°	402.3	313.5	290.0	257.9	397.3
62.5°	367.7	270.3	265.3	233.2	360.3
65°	330.7	240.6	239.4	212.3	306.1
67.5°	295.0	220.9	219.7	192.5	233.2
70°	256.7	199.9	197.4	171.6	172.8
72.5°	217.2	176.4	174.0	154.3	143.2
75°	177.7	149.3	148.0	134.5	116.0
77.5°	139.4	118.4	121.0	108.6	85.2
80°	99.9	86.4	88.8	77.7	64.2
82.5°	66.6	56.8	59.2	49.3	43.2
85°	37.0	32.1	33.3	25.9	19.7
87.5°	17.3	14.9	14.9	9.9	6.2
90°	8.5	5.4	5.0	3.5	2.0
92.5°	52.2	37.2	33.9	20.7	7.7
95°	128.5	72.4	66.4	42.4	18.5
97.5°	173.1	79.5	74.2	53.1	31.9
100°	189.3	85.5	80.7	61.5	42.3
102.5°	196.8	91.4	87.0	69.1	51.2
105°	202.3	100.3	96.5	81.4	66.2
107.5°	203.3	113.4	109.8	95.7	81.6
110°	201.8	120.7	117.5	104.7	92.0



TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	201.8	129.5	126.5	114.3	102.2
115°	203.7	142.8	140.0	128.8	117.6
117.5°	207.5	155.7	153.2	143.0	132.8
120°	210.6	163.3	160.8	151.3	141.7
122.5°	215.0	172.1	169.7	160.1	150.4
125°	221.0	183.4	181.2	172.4	163.6
127.5°	227.0	194.5	192.2	183.3	174.4
130°	231.4	201.7	199.3	189.8	180.2
132.5°	234.9	207.7	205.3	195.8	186.1
135°	238.7	214.6	212.5	203.7	195.0
137.5°	244.5	223.5	221.4	212.7	204.1
140°	248.0	229.5	227.5	219.5	211.6
142.5°	251.0	233.9	232.0	224.7	217.3
145°	254.8	240.6	239.0	232.6	226.2
147.5°	260.5	249.1	247.5	241.3	235.1
150°	263.4	253.5	252.1	246.4	240.8
152.5°	265.3	256.4	255.4	251.1	246.8
155°	269.6	262.7	262.0	258.8	255.6
157.5°	273.8	269.1	268.3	265.3	262.2
160°	275.7	272.0	271.4	269.0	266.7
162.5°	277.8	275.1	274.6	272.8	271.0
165°	280.8	279.5	279.2	277.5	275.9
167.5°	283.0	282.0	281.8	281.0	280.3
170°	285.0	284.9	284.7	283.9	283.2
172.5°	285.1	285.1	285.1	284.9	284.7
175°	286.3	286.8	286.8	286.8	286.8
177.5°	286.4	286.8	286.8	286.8	286.8
180°	286.8	286.8	286.8	286.8	286.8

TEST NUMBER: P934486

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-W2A-W-4-5000K

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.70	15.71	15.52	16.55	17.60	17.50	18.51	18.32	19.35	20.40
	3H	15.19	16.09	16.02	16.95	18.02	18.84	19.75	19.68	20.60	21.68
	4H	15.39	16.24	16.24	17.10	18.19	19.29	20.14	20.14	21.00	22.09
	6H	15.51	16.30	16.38	17.17	18.27	19.57	20.36	20.44	21.23	22.33
	8H	15.52	16.27	16.39	17.16	18.26	19.65	20.40	20.52	21.29	22.38
	12H	15.50	16.21	16.37	17.09	18.22	19.69	20.40	20.57	21.28	22.41
4H	2H	15.74	16.60	16.60	17.46	18.54	17.93	18.78	18.78	19.64	20.73
	3H	16.78	17.50	17.65	18.39	19.49	19.44	20.15	20.30	21.04	22.14
	4H	17.07	17.71	17.95	18.60	19.73	19.96	20.61	20.84	21.50	22.63
	6H	17.20	17.76	18.09	18.67	19.80	20.33	20.89	21.22	21.80	22.93
	8H	17.21	17.73	18.11	18.64	19.78	20.43	20.96	21.33	21.87	23.01
	12H	17.18	17.65	18.10	18.58	19.73	20.49	20.96	21.41	21.89	23.04
8H	4H	17.53	18.05	18.42	18.96	20.10	20.10	20.62	21.00	21.53	22.68
	6H	17.79	18.23	18.72	19.18	20.32	20.54	20.97	21.46	21.92	23.06
	8H	17.84	18.22	18.77	19.16	20.32	20.68	21.07	21.62	22.01	23.17
	12H	17.83	18.17	18.77	19.10	20.31	20.78	21.12	21.72	22.06	23.27
12H	4H	17.54	18.01	18.46	18.94	20.09	20.07	20.54	20.99	21.47	22.62
	6H	17.85	18.24	18.79	19.18	20.34	20.53	20.92	21.47	21.86	23.02
	8H	17.93	18.27	18.87	19.20	20.41	20.70	21.04	21.64	21.97	23.18