

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: P934436

Luminaire Tested: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934436
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-92765-1D-UNV-STD-W-4-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

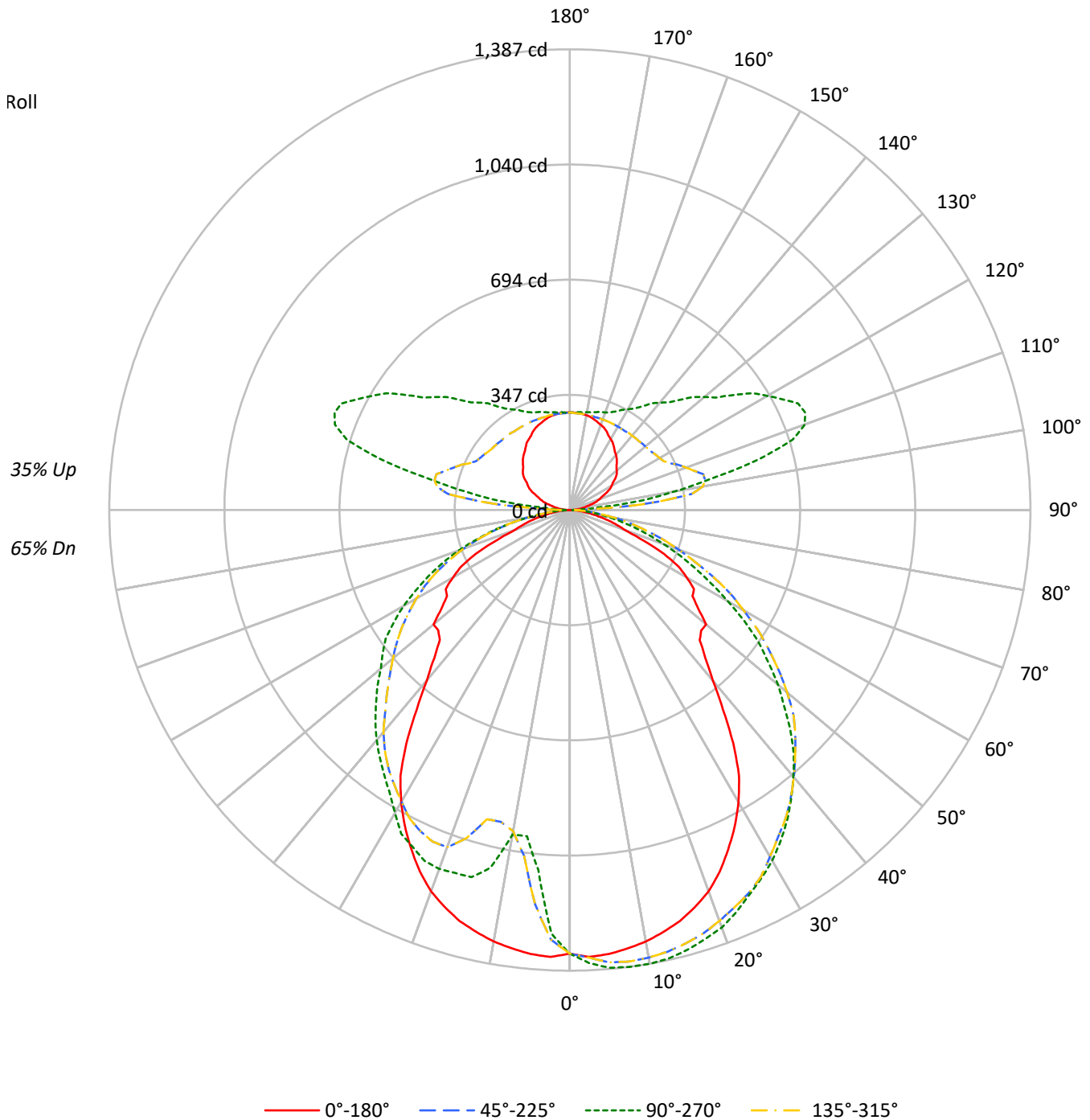
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5367.1 lumens
Efficiency: N/A
Efficacy: 118.7 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-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

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CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-6500K

Luminous Intensity Polar Plot





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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	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°	12391	12391	12391	12391
5°	12470	12509	12470	9836
10°	12374	12321	12374	8809
15°	12224	12054	12224	10066
20°	11954	11738	11954	10086
25°	11418	11277	11418	9873
30°	10729	10894	10729	9404
35°	9550	10409	9550	8888
40°	7944	9839	7944	8499
45°	7084	9172	7084	8050
50°	7510	8376	7510	7601
55°	7045	7518	7045	7341
60°	7236	6385	7236	6723
65°	6529	5277	6529	5901
70°	4491	4207	4491	4946
75°	3896	3109	3896	3723
80°	3075	2056	3075	2238
85°	1673	1088	1673	924

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 10878 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.5	2.2
10°-20°	342.2	6.4
20°-30°	529.1	9.9
30°-40°	631.6	11.8
40°-50°	635.3	11.8
50°-60°	552.8	10.3
60°-70°	391.9	7.3
70°-80°	207.3	3.9
80°-90°	52.8	1.0
90°-100°	143.1	2.7
100°-110°	376.3	7.0
110°-120°	390.2	7.3
120°-130°	313.0	5.8
130°-140°	245.6	4.6
140°-150°	188.5	3.5
150°-160°	135.8	2.5
160°-170°	83.1	1.5
170°-180°	28.1	0.5
0°-30°	991.8	18.5
0°-40°	1623.4	30.2
0°-60°	2811.5	52.4
0°-90°	3463.5	64.5
90°-120°	909.6	16.9
90°-150°	1656.7	30.9
90°-180°	1904.0	35.5
0°-180°	5367.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1335	1335	1335	1335	1335	
5°	1342	1383	1342	1088	1342	127
15°	1281	1371	1281	1145	1281	360
25°	1128	1278	1128	1119	1128	518
35°	858	1141	858	974	858	531
45°	553	940	553	825	553	443
55°	451	694	451	677	451	414
65°	313	418	313	468	313	299
75°	119	198	119	238	119	125
85°	20	50	20	43	20	27
90°	2	8	2	8	2	2
95°	19	86	19	86	19	21
105°	68	589	68	589	68	72
115°	120	759	120	759	120	119
125°	168	604	168	604	168	149
135°	200	469	200	469	200	154
145°	232	380	232	380	232	145
155°	262	328	262	328	262	120
165°	282	305	282	305	282	80
175°	294	296	294	296	294	28
180°	294	294	294	294	294	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3
2.5°	1346.7	1346.7	1354.4	1356.8	1356.8	1353.0	1349.3	1353.0	1364.4	1368.2	1367.0
5°	1341.7	1351.8	1365.7	1368.2	1370.7	1369.5	1367.0	1369.5	1382.1	1384.7	1385.9
7.5°	1331.6	1350.5	1368.2	1372.0	1375.8	1372.0	1370.7	1373.3	1385.9	1388.4	1388.4
10°	1319.0	1345.5	1365.7	1368.2	1372.0	1368.2	1368.2	1373.3	1385.9	1388.4	1389.7
12.5°	1301.3	1337.9	1356.8	1359.4	1364.4	1363.1	1361.9	1367.0	1379.6	1382.1	1382.1
15°	1281.0	1324.0	1341.7	1344.2	1353.0	1350.5	1350.5	1355.6	1369.5	1373.3	1372.0
17.5°	1253.3	1306.4	1326.5	1330.4	1336.7	1335.3	1336.7	1341.7	1354.4	1356.8	1358.1
20°	1221.6	1282.4	1306.4	1310.1	1316.4	1316.4	1316.4	1322.7	1335.3	1340.4	1340.4
22.5°	1178.7	1257.0	1282.4	1284.8	1292.4	1292.4	1295.0	1303.8	1315.1	1316.4	1316.4
25°	1128.2	1229.3	1250.7	1258.3	1265.9	1269.6	1273.5	1278.5	1282.4	1281.0	1282.4
27.5°	1075.1	1193.9	1221.6	1226.7	1236.8	1240.7	1245.6	1247.0	1248.2	1251.9	1249.5
30°	1015.8	1144.6	1186.3	1191.3	1207.8	1210.3	1205.3	1207.8	1214.1	1216.7	1219.1
32.5°	948.7	1071.3	1149.6	1161.0	1176.2	1168.6	1167.3	1171.1	1181.3	1181.3	1183.8
35°	857.8	1014.5	1115.6	1125.6	1137.0	1128.2	1133.2	1134.5	1140.8	1144.6	1143.3
37.5°	758.0	965.2	1080.2	1087.8	1096.6	1085.2	1092.8	1096.6	1101.6	1099.1	1099.1
40°	669.6	888.1	1038.5	1043.5	1051.1	1042.3	1049.8	1052.4	1054.9	1052.4	1051.1
42.5°	603.9	803.5	994.2	1000.6	995.5	1001.8	1004.4	1009.5	1005.6	1000.6	1000.6
45°	553.3	780.7	946.2	953.8	946.2	956.4	960.1	960.1	948.7	946.2	945.0
47.5°	536.9	735.3	898.2	898.2	894.4	907.0	913.5	904.6	893.2	889.5	889.5
50°	535.7	684.7	832.6	827.5	845.2	860.4	854.1	845.2	836.4	822.4	822.4
52.5°	486.4	622.9	747.9	766.9	794.7	803.5	793.4	784.6	769.4	763.0	758.0
55°	451.0	558.4	670.9	708.7	737.8	749.2	730.2	721.4	698.6	694.9	692.3
57.5°	443.5	464.9	600.1	648.1	683.5	682.2	670.9	654.4	635.5	631.7	630.4
60°	406.8	336.0	524.3	581.2	617.8	614.0	603.9	588.7	571.0	568.6	566.0
62.5°	368.9	243.8	438.4	502.9	554.6	553.3	544.6	521.8	509.2	502.9	497.8
65°	313.3	204.6	312.0	418.1	492.7	495.2	476.3	459.8	446.0	438.4	437.1
67.5°	238.8	166.8	210.9	348.7	433.3	430.8	406.8	399.2	381.5	377.7	370.1
70°	176.9	111.2	146.6	283.0	375.2	368.9	350.0	341.1	324.7	315.8	310.8
72.5°	146.6	89.7	107.4	219.8	315.8	308.3	291.8	281.7	267.8	260.3	255.2
75°	118.8	94.8	82.1	162.9	256.5	251.4	236.3	226.1	214.8	204.6	206.0
77.5°	87.2	88.4	65.7	120.0	203.4	195.8	186.9	174.3	169.2	159.2	159.2
80°	65.7	69.5	49.2	82.1	146.6	146.6	138.9	130.1	121.2	116.3	116.3
82.5°	44.2	44.2	36.6	51.8	99.8	96.0	90.9	88.4	83.4	80.9	80.9
85°	20.2	25.2	22.8	31.6	54.3	56.9	56.9	54.3	53.1	50.5	51.8
87.5°	6.3	11.4	13.9	17.7	27.8	29.1	30.3	30.3	30.3	31.6	31.6
90°	2.0	3.5	5.2	5.5	8.7	12.9	15.0	13.3	9.9	7.5	7.5
92.5°	7.8	21.2	34.7	38.1	53.5	74.0	84.3	73.9	53.1	37.5	36.0
95°	18.9	43.4	68.0	74.1	131.6	208.2	246.5	219.9	166.9	127.1	122.6
97.5°	32.7	54.3	75.9	81.4	177.2	305.0	368.9	352.2	318.6	293.5	284.8
100°	43.3	62.9	82.6	87.5	193.8	335.6	406.6	407.8	410.3	412.1	401.9
102.5°	52.4	70.8	89.0	93.6	201.5	345.3	417.2	438.6	481.3	513.4	504.6
105°	67.8	83.3	98.8	102.7	207.1	346.4	416.0	463.9	559.8	631.7	627.0
107.5°	83.6	98.0	112.4	116.1	208.2	331.0	392.4	459.3	592.9	693.1	694.3
110°	94.2	107.2	120.3	123.5	206.6	317.4	372.7	447.4	596.9	708.9	713.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	104.6	117.0	129.5	132.6	206.6	305.4	354.7	431.2	584.1	698.9	706.4
115°	120.4	131.9	143.3	146.2	208.5	291.6	333.2	406.9	554.2	664.7	675.2
117.5°	136.0	146.4	156.8	159.4	212.5	283.1	318.5	385.0	517.9	617.6	629.2
120°	145.1	154.9	164.7	167.1	215.6	280.3	312.6	373.3	494.8	586.0	597.2
122.5°	153.9	163.9	173.7	176.2	220.1	278.7	308.0	362.7	472.2	554.2	565.3
125°	167.5	176.5	185.5	187.8	226.2	277.5	303.1	349.6	442.5	512.2	522.5
127.5°	178.5	187.7	196.8	199.1	232.4	276.8	299.0	338.9	418.6	478.5	487.1
130°	184.4	194.3	204.1	206.5	236.8	277.2	297.4	332.9	404.0	457.3	465.2
132.5°	190.6	200.4	210.2	212.7	240.5	277.5	296.0	327.8	391.4	439.1	446.3
135°	199.7	208.5	217.5	219.7	244.4	277.2	293.6	320.2	373.5	413.5	419.6
137.5°	208.9	217.7	226.6	228.8	250.3	278.9	293.3	315.7	360.8	394.5	399.6
140°	216.6	224.7	232.9	234.9	253.9	279.2	291.8	311.3	350.3	379.4	384.1
142.5°	222.5	230.1	237.5	239.4	256.9	280.2	291.8	308.9	343.1	368.7	372.7
145°	231.6	238.1	244.7	246.3	260.8	280.3	289.9	303.9	331.8	352.7	355.8
147.5°	240.7	247.1	253.4	255.0	266.7	282.2	289.9	300.9	322.9	339.4	341.9
150°	246.5	252.2	258.1	259.5	269.6	283.1	289.9	299.2	317.7	331.7	333.8
152.5°	252.6	257.0	261.4	262.5	271.7	283.8	289.9	297.9	313.7	325.6	327.1
155°	261.7	265.0	268.2	269.0	276.0	285.2	289.9	296.2	308.9	318.3	319.4
157.5°	268.4	271.6	274.7	275.5	280.3	286.7	289.9	294.8	304.6	312.0	312.8
160°	273.0	275.4	277.9	278.4	282.3	287.3	289.9	294.1	302.5	308.9	309.2
162.5°	277.5	279.3	281.1	281.6	284.4	288.1	289.9	293.5	300.5	305.9	306.3
165°	282.5	284.1	285.8	286.2	287.4	289.1	289.9	292.4	297.5	301.3	301.7
167.5°	287.0	287.7	288.5	288.7	289.7	291.2	291.8	293.6	296.9	299.4	299.6
170°	289.9	290.7	291.4	291.6	291.7	291.8	291.8	293.6	296.9	299.4	299.4
172.5°	291.4	291.6	291.8	291.8	291.8	291.8	291.8	293.2	295.8	297.8	297.6
175°	293.6	293.6	293.6	293.6	293.1	292.2	291.8	292.7	294.4	295.7	295.7
177.5°	293.6	293.6	293.6	293.6	293.2	292.6	292.3	293.0	294.3	295.3	295.1
180°	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3
2.5°	1369.5	1365.7	1369.5	1367.0	1368.2	1364.4	1353.0	1349.3	1353.0	1356.8	1356.8
5°	1385.9	1383.4	1385.9	1385.9	1384.7	1382.1	1369.5	1367.0	1369.5	1370.7	1368.2
7.5°	1391.0	1387.1	1391.0	1388.4	1388.4	1385.9	1373.3	1370.7	1372.0	1375.8	1372.0
10°	1391.0	1387.1	1391.0	1389.7	1388.4	1385.9	1373.3	1368.2	1368.2	1372.0	1368.2
12.5°	1384.7	1382.1	1384.7	1382.1	1382.1	1379.6	1367.0	1361.9	1363.1	1364.4	1359.4
15°	1374.5	1370.7	1374.5	1372.0	1373.3	1369.5	1355.6	1350.5	1350.5	1353.0	1344.2
17.5°	1359.4	1354.4	1359.4	1358.1	1356.8	1354.4	1341.7	1336.7	1335.3	1336.7	1330.4
20°	1341.7	1337.9	1341.7	1340.4	1340.4	1335.3	1322.7	1316.4	1316.4	1316.4	1310.1
22.5°	1313.9	1310.1	1313.9	1316.4	1316.4	1315.1	1303.8	1295.0	1292.4	1292.4	1284.8
25°	1282.4	1278.5	1282.4	1282.4	1281.0	1282.4	1278.5	1273.5	1269.6	1265.9	1258.3
27.5°	1251.9	1249.5	1251.9	1249.5	1251.9	1248.2	1247.0	1245.6	1240.7	1236.8	1226.7
30°	1221.6	1219.1	1221.6	1219.1	1216.7	1214.1	1207.8	1205.3	1210.3	1207.8	1191.3
32.5°	1183.8	1181.3	1183.8	1183.8	1181.3	1181.3	1171.1	1167.3	1168.6	1176.2	1161.0
35°	1144.6	1140.8	1144.6	1143.3	1144.6	1140.8	1134.5	1133.2	1128.2	1137.0	1125.6
37.5°	1099.1	1095.3	1099.1	1099.1	1099.1	1101.6	1096.6	1092.8	1085.2	1096.6	1087.8
40°	1052.4	1047.3	1052.4	1051.1	1052.4	1054.9	1052.4	1049.8	1042.3	1051.1	1043.5
42.5°	999.3	998.1	999.3	1000.6	1000.6	1005.6	1009.5	1004.4	1001.8	995.5	1000.6
45°	942.4	939.9	942.4	945.0	946.2	948.7	960.1	960.1	956.4	946.2	953.8
47.5°	881.8	875.5	881.8	889.5	889.5	893.2	904.6	913.5	907.0	894.4	898.2
50°	817.4	818.7	817.4	822.4	822.4	836.4	845.2	854.1	860.4	845.2	827.5
52.5°	754.2	753.0	754.2	758.0	763.0	769.4	784.6	793.4	803.5	794.7	766.9
55°	691.0	693.6	691.0	692.3	694.9	698.6	721.4	730.2	749.2	737.8	708.7
57.5°	627.9	624.1	627.9	630.4	631.7	635.5	654.4	670.9	682.2	683.5	648.1
60°	554.6	549.5	554.6	566.0	568.6	571.0	588.7	603.9	614.0	617.8	581.2
62.5°	490.1	481.3	490.1	497.8	502.9	509.2	521.8	544.6	553.3	554.6	502.9
65°	422.0	418.1	422.0	437.1	438.4	446.0	459.8	476.3	495.2	492.7	418.1
67.5°	360.1	360.1	360.1	370.1	377.7	381.5	399.2	406.8	430.8	433.3	348.7
70°	303.2	302.0	303.2	310.8	315.8	324.7	341.1	350.0	368.9	375.2	283.0
72.5°	248.9	247.7	248.9	255.2	260.3	267.8	281.7	291.8	308.3	315.8	219.8
75°	200.9	198.3	200.9	206.0	204.6	214.8	226.1	236.3	251.4	256.5	162.9
77.5°	154.1	154.1	154.1	159.2	159.2	169.2	174.3	186.9	195.8	203.4	120.0
80°	114.9	113.7	114.9	116.3	116.3	121.2	130.1	138.9	146.6	146.6	82.1
82.5°	80.9	78.3	80.9	80.9	80.9	83.4	88.4	90.9	96.0	99.8	51.8
85°	50.5	50.5	50.5	51.8	50.5	53.1	54.3	56.9	56.9	54.3	31.6
87.5°	32.9	31.6	32.9	31.6	31.6	30.3	30.3	30.3	29.1	27.8	17.7
90°	7.5	7.5	7.5	7.5	7.5	9.9	13.3	15.0	12.9	8.7	5.5
92.5°	30.0	24.0	30.0	36.0	37.5	53.1	73.9	84.3	74.0	53.5	38.1
95°	104.5	86.5	104.5	122.6	127.1	166.9	219.9	246.5	208.2	131.6	74.1
97.5°	250.5	216.2	250.5	284.8	293.5	318.6	352.2	368.9	305.0	177.2	81.4
100°	361.0	320.0	361.0	401.9	412.1	410.3	407.8	406.6	335.6	193.8	87.5
102.5°	469.6	434.6	469.6	504.6	513.4	481.3	438.6	417.2	345.3	201.5	93.6
105°	608.1	589.3	608.1	627.0	631.7	559.8	463.9	416.0	346.4	207.1	102.7
107.5°	698.8	703.4	698.8	694.3	693.1	592.9	459.3	392.4	331.0	208.2	116.1
110°	733.4	753.0	733.4	713.8	708.9	596.9	447.4	372.7	317.4	206.6	123.5



TEST NUMBER: P934436

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-6500K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	736.6	766.7	736.6	706.4	698.9	584.1	431.2	354.7	305.4	206.6	132.6
115°	717.0	758.7	717.0	675.2	664.7	554.2	406.9	333.2	291.6	208.5	146.2
117.5°	675.6	721.9	675.6	629.2	617.6	517.9	385.0	318.5	283.1	212.5	159.4
120°	642.2	687.2	642.2	597.2	586.0	494.8	373.3	312.6	280.3	215.6	167.1
122.5°	609.8	654.1	609.8	565.3	554.2	472.2	362.7	308.0	278.7	220.1	176.2
125°	563.3	604.2	563.3	522.5	512.2	442.5	349.6	303.1	277.5	226.2	187.8
127.5°	521.6	556.1	521.6	487.1	478.5	418.6	338.9	299.0	276.8	232.4	199.1
130°	497.1	529.0	497.1	465.2	457.3	404.0	332.9	297.4	277.2	236.8	206.5
132.5°	474.7	503.3	474.7	446.3	439.1	391.4	327.8	296.0	277.5	240.5	212.7
135°	444.2	468.8	444.2	419.6	413.5	373.5	320.2	293.6	277.2	244.4	219.7
137.5°	419.7	439.8	419.7	399.6	394.5	360.8	315.7	293.3	278.9	250.3	228.8
140°	402.9	421.8	402.9	384.1	379.4	350.3	311.3	291.8	279.2	253.9	234.9
142.5°	389.0	405.2	389.0	372.7	368.7	343.1	308.9	291.8	280.2	256.9	239.4
145°	368.1	380.4	368.1	355.8	352.7	331.8	303.9	289.9	280.3	260.8	246.3
147.5°	352.1	362.2	352.1	341.9	339.4	322.9	300.9	289.9	282.2	266.7	255.0
150°	342.0	350.3	342.0	333.8	331.7	317.7	299.2	289.9	283.1	269.6	259.5
152.5°	333.3	339.5	333.3	327.1	325.6	313.7	297.9	289.9	283.8	271.7	262.5
155°	323.5	327.6	323.5	319.4	318.3	308.9	296.2	289.9	285.2	276.0	269.0
157.5°	315.6	318.5	315.6	312.8	312.0	304.6	294.8	289.9	286.7	280.3	275.5
160°	311.0	312.6	311.0	309.2	308.9	302.5	294.1	289.9	287.3	282.3	278.4
162.5°	307.9	309.4	307.9	306.3	305.9	300.5	293.5	289.9	288.1	284.4	281.6
165°	303.4	305.1	303.4	301.7	301.3	297.5	292.4	289.9	289.1	287.4	286.2
167.5°	300.2	300.9	300.2	299.6	299.4	296.9	293.6	291.8	291.2	289.7	288.7
170°	299.4	299.4	299.4	299.4	299.4	296.9	293.6	291.8	291.8	291.7	291.6
172.5°	297.0	296.4	297.0	297.6	297.8	295.8	293.2	291.8	291.8	291.8	291.8
175°	295.7	295.7	295.7	295.7	295.7	294.4	292.7	291.8	292.2	293.1	293.6
177.5°	294.4	293.6	294.4	295.1	295.3	294.3	293.0	292.3	292.6	293.2	293.6
180°	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6



TEST NUMBER: P934436

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-6500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3
2.5°	1354.4	1346.7	1346.7	1334.1	1329.0	1325.3	1319.0	1300.0	1295.0	1289.9	1297.5
5°	1365.7	1351.8	1341.7	1319.0	1300.0	1292.4	1268.4	1223.0	1192.6	1169.9	1157.3
7.5°	1368.2	1350.5	1331.6	1296.2	1250.7	1230.5	1157.3	1073.9	1051.1	1030.9	1018.2
10°	1365.7	1345.5	1319.0	1265.9	1158.5	1123.1	1049.8	995.5	981.6	977.8	981.6
12.5°	1356.8	1337.9	1301.3	1212.8	1062.5	1038.5	995.5	963.9	961.5	967.8	1001.8
15°	1341.7	1324.0	1281.0	1142.1	1009.5	991.8	961.5	950.1	963.9	1008.1	1110.5
17.5°	1326.5	1306.4	1253.3	1072.6	969.0	956.4	934.9	957.6	1035.9	1095.3	1129.5
20°	1306.4	1282.4	1221.6	1022.1	939.9	928.6	918.4	1020.8	1080.2	1101.6	1120.6
22.5°	1282.4	1257.0	1178.7	986.7	909.6	900.7	907.0	1056.2	1080.2	1095.3	1111.8
25°	1250.7	1229.3	1128.2	958.9	885.6	875.5	899.5	1052.4	1066.3	1070.1	1102.9
27.5°	1221.6	1193.9	1075.1	933.6	856.6	852.7	905.8	1035.9	1046.1	1049.8	1085.2
30°	1186.3	1144.6	1015.8	907.0	826.2	825.0	907.0	1015.8	1013.2	1023.3	1058.7
32.5°	1149.6	1071.3	948.7	874.2	797.2	795.9	898.2	985.5	982.9	996.8	1023.3
35°	1115.6	1014.5	857.8	836.4	760.6	761.8	876.7	950.1	951.3	963.9	980.4
37.5°	1080.2	965.2	758.0	794.7	725.2	725.2	847.7	917.2	914.7	918.4	941.2
40°	1038.5	888.1	669.6	740.3	692.3	688.6	812.4	881.8	873.0	871.8	903.3
42.5°	994.2	803.5	603.9	668.3	654.4	649.4	769.4	838.9	822.4	826.2	866.7
45°	946.2	780.7	553.3	564.7	615.2	611.5	722.6	789.6	778.2	788.4	830.1
47.5°	898.2	735.3	536.9	468.7	573.5	572.3	670.9	741.6	735.3	745.4	789.6
50°	832.6	684.7	535.7	401.8	526.9	531.8	608.9	694.9	694.9	703.7	750.4
52.5°	747.9	622.9	486.4	363.8	472.5	487.7	554.6	654.4	656.9	665.8	707.5
55°	670.9	558.4	451.0	334.8	408.1	440.9	501.5	612.7	617.8	626.6	664.6
57.5°	600.1	464.9	443.5	300.7	348.7	380.3	454.8	572.3	574.9	582.4	619.0
60°	524.3	336.0	406.8	264.0	296.9	320.9	411.8	524.3	533.2	538.1	569.8
62.5°	438.4	243.8	368.9	238.8	271.7	276.7	376.5	478.8	490.1	494.0	512.9
65°	312.0	204.6	313.3	217.3	245.1	246.3	338.6	432.1	442.1	448.5	462.4
67.5°	210.9	166.8	238.8	197.1	224.9	226.1	302.0	377.7	391.7	396.7	405.5
70°	146.6	111.2	176.9	175.7	202.1	204.6	262.8	328.5	341.1	344.9	350.0
72.5°	107.4	89.7	146.6	158.0	178.1	180.6	222.3	272.9	285.5	289.3	291.8
75°	82.1	94.8	118.8	137.7	151.6	152.9	182.0	222.3	231.2	233.7	234.9
77.5°	65.7	88.4	87.2	111.2	123.8	121.2	142.8	171.8	179.4	179.4	179.4
80°	49.2	69.5	65.7	79.6	90.9	88.4	102.3	122.6	125.1	127.6	126.3
82.5°	36.6	44.2	44.2	50.5	60.6	58.1	68.2	79.6	79.6	79.6	82.1
85°	22.8	25.2	20.2	26.5	34.1	32.9	37.9	42.9	44.2	44.2	41.7
87.5°	13.9	11.4	6.3	10.1	15.2	15.2	17.7	18.9	17.7	17.7	17.7
90°	5.2	3.5	2.0	3.5	5.2	5.5	8.7	12.9	15.0	13.3	9.9
92.5°	34.7	21.2	7.8	21.2	34.7	38.1	53.5	74.0	84.3	73.9	53.1
95°	68.0	43.4	18.9	43.4	68.0	74.1	131.6	208.2	246.5	219.9	166.9
97.5°	75.9	54.3	32.7	54.3	75.9	81.4	177.2	305.0	368.9	352.2	318.6
100°	82.6	62.9	43.3	62.9	82.6	87.5	193.8	335.6	406.6	407.8	410.3
102.5°	89.0	70.8	52.4	70.8	89.0	93.6	201.5	345.3	417.2	438.6	481.3
105°	98.8	83.3	67.8	83.3	98.8	102.7	207.1	346.4	416.0	463.9	559.8
107.5°	112.4	98.0	83.6	98.0	112.4	116.1	208.2	331.0	392.4	459.3	592.9
110°	120.3	107.2	94.2	107.2	120.3	123.5	206.6	317.4	372.7	447.4	596.9



TEST NUMBER: P934436

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-6500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	129.5	117.0	104.6	117.0	129.5	132.6	206.6	305.4	354.7	431.2	584.1
115°	143.3	131.9	120.4	131.9	143.3	146.2	208.5	291.6	333.2	406.9	554.2
117.5°	156.8	146.4	136.0	146.4	156.8	159.4	212.5	283.1	318.5	385.0	517.9
120°	164.7	154.9	145.1	154.9	164.7	167.1	215.6	280.3	312.6	373.3	494.8
122.5°	173.7	163.9	153.9	163.9	173.7	176.2	220.1	278.7	308.0	362.7	472.2
125°	185.5	176.5	167.5	176.5	185.5	187.8	226.2	277.5	303.1	349.6	442.5
127.5°	196.8	187.7	178.5	187.7	196.8	199.1	232.4	276.8	299.0	338.9	418.6
130°	204.1	194.3	184.4	194.3	204.1	206.5	236.8	277.2	297.4	332.9	404.0
132.5°	210.2	200.4	190.6	200.4	210.2	212.7	240.5	277.5	296.0	327.8	391.4
135°	217.5	208.5	199.7	208.5	217.5	219.7	244.4	277.2	293.6	320.2	373.5
137.5°	226.6	217.7	208.9	217.7	226.6	228.8	250.3	278.9	293.3	315.7	360.8
140°	232.9	224.7	216.6	224.7	232.9	234.9	253.9	279.2	291.8	311.3	350.3
142.5°	237.5	230.1	222.5	230.1	237.5	239.4	256.9	280.2	291.8	308.9	343.1
145°	244.7	238.1	231.6	238.1	244.7	246.3	260.8	280.3	289.9	303.9	331.8
147.5°	253.4	247.1	240.7	247.1	253.4	255.0	266.7	282.2	289.9	300.9	322.9
150°	258.1	252.2	246.5	252.2	258.1	259.5	269.6	283.1	289.9	299.2	317.7
152.5°	261.4	257.0	252.6	257.0	261.4	262.5	271.7	283.8	289.9	297.9	313.7
155°	268.2	265.0	261.7	265.0	268.2	269.0	276.0	285.2	289.9	296.2	308.9
157.5°	274.7	271.6	268.4	271.6	274.7	275.5	280.3	286.7	289.9	294.8	304.6
160°	277.9	275.4	273.0	275.4	277.9	278.4	282.3	287.3	289.9	294.1	302.5
162.5°	281.1	279.3	277.5	279.3	281.1	281.6	284.4	288.1	289.9	293.5	300.5
165°	285.8	284.1	282.5	284.1	285.8	286.2	287.4	289.1	289.9	292.4	297.5
167.5°	288.5	287.7	287.0	287.7	288.5	288.7	289.7	291.2	291.8	293.6	296.9
170°	291.4	290.7	289.9	290.7	291.4	291.6	291.7	291.8	291.8	293.6	296.9
172.5°	291.8	291.6	291.4	291.6	291.8	291.8	291.8	291.8	291.8	293.2	295.8
175°	293.6	293.6	293.6	293.6	293.6	293.6	293.1	292.2	291.8	292.7	294.4
177.5°	293.6	293.6	293.6	293.6	293.6	293.6	293.2	292.6	292.3	293.0	294.3
180°	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6



TEST NUMBER: P934436

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-6500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3	1335.3
2.5°	1288.7	1284.8	1289.9	1275.9	1289.9	1284.8	1288.7	1297.5	1289.9	1295.0	1300.0
5°	1130.7	1124.4	1104.2	1087.8	1104.2	1124.4	1130.7	1157.3	1169.9	1192.6	1223.0
7.5°	1010.7	1005.6	1000.6	990.4	1000.6	1005.6	1010.7	1018.2	1030.9	1051.1	1073.9
10°	984.1	985.5	993.0	991.8	993.0	985.5	984.1	981.6	977.8	981.6	995.5
12.5°	1052.4	1063.8	1105.5	1102.9	1105.5	1063.8	1052.4	1001.8	967.8	961.5	963.9
15°	1130.7	1134.5	1143.3	1144.6	1143.3	1134.5	1130.7	1110.5	1008.1	963.9	950.1
17.5°	1138.3	1139.6	1145.9	1145.9	1145.9	1139.6	1138.3	1129.5	1095.3	1035.9	957.6
20°	1131.9	1134.5	1147.1	1149.6	1147.1	1134.5	1131.9	1120.6	1101.6	1080.2	1020.8
22.5°	1129.5	1134.5	1144.6	1143.3	1144.6	1134.5	1129.5	1111.8	1095.3	1080.2	1056.2
25°	1116.8	1116.8	1118.1	1119.3	1118.1	1116.8	1116.8	1102.9	1070.1	1066.3	1052.4
27.5°	1090.3	1092.8	1100.4	1099.1	1100.4	1092.8	1090.3	1085.2	1049.8	1046.1	1035.9
30°	1066.3	1063.8	1057.5	1052.4	1057.5	1063.8	1066.3	1058.7	1023.3	1013.2	1015.8
32.5°	1025.8	1019.5	1013.2	1009.5	1013.2	1019.5	1025.8	1023.3	996.8	982.9	985.5
35°	977.8	979.1	977.8	974.1	977.8	979.1	977.8	980.4	963.9	951.3	950.1
37.5°	943.8	946.2	945.0	939.9	945.0	946.2	943.8	941.2	918.4	914.7	917.2
40°	908.4	909.6	908.4	904.6	908.4	909.6	908.4	903.3	871.8	873.0	881.8
42.5°	874.2	873.0	869.2	866.7	869.2	873.0	874.2	866.7	826.2	822.4	838.9
45°	835.0	836.4	828.7	825.0	828.7	836.4	835.0	830.1	788.4	778.2	789.6
47.5°	795.9	795.9	789.6	785.8	789.6	795.9	795.9	789.6	745.4	735.3	741.6
50°	754.2	753.0	744.1	742.9	744.1	753.0	754.2	750.4	703.7	694.9	694.9
52.5°	706.2	706.2	707.5	710.0	707.5	706.2	706.2	707.5	665.8	656.9	654.4
55°	664.6	665.8	674.6	677.2	674.6	665.8	664.6	664.6	626.6	617.8	612.7
57.5°	621.5	621.5	627.9	627.9	627.9	621.5	621.5	619.0	582.4	574.9	572.3
60°	572.3	574.9	579.8	578.6	579.8	574.9	572.3	569.8	538.1	533.2	524.3
62.5°	520.5	523.0	524.3	521.8	524.3	523.0	520.5	512.9	494.0	490.1	478.8
65°	466.1	468.7	470.0	467.5	470.0	468.7	466.1	462.4	448.5	442.1	432.1
67.5°	410.6	409.3	408.1	413.1	408.1	409.3	410.6	405.5	396.7	391.7	377.7
70°	353.7	353.7	352.5	355.0	352.5	353.7	353.7	350.0	344.9	341.1	328.5
72.5°	293.1	291.8	296.9	293.1	296.9	291.8	293.1	291.8	289.3	285.5	272.9
75°	233.7	236.3	233.7	237.5	233.7	236.3	233.7	234.9	233.7	231.2	222.3
77.5°	178.1	180.6	178.1	178.1	178.1	180.6	178.1	179.4	179.4	179.4	171.8
80°	126.3	125.1	125.1	123.8	125.1	125.1	126.3	126.3	127.6	125.1	122.6
82.5°	80.9	79.6	79.6	82.1	79.6	79.6	80.9	82.1	79.6	79.6	79.6
85°	44.2	45.5	42.9	42.9	42.9	45.5	44.2	41.7	44.2	44.2	42.9
87.5°	16.4	15.2	15.2	15.2	15.2	15.2	16.4	17.7	17.7	17.7	18.9
90°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	9.9	13.3	15.0	12.9
92.5°	37.5	36.0	30.0	24.0	30.0	36.0	37.5	53.1	73.9	84.3	74.0
95°	127.1	122.6	104.5	86.5	104.5	122.6	127.1	166.9	219.9	246.5	208.2
97.5°	293.5	284.8	250.5	216.2	250.5	284.8	293.5	318.6	352.2	368.9	305.0
100°	412.1	401.9	361.0	320.0	361.0	401.9	412.1	410.3	407.8	406.6	335.6
102.5°	513.4	504.6	469.6	434.6	469.6	504.6	513.4	481.3	438.6	417.2	345.3
105°	631.7	627.0	608.1	589.3	608.1	627.0	631.7	559.8	463.9	416.0	346.4
107.5°	693.1	694.3	698.8	703.4	698.8	694.3	693.1	592.9	459.3	392.4	331.0
110°	708.9	713.8	733.4	753.0	733.4	713.8	708.9	596.9	447.4	372.7	317.4



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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	698.9	706.4	736.6	766.7	736.6	706.4	698.9	584.1	431.2	354.7	305.4
115°	664.7	675.2	717.0	758.7	717.0	675.2	664.7	554.2	406.9	333.2	291.6
117.5°	617.6	629.2	675.6	721.9	675.6	629.2	617.6	517.9	385.0	318.5	283.1
120°	586.0	597.2	642.2	687.2	642.2	597.2	586.0	494.8	373.3	312.6	280.3
122.5°	554.2	565.3	609.8	654.1	609.8	565.3	554.2	472.2	362.7	308.0	278.7
125°	512.2	522.5	563.3	604.2	563.3	522.5	512.2	442.5	349.6	303.1	277.5
127.5°	478.5	487.1	521.6	556.1	521.6	487.1	478.5	418.6	338.9	299.0	276.8
130°	457.3	465.2	497.1	529.0	497.1	465.2	457.3	404.0	332.9	297.4	277.2
132.5°	439.1	446.3	474.7	503.3	474.7	446.3	439.1	391.4	327.8	296.0	277.5
135°	413.5	419.6	444.2	468.8	444.2	419.6	413.5	373.5	320.2	293.6	277.2
137.5°	394.5	399.6	419.7	439.8	419.7	399.6	394.5	360.8	315.7	293.3	278.9
140°	379.4	384.1	402.9	421.8	402.9	384.1	379.4	350.3	311.3	291.8	279.2
142.5°	368.7	372.7	389.0	405.2	389.0	372.7	368.7	343.1	308.9	291.8	280.2
145°	352.7	355.8	368.1	380.4	368.1	355.8	352.7	331.8	303.9	289.9	280.3
147.5°	339.4	341.9	352.1	362.2	352.1	341.9	339.4	322.9	300.9	289.9	282.2
150°	331.7	333.8	342.0	350.3	342.0	333.8	331.7	317.7	299.2	289.9	283.1
152.5°	325.6	327.1	333.3	339.5	333.3	327.1	325.6	313.7	297.9	289.9	283.8
155°	318.3	319.4	323.5	327.6	323.5	319.4	318.3	308.9	296.2	289.9	285.2
157.5°	312.0	312.8	315.6	318.5	315.6	312.8	312.0	304.6	294.8	289.9	286.7
160°	308.9	309.2	311.0	312.6	311.0	309.2	308.9	302.5	294.1	289.9	287.3
162.5°	305.9	306.3	307.9	309.4	307.9	306.3	305.9	300.5	293.5	289.9	288.1
165°	301.3	301.7	303.4	305.1	303.4	301.7	301.3	297.5	292.4	289.9	289.1
167.5°	299.4	299.6	300.2	300.9	300.2	299.6	299.4	296.9	293.6	291.8	291.2
170°	299.4	299.4	299.4	299.4	299.4	299.4	299.4	296.9	293.6	291.8	291.8
172.5°	297.8	297.6	297.0	296.4	297.0	297.6	297.8	295.8	293.2	291.8	291.8
175°	295.7	295.7	295.7	295.7	295.7	295.7	295.7	294.4	292.7	291.8	292.2
177.5°	295.3	295.1	294.4	293.6	294.4	295.1	295.3	294.3	293.0	292.3	292.6
180°	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1335.3	1335.3	1335.3	1335.3	1335.3
2.5°	1319.0	1325.3	1329.0	1334.1	1346.7
5°	1268.4	1292.4	1300.0	1319.0	1341.7
7.5°	1157.3	1230.5	1250.7	1296.2	1331.6
10°	1049.8	1123.1	1158.5	1265.9	1319.0
12.5°	995.5	1038.5	1062.5	1212.8	1301.3
15°	961.5	991.8	1009.5	1142.1	1281.0
17.5°	934.9	956.4	969.0	1072.6	1253.3
20°	918.4	928.6	939.9	1022.1	1221.6
22.5°	907.0	900.7	909.6	986.7	1178.7
25°	899.5	875.5	885.6	958.9	1128.2
27.5°	905.8	852.7	856.6	933.6	1075.1
30°	907.0	825.0	826.2	907.0	1015.8
32.5°	898.2	795.9	797.2	874.2	948.7
35°	876.7	761.8	760.6	836.4	857.8
37.5°	847.7	725.2	725.2	794.7	758.0
40°	812.4	688.6	692.3	740.3	669.6
42.5°	769.4	649.4	654.4	668.3	603.9
45°	722.6	611.5	615.2	564.7	553.3
47.5°	670.9	572.3	573.5	468.7	536.9
50°	608.9	531.8	526.9	401.8	535.7
52.5°	554.6	487.7	472.5	363.8	486.4
55°	501.5	440.9	408.1	334.8	451.0
57.5°	454.8	380.3	348.7	300.7	443.5
60°	411.8	320.9	296.9	264.0	406.8
62.5°	376.5	276.7	271.7	238.8	368.9
65°	338.6	246.3	245.1	217.3	313.3
67.5°	302.0	226.1	224.9	197.1	238.8
70°	262.8	204.6	202.1	175.7	176.9
72.5°	222.3	180.6	178.1	158.0	146.6
75°	182.0	152.9	151.6	137.7	118.8
77.5°	142.8	121.2	123.8	111.2	87.2
80°	102.3	88.4	90.9	79.6	65.7
82.5°	68.2	58.1	60.6	50.5	44.2
85°	37.9	32.9	34.1	26.5	20.2
87.5°	17.7	15.2	15.2	10.1	6.3
90°	8.7	5.5	5.2	3.5	2.0
92.5°	53.5	38.1	34.7	21.2	7.8
95°	131.6	74.1	68.0	43.4	18.9
97.5°	177.2	81.4	75.9	54.3	32.7
100°	193.8	87.5	82.6	62.9	43.3
102.5°	201.5	93.6	89.0	70.8	52.4
105°	207.1	102.7	98.8	83.3	67.8
107.5°	208.2	116.1	112.4	98.0	83.6
110°	206.6	123.5	120.3	107.2	94.2



TEST NUMBER: P934436

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-6500K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	206.6	132.6	129.5	117.0	104.6
115°	208.5	146.2	143.3	131.9	120.4
117.5°	212.5	159.4	156.8	146.4	136.0
120°	215.6	167.1	164.7	154.9	145.1
122.5°	220.1	176.2	173.7	163.9	153.9
125°	226.2	187.8	185.5	176.5	167.5
127.5°	232.4	199.1	196.8	187.7	178.5
130°	236.8	206.5	204.1	194.3	184.4
132.5°	240.5	212.7	210.2	200.4	190.6
135°	244.4	219.7	217.5	208.5	199.7
137.5°	250.3	228.8	226.6	217.7	208.9
140°	253.9	234.9	232.9	224.7	216.6
142.5°	256.9	239.4	237.5	230.1	222.5
145°	260.8	246.3	244.7	238.1	231.6
147.5°	266.7	255.0	253.4	247.1	240.7
150°	269.6	259.5	258.1	252.2	246.5
152.5°	271.7	262.5	261.4	257.0	252.6
155°	276.0	269.0	268.2	265.0	261.7
157.5°	280.3	275.5	274.7	271.6	268.4
160°	282.3	278.4	277.9	275.4	273.0
162.5°	284.4	281.6	281.1	279.3	277.5
165°	287.4	286.2	285.8	284.1	282.5
167.5°	289.7	288.7	288.5	287.7	287.0
170°	291.7	291.6	291.4	290.7	289.9
172.5°	291.8	291.8	291.8	291.6	291.4
175°	293.1	293.6	293.6	293.6	293.6
177.5°	293.2	293.6	293.6	293.6	293.6
180°	293.6	293.6	293.6	293.6	293.6



TEST NUMBER: P934436
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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	14.78	15.79	15.60	16.63	17.68	17.58	18.59	18.40	19.43	20.48
	3H	15.27	16.18	16.10	17.03	18.10	18.93	19.83	19.76	20.68	21.76
	4H	15.47	16.32	16.32	17.18	18.27	19.37	20.22	20.22	21.09	22.17
	6H	15.60	16.38	16.46	17.25	18.35	19.65	20.44	20.52	21.31	22.41
	8H	15.60	16.35	16.47	17.24	18.34	19.73	20.48	20.60	21.37	22.47
	12H	15.58	16.29	16.45	17.17	18.30	19.77	20.48	20.65	21.36	22.49
4H	2H	15.82	16.68	16.68	17.54	18.63	18.01	18.86	18.86	19.72	20.81
	3H	16.86	17.58	17.73	18.47	19.57	19.52	20.23	20.38	21.12	22.22
	4H	17.15	17.80	18.03	18.69	19.81	20.04	20.69	20.92	21.58	22.71
	6H	17.28	17.84	18.18	18.76	19.89	20.41	20.97	21.31	21.89	23.02
	8H	17.29	17.81	18.19	18.72	19.87	20.52	21.04	21.41	21.95	23.09
	12H	17.26	17.74	18.18	18.66	19.81	20.57	21.05	21.49	21.97	23.12
8H	4H	17.61	18.13	18.51	19.04	20.18	20.18	20.71	21.08	21.61	22.76
	6H	17.88	18.31	18.80	19.26	20.40	20.62	21.05	21.54	22.00	23.14
	8H	17.92	18.30	18.85	19.25	20.41	20.76	21.15	21.70	22.09	23.25
	12H	17.91	18.25	18.85	19.18	20.39	20.86	21.20	21.80	22.14	23.35
12H	4H	17.62	18.09	18.54	19.02	20.17	20.15	20.63	21.07	21.55	22.70
	6H	17.94	18.32	18.87	19.26	20.42	20.61	21.00	21.55	21.94	23.10
	8H	18.01	18.35	18.95	19.28	20.49	20.78	21.12	21.72	22.05	23.26