

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: P935231

Luminaire Tested: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935231
REPORT IS A COMBINATION OF REPORTS P933746 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

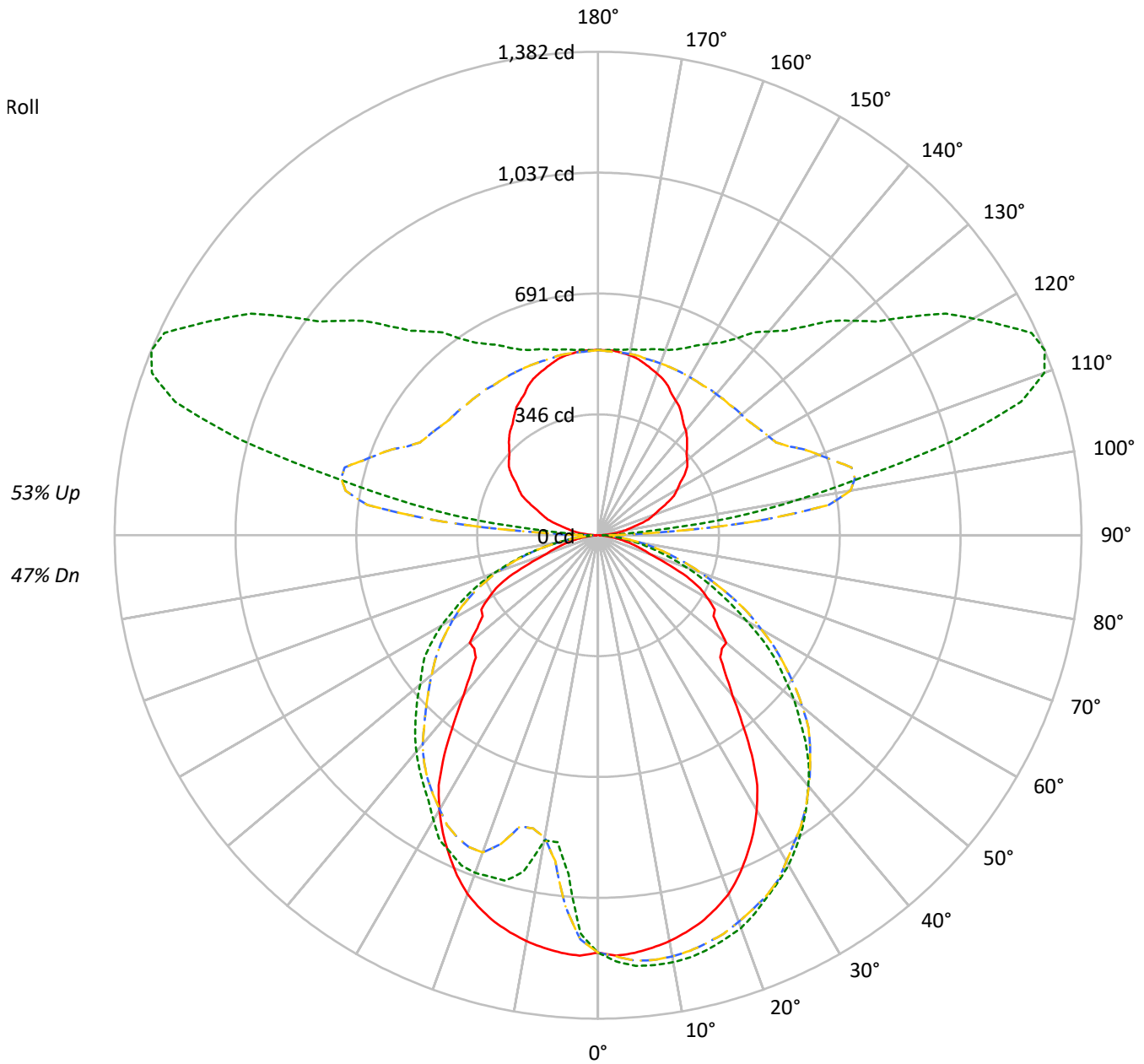
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6526.4 lumens
Efficiency: N/A
Efficacy: 112.5 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: General Diffuse

Input Watts (W): 58
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: P935231
CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-2700K

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° ··· 90°-270° - · 135°-315°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47	47	47	47
1	97	93	89	86	89	86	82	79	72	70	67	59	58	56	48	47	46	40	40	40	40
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38	34	34	34	34
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33	28	28	28	28
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24	24	24	24
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	24	21	21	21	21
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	27	24	21	19	19	19	19
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	21	19	16	16	16	16
8	53	41	33	28	49	38	31	27	33	27	23	28	23	20	23	19	17	15	15	15	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13	13	13	13
10	46	34	27	22	43	32	26	21	28	22	19	23	19	16	19	16	14	12	12	12	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11068	11068	11068	11068
5°	11139	11174	11139	8786
10°	11053	11006	11053	7869
15°	10920	10767	10920	8991
20°	10678	10485	10678	9010
25°	10199	10074	10199	8818
30°	9583	9731	9583	8401
35°	8530	9299	8530	7939
40°	7096	8789	7096	7591
45°	6328	8193	6328	7191
50°	6708	7482	6708	6790
55°	6293	6716	6293	6557
60°	6462	5704	6462	6005
65°	5833	4714	5833	5271
70°	4011	3757	4011	4418
75°	3479	2776	3479	3327
80°	2747	1837	2747	2000
85°	1490	972	1490	827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 9717 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.7	1.6
10°-20°	305.7	4.7
20°-30°	472.6	7.2
30°-40°	564.2	8.6
40°-50°	567.5	8.7
50°-60°	493.8	7.6
60°-70°	350.1	5.4
70°-80°	185.2	2.8
80°-90°	48.2	0.7
90°-100°	258.0	4.0
100°-110°	678.4	10.4
110°-120°	703.4	10.8
120°-130°	564.2	8.6
130°-140°	442.7	6.8
140°-150°	339.8	5.2
150°-160°	244.7	3.7
160°-170°	149.7	2.3
170°-180°	50.6	0.8
0°-30°	886.0	13.6
0°-40°	1450.1	22.2
0°-60°	2511.4	38.5
0°-90°	3094.8	47.4
90°-120°	1639.8	25.1
90°-150°	2986.5	45.8
90°-180°	3432.0	52.6
0°-180°	6526.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1193	1193	1193	1193	1193	
5°	1198	1236	1198	972	1198	114
15°	1144	1224	1144	1022	1144	322
25°	1008	1142	1008	1000	1008	463
35°	766	1019	766	870	766	474
45°	494	840	494	737	494	396
55°	403	620	403	605	403	370
65°	280	374	280	418	280	267
75°	106	177	106	212	106	112
85°	18	45	18	38	18	24
90°	4	14	4	14	4	4
95°	34	156	34	156	34	38
105°	122	1062	122	1062	122	130
115°	217	1368	217	1368	217	214
125°	302	1089	302	1089	302	268
135°	360	845	360	845	360	278
145°	417	686	417	686	417	262
155°	472	590	472	590	472	217
165°	509	550	509	550	509	144
175°	529	533	529	533	529	50
180°	529	529	529	529	529	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8
2.5°	1203.0	1203.0	1209.8	1212.0	1212.0	1208.6	1205.3	1208.6	1218.8	1222.2	1221.1
5°	1198.5	1207.5	1220.0	1222.2	1224.4	1223.3	1221.1	1223.3	1234.6	1236.9	1238.0
7.5°	1189.5	1206.4	1222.2	1225.6	1228.9	1225.6	1224.4	1226.7	1238.0	1240.2	1240.2
10°	1178.2	1201.8	1220.0	1222.2	1225.6	1222.2	1222.2	1226.7	1238.0	1240.2	1241.4
12.5°	1162.4	1195.1	1212.0	1214.3	1218.8	1217.6	1216.5	1221.1	1232.3	1234.6	1234.6
15°	1144.3	1182.7	1198.5	1200.7	1208.6	1206.4	1206.4	1210.9	1223.3	1226.7	1225.6
17.5°	1119.5	1166.9	1184.9	1188.3	1194.0	1192.8	1194.0	1198.5	1209.8	1212.0	1213.1
20°	1091.2	1145.5	1166.9	1170.2	1175.9	1175.9	1175.9	1181.5	1192.8	1197.3	1197.3
22.5°	1052.9	1122.8	1145.5	1147.7	1154.4	1154.4	1156.7	1164.6	1174.8	1175.9	1175.9
25°	1007.8	1098.1	1117.2	1124.0	1130.8	1134.1	1137.5	1142.1	1145.5	1144.3	1145.5
27.5°	960.4	1066.5	1091.2	1095.8	1104.8	1108.2	1112.7	1113.9	1115.0	1118.3	1116.1
30°	907.3	1022.4	1059.6	1064.2	1078.8	1081.1	1076.6	1078.8	1084.5	1086.8	1089.0
32.5°	847.5	957.0	1026.9	1037.1	1050.7	1043.8	1042.7	1046.1	1055.2	1055.2	1057.4
35°	766.2	906.2	996.5	1005.5	1015.6	1007.8	1012.2	1013.4	1019.1	1022.4	1021.3
37.5°	677.1	862.2	964.9	971.7	979.5	969.3	976.2	979.5	984.0	981.8	981.8
40°	598.1	793.3	927.7	932.1	938.9	931.0	937.7	940.1	942.3	940.1	938.9
42.5°	539.5	717.7	888.1	893.8	889.2	894.9	897.2	901.7	898.3	893.8	893.8
45°	494.3	697.4	845.2	852.0	845.2	854.3	857.6	857.6	847.5	845.2	844.1
47.5°	479.6	656.8	802.4	802.4	799.0	810.2	815.9	808.0	797.8	794.5	794.5
50°	478.5	611.6	743.7	739.2	755.0	768.5	762.9	755.0	747.1	734.6	734.6
52.5°	434.5	556.4	668.1	685.0	709.9	717.7	708.7	700.8	687.2	681.6	677.1
55°	402.9	498.8	599.3	633.1	659.0	669.2	652.3	644.4	624.0	620.7	618.4
57.5°	396.1	415.3	536.1	578.9	610.5	609.4	599.3	584.6	567.7	564.2	563.1
60°	363.3	300.1	468.3	519.1	551.9	548.4	539.5	525.9	510.1	507.9	505.6
62.5°	329.5	217.8	391.6	449.2	495.4	494.3	486.4	466.1	454.8	449.2	444.7
65°	279.9	182.8	278.7	373.5	440.1	442.4	425.4	410.8	398.4	391.6	390.4
67.5°	213.3	149.0	188.4	311.5	387.1	384.8	363.3	356.6	340.8	337.4	330.6
70°	158.0	99.3	130.9	252.8	335.2	329.5	312.6	304.7	290.1	282.1	277.6
72.5°	130.9	80.1	95.9	196.4	282.1	275.4	260.7	251.6	239.2	232.5	228.0
75°	106.1	84.6	73.4	145.5	229.1	224.6	211.1	202.0	191.8	182.8	184.0
77.5°	77.9	79.0	58.7	107.2	181.7	174.9	167.0	155.7	151.2	142.2	142.2
80°	58.7	62.1	44.0	73.4	130.9	130.9	124.1	116.2	108.3	103.9	103.9
82.5°	39.5	39.5	32.7	46.3	89.2	85.8	81.2	79.0	74.5	72.3	72.3
85°	18.0	22.5	20.3	28.2	48.5	50.8	50.8	48.5	47.4	45.1	46.3
87.5°	5.6	10.2	12.4	15.8	24.9	26.0	27.1	27.1	27.1	28.2	28.2
90°	3.6	6.4	9.2	9.9	15.6	23.2	27.0	24.0	18.0	13.5	13.5
92.5°	14.2	38.4	62.5	68.6	96.4	133.5	152.0	133.2	95.7	67.5	64.8
95°	34.1	78.3	122.6	133.6	237.2	375.3	444.4	396.6	300.9	229.2	221.0
97.5°	58.9	98.0	137.0	146.7	319.5	549.9	665.0	634.8	574.3	529.0	513.5
100°	78.2	113.5	148.9	157.8	349.5	605.1	732.9	735.1	739.5	742.8	724.4
102.5°	94.5	127.5	160.5	168.8	363.3	622.5	752.1	790.7	867.7	925.4	909.6
105°	122.2	150.2	178.1	185.1	373.4	624.5	750.0	836.4	1009.1	1138.6	1130.2
107.5°	150.7	176.7	202.8	209.3	375.3	596.6	707.3	827.8	1068.8	1249.5	1251.6
110°	169.8	193.4	216.9	222.8	372.4	572.0	671.8	806.5	1075.9	1277.9	1286.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	188.7	211.1	233.4	239.1	372.6	550.5	639.5	777.3	1053.0	1259.8	1273.3
115°	217.0	237.7	258.4	263.6	376.0	525.9	600.8	733.6	999.2	1198.3	1217.1
117.5°	245.1	263.9	282.7	287.4	383.0	510.4	574.1	694.0	933.6	1113.4	1134.3
120°	261.4	279.1	296.8	301.3	388.6	505.2	563.5	673.0	892.0	1056.2	1076.5
122.5°	277.5	295.4	313.2	317.7	396.8	502.5	555.3	653.8	851.1	999.0	1019.0
125°	302.0	318.2	334.5	338.6	407.8	500.2	546.4	630.2	797.7	923.3	941.8
127.5°	321.8	338.2	354.7	358.8	418.9	498.9	539.0	610.9	754.7	862.6	878.1
130°	332.5	350.2	367.9	372.3	426.9	499.8	536.1	600.2	728.2	824.2	838.6
132.5°	343.5	361.2	378.9	383.3	433.4	500.2	533.6	590.9	705.5	791.5	804.4
135°	359.9	376.0	392.1	396.1	440.6	499.8	529.4	577.4	673.3	745.3	756.4
137.5°	376.6	392.6	408.4	412.5	451.2	502.8	528.6	569.2	650.3	711.2	720.3
140°	390.4	405.1	419.8	423.5	457.7	503.3	526.1	561.2	631.3	683.9	692.4
142.5°	401.1	414.7	428.3	431.7	463.2	505.1	526.1	556.9	618.5	664.7	672.0
145°	417.4	429.3	441.1	444.1	470.3	505.2	522.6	547.8	598.1	635.9	641.5
147.5°	433.8	445.3	456.8	459.7	480.7	508.6	522.6	542.5	582.1	611.8	616.4
150°	444.4	454.8	465.2	467.9	486.2	510.5	522.6	539.4	572.8	597.9	601.6
152.5°	455.4	463.3	471.2	473.2	489.7	511.6	522.6	536.9	565.4	586.9	589.7
155°	471.8	477.6	483.5	485.0	497.5	514.3	522.6	534.0	556.7	573.7	575.6
157.5°	483.9	489.6	495.2	496.7	505.3	516.8	522.6	531.4	549.1	562.4	563.6
160°	492.1	496.5	500.9	502.0	508.9	518.0	522.6	530.2	545.4	556.7	557.5
162.5°	500.2	503.5	506.8	507.7	512.6	519.3	522.6	529.0	541.8	551.3	552.0
165°	509.1	512.0	515.0	515.8	518.1	521.1	522.6	527.3	536.4	543.2	544.0
167.5°	517.3	518.7	520.2	520.5	522.4	524.9	526.1	529.1	535.1	539.6	540.0
170°	522.6	524.0	525.5	525.8	525.9	526.1	526.1	529.1	535.1	539.6	539.6
172.5°	525.5	525.8	526.1	526.1	526.1	526.1	526.1	528.5	533.2	536.8	536.6
175°	529.4	529.4	529.4	529.4	528.3	526.8	526.1	527.7	530.7	532.9	532.9
177.5°	529.4	529.4	529.4	529.4	528.5	527.4	526.8	528.0	530.4	532.2	531.9
180°	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8
2.5°	1223.3	1220.0	1223.3	1221.1	1222.2	1218.8	1208.6	1205.3	1208.6	1212.0	1212.0
5°	1238.0	1235.8	1238.0	1238.0	1236.9	1234.6	1223.3	1221.1	1223.3	1224.4	1222.2
7.5°	1242.5	1239.1	1242.5	1240.2	1240.2	1238.0	1226.7	1224.4	1225.6	1228.9	1225.6
10°	1242.5	1239.1	1242.5	1241.4	1240.2	1238.0	1226.7	1222.2	1222.2	1225.6	1222.2
12.5°	1236.9	1234.6	1236.9	1234.6	1234.6	1232.3	1221.1	1216.5	1217.6	1218.8	1214.3
15°	1227.8	1224.4	1227.8	1225.6	1226.7	1223.3	1210.9	1206.4	1206.4	1208.6	1200.7
17.5°	1214.3	1209.8	1214.3	1213.1	1212.0	1209.8	1198.5	1194.0	1192.8	1194.0	1188.3
20°	1198.5	1195.1	1198.5	1197.3	1197.3	1192.8	1181.5	1175.9	1175.9	1175.9	1170.2
22.5°	1173.7	1170.2	1173.7	1175.9	1175.9	1174.8	1164.6	1156.7	1154.4	1154.4	1147.7
25°	1145.5	1142.1	1145.5	1145.5	1144.3	1145.5	1142.1	1137.5	1134.1	1130.8	1124.0
27.5°	1118.3	1116.1	1118.3	1116.1	1118.3	1115.0	1113.9	1112.7	1108.2	1104.8	1095.8
30°	1091.2	1089.0	1091.2	1089.0	1086.8	1084.5	1078.8	1076.6	1081.1	1078.8	1064.2
32.5°	1057.4	1055.2	1057.4	1057.4	1055.2	1055.2	1046.1	1042.7	1043.8	1050.7	1037.1
35°	1022.4	1019.1	1022.4	1021.3	1022.4	1019.1	1013.4	1012.2	1007.8	1015.6	1005.5
37.5°	981.8	978.4	981.8	981.8	981.8	984.0	979.5	976.2	969.3	979.5	971.7
40°	940.1	935.5	940.1	938.9	940.1	942.3	940.1	937.7	931.0	938.9	932.1
42.5°	892.6	891.5	892.6	893.8	893.8	898.3	901.7	897.2	894.9	889.2	893.8
45°	841.8	839.6	841.8	844.1	845.2	847.5	857.6	857.6	854.3	845.2	852.0
47.5°	787.7	782.0	787.7	794.5	794.5	797.8	808.0	815.9	810.2	799.0	802.4
50°	730.1	731.3	730.1	734.6	734.6	747.1	755.0	762.9	768.5	755.0	739.2
52.5°	673.7	672.6	673.7	677.1	681.6	687.2	700.8	708.7	717.7	709.9	685.0
55°	617.3	619.6	617.3	618.4	620.7	624.0	644.4	652.3	669.2	659.0	633.1
57.5°	560.9	557.5	560.9	563.1	564.2	567.7	584.6	599.3	609.4	610.5	578.9
60°	495.4	490.9	495.4	505.6	507.9	510.1	525.9	539.5	548.4	551.9	519.1
62.5°	437.8	430.0	437.8	444.7	449.2	454.8	466.1	486.4	494.3	495.4	449.2
65°	376.9	373.5	376.9	390.4	391.6	398.4	410.8	425.4	442.4	440.1	373.5
67.5°	321.7	321.7	321.7	330.6	337.4	340.8	356.6	363.3	384.8	387.1	311.5
70°	270.8	269.7	270.8	277.6	282.1	290.1	304.7	312.6	329.5	335.2	252.8
72.5°	222.3	221.2	222.3	228.0	232.5	239.2	251.6	260.7	275.4	282.1	196.4
75°	179.5	177.1	179.5	184.0	182.8	191.8	202.0	211.1	224.6	229.1	145.5
77.5°	137.7	137.7	137.7	142.2	142.2	151.2	155.7	167.0	174.9	181.7	107.2
80°	102.7	101.6	102.7	103.9	103.9	108.3	116.2	124.1	130.9	130.9	73.4
82.5°	72.3	70.0	72.3	72.3	72.3	74.5	79.0	81.2	85.8	89.2	46.3
85°	45.1	45.1	45.1	46.3	45.1	47.4	48.5	50.8	50.8	48.5	28.2
87.5°	29.4	28.2	29.4	28.2	28.2	27.1	27.1	27.1	26.0	24.9	15.8
90°	13.5	13.5	13.5	13.5	13.5	18.0	24.0	27.0	23.2	15.6	9.9
92.5°	54.1	43.3	54.1	64.8	67.5	95.7	133.2	152.0	133.5	96.4	68.6
95°	188.5	156.0	188.5	221.0	229.2	300.9	396.6	444.4	375.3	237.2	133.6
97.5°	451.6	389.7	451.6	513.5	529.0	574.3	634.8	665.0	549.9	319.5	146.7
100°	650.7	577.0	650.7	724.4	742.8	739.5	735.1	732.9	605.1	349.5	157.8
102.5°	846.5	783.4	846.5	909.6	925.4	867.7	790.7	752.1	622.5	363.3	168.8
105°	1096.2	1062.3	1096.2	1130.2	1138.6	1009.1	836.4	750.0	624.5	373.4	185.1
107.5°	1259.8	1268.0	1259.8	1251.6	1249.5	1068.8	827.8	707.3	596.6	375.3	209.3
110°	1322.1	1357.5	1322.1	1286.7	1277.9	1075.9	806.5	671.8	572.0	372.4	222.8



TEST NUMBER: P935231

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1327.7	1382.0	1327.7	1273.3	1259.8	1053.0	777.3	639.5	550.5	372.6	239.1
115°	1292.5	1367.8	1292.5	1217.1	1198.3	999.2	733.6	600.8	525.9	376.0	263.6
117.5°	1217.8	1301.3	1217.8	1134.3	1113.4	933.6	694.0	574.1	510.4	383.0	287.4
120°	1157.7	1238.8	1157.7	1076.5	1056.2	892.0	673.0	563.5	505.2	388.6	301.3
122.5°	1099.1	1179.1	1099.1	1019.0	999.0	851.1	653.8	555.3	502.5	396.8	317.7
125°	1015.5	1089.3	1015.5	941.8	923.3	797.7	630.2	546.4	500.2	407.8	338.6
127.5°	940.4	1002.6	940.4	878.1	862.6	754.7	610.9	539.0	498.9	418.9	358.8
130°	896.1	953.5	896.1	838.6	824.2	728.2	600.2	536.1	499.8	426.9	372.3
132.5°	855.8	907.3	855.8	804.4	791.5	705.5	590.9	533.6	500.2	433.4	383.3
135°	800.7	845.2	800.7	756.4	745.3	673.3	577.4	529.4	499.8	440.6	396.1
137.5°	756.7	793.0	756.7	720.3	711.2	650.3	569.2	528.6	502.8	451.2	412.5
140°	726.4	760.3	726.4	692.4	683.9	631.3	561.2	526.1	503.3	457.7	423.5
142.5°	701.2	730.5	701.2	672.0	664.7	618.5	556.9	526.1	505.1	463.2	431.7
145°	663.6	685.7	663.6	641.5	635.9	598.1	547.8	522.6	505.2	470.3	444.1
147.5°	634.7	653.0	634.7	616.4	611.8	582.1	542.5	522.6	508.6	480.7	459.7
150°	616.4	631.3	616.4	601.6	597.9	572.8	539.4	522.6	510.5	486.2	467.9
152.5°	600.9	612.2	600.9	589.7	586.9	565.4	536.9	522.6	511.6	489.7	473.2
155°	583.0	590.5	583.0	575.6	573.7	556.7	534.0	522.6	514.3	497.5	485.0
157.5°	568.9	574.1	568.9	563.6	562.4	549.1	531.4	522.6	516.8	505.3	496.7
160°	560.5	563.5	560.5	557.5	556.7	545.4	530.2	522.6	518.0	508.9	502.0
162.5°	554.9	557.7	554.9	552.0	551.3	541.8	529.0	522.6	519.3	512.6	507.7
165°	547.0	550.0	547.0	544.0	543.2	536.4	527.3	522.6	521.1	518.1	515.8
167.5°	541.2	542.5	541.2	540.0	539.6	535.1	529.1	526.1	524.9	522.4	520.5
170°	539.6	539.6	539.6	539.6	539.6	535.1	529.1	526.1	526.1	525.9	525.8
172.5°	535.5	534.3	535.5	536.6	536.8	533.2	528.5	526.1	526.1	526.1	526.1
175°	532.9	532.9	532.9	532.9	532.9	530.7	527.7	526.1	526.8	528.3	529.4
177.5°	530.7	529.4	530.7	531.9	532.2	530.4	528.0	526.8	527.4	528.5	529.4
180°	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4



TEST NUMBER: P935231

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8
2.5°	1209.8	1203.0	1203.0	1191.7	1187.2	1183.8	1178.2	1161.3	1156.7	1152.2	1159.0
5°	1220.0	1207.5	1198.5	1178.2	1161.3	1154.4	1133.0	1092.4	1065.3	1045.0	1033.8
7.5°	1222.2	1206.4	1189.5	1157.9	1117.2	1099.2	1033.8	959.3	938.9	920.8	909.6
10°	1220.0	1201.8	1178.2	1130.8	1034.9	1003.3	937.7	889.2	876.8	873.4	876.8
12.5°	1212.0	1195.1	1162.4	1083.4	949.1	927.7	889.2	861.0	858.8	864.5	894.9
15°	1198.5	1182.7	1144.3	1020.2	901.7	885.9	858.8	848.7	861.0	900.5	992.0
17.5°	1184.9	1166.9	1119.5	958.1	865.6	854.3	835.1	855.4	925.4	978.4	1008.9
20°	1166.9	1145.5	1091.2	913.0	839.6	829.4	820.4	911.9	964.9	984.0	1001.0
22.5°	1145.5	1122.8	1052.9	881.4	812.5	804.6	810.2	943.5	964.9	978.4	993.1
25°	1117.2	1098.1	1007.8	856.5	791.1	782.0	803.5	940.1	952.4	955.9	985.2
27.5°	1091.2	1066.5	960.4	834.0	765.1	761.7	809.1	925.4	934.4	937.7	969.3
30°	1059.6	1022.4	907.3	810.2	738.1	736.9	810.2	907.3	905.0	914.1	945.7
32.5°	1026.9	957.0	847.5	780.9	712.1	711.0	802.4	880.3	878.0	890.4	914.1
35°	996.5	906.2	766.2	747.1	679.4	680.5	783.1	848.7	849.8	861.0	875.7
37.5°	964.9	862.2	677.1	709.9	647.8	647.8	757.2	819.3	817.1	820.4	840.7
40°	927.7	793.3	598.1	661.3	618.4	615.1	725.7	787.7	779.8	778.7	806.9
42.5°	888.1	717.7	539.5	597.0	584.6	580.0	687.2	749.3	734.6	738.1	774.2
45°	845.2	697.4	494.3	504.4	549.5	546.2	645.5	705.3	695.2	704.2	741.5
47.5°	802.4	656.8	479.6	418.7	512.3	511.2	599.3	662.5	656.8	665.8	705.3
50°	743.7	611.6	478.5	358.9	470.6	475.1	543.9	620.7	620.7	628.6	670.3
52.5°	668.1	556.4	434.5	325.0	422.0	435.6	495.4	584.6	586.8	594.7	632.0
55°	599.3	498.8	402.9	299.0	364.5	393.8	448.0	547.3	551.9	559.7	593.6
57.5°	536.1	415.3	396.1	268.6	311.5	339.7	406.2	511.2	513.5	520.2	553.0
60°	468.3	300.1	363.3	235.8	265.2	286.6	367.9	468.3	476.3	480.7	509.0
62.5°	391.6	217.8	329.5	213.3	242.7	247.2	336.3	427.7	437.8	441.2	458.2
65°	278.7	182.8	279.9	194.1	218.9	220.0	302.4	386.0	394.9	400.6	413.1
67.5°	188.4	149.0	213.3	176.0	200.9	202.0	269.7	337.4	349.9	354.4	362.2
70°	130.9	99.3	158.0	156.9	180.6	182.8	234.7	293.4	304.7	308.1	312.6
72.5°	95.9	80.1	130.9	141.1	159.1	161.3	198.6	243.8	255.0	258.5	260.7
75°	73.4	84.6	106.1	123.0	135.4	136.6	162.5	198.6	206.5	208.7	209.9
77.5°	58.7	79.0	77.9	99.3	110.6	108.3	127.5	153.5	160.2	160.2	160.2
80°	44.0	62.1	58.7	71.1	81.2	79.0	91.4	109.5	111.7	113.9	112.8
82.5°	32.7	39.5	39.5	45.1	54.2	51.9	60.9	71.1	71.1	71.1	73.4
85°	20.3	22.5	18.0	23.7	30.5	29.4	33.8	38.4	39.5	39.5	37.2
87.5°	12.4	10.2	5.6	9.1	13.6	13.6	15.8	16.9	15.8	15.8	15.8
90°	9.2	6.4	3.6	6.4	9.2	9.9	15.6	23.2	27.0	24.0	18.0
92.5°	62.5	38.4	14.2	38.4	62.5	68.6	96.4	133.5	152.0	133.2	95.7
95°	122.6	78.3	34.1	78.3	122.6	133.6	237.2	375.3	444.4	396.6	300.9
97.5°	137.0	98.0	58.9	98.0	137.0	146.7	319.5	549.9	665.0	634.8	574.3
100°	148.9	113.5	78.2	113.5	148.9	157.8	349.5	605.1	732.9	735.1	739.5
102.5°	160.5	127.5	94.5	127.5	160.5	168.8	363.3	622.5	752.1	790.7	867.7
105°	178.1	150.2	122.2	150.2	178.1	185.1	373.4	624.5	750.0	836.4	1009.1
107.5°	202.8	176.7	150.7	176.7	202.8	209.3	375.3	596.6	707.3	827.8	1068.8
110°	216.9	193.4	169.8	193.4	216.9	222.8	372.4	572.0	671.8	806.5	1075.9



TEST NUMBER: P935231

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	233.4	211.1	188.7	211.1	233.4	239.1	372.6	550.5	639.5	777.3	1053.0
115°	258.4	237.7	217.0	237.7	258.4	263.6	376.0	525.9	600.8	733.6	999.2
117.5°	282.7	263.9	245.1	263.9	282.7	287.4	383.0	510.4	574.1	694.0	933.6
120°	296.8	279.1	261.4	279.1	296.8	301.3	388.6	505.2	563.5	673.0	892.0
122.5°	313.2	295.4	277.5	295.4	313.2	317.7	396.8	502.5	555.3	653.8	851.1
125°	334.5	318.2	302.0	318.2	334.5	338.6	407.8	500.2	546.4	630.2	797.7
127.5°	354.7	338.2	321.8	338.2	354.7	358.8	418.9	498.9	539.0	610.9	754.7
130°	367.9	350.2	332.5	350.2	367.9	372.3	426.9	499.8	536.1	600.2	728.2
132.5°	378.9	361.2	343.5	361.2	378.9	383.3	433.4	500.2	533.6	590.9	705.5
135°	392.1	376.0	359.9	376.0	392.1	396.1	440.6	499.8	529.4	577.4	673.3
137.5°	408.4	392.6	376.6	392.6	408.4	412.5	451.2	502.8	528.6	569.2	650.3
140°	419.8	405.1	390.4	405.1	419.8	423.5	457.7	503.3	526.1	561.2	631.3
142.5°	428.3	414.7	401.1	414.7	428.3	431.7	463.2	505.1	526.1	556.9	618.5
145°	441.1	429.3	417.4	429.3	441.1	444.1	470.3	505.2	522.6	547.8	598.1
147.5°	456.8	445.3	433.8	445.3	456.8	459.7	480.7	508.6	522.6	542.5	582.1
150°	465.2	454.8	444.4	454.8	465.2	467.9	486.2	510.5	522.6	539.4	572.8
152.5°	471.2	463.3	455.4	463.3	471.2	473.2	489.7	511.6	522.6	536.9	565.4
155°	483.5	477.6	471.8	477.6	483.5	485.0	497.5	514.3	522.6	534.0	556.7
157.5°	495.2	489.6	483.9	489.6	495.2	496.7	505.3	516.8	522.6	531.4	549.1
160°	500.9	496.5	492.1	496.5	500.9	502.0	508.9	518.0	522.6	530.2	545.4
162.5°	506.8	503.5	500.2	503.5	506.8	507.7	512.6	519.3	522.6	529.0	541.8
165°	515.0	512.0	509.1	512.0	515.0	515.8	518.1	521.1	522.6	527.3	536.4
167.5°	520.2	518.7	517.3	518.7	520.2	520.5	522.4	524.9	526.1	529.1	535.1
170°	525.5	524.0	522.6	524.0	525.5	525.8	525.9	526.1	526.1	529.1	535.1
172.5°	526.1	525.8	525.5	525.8	526.1	526.1	526.1	526.1	526.1	528.5	533.2
175°	529.4	529.4	529.4	529.4	529.4	529.4	528.3	526.8	526.1	527.7	530.7
177.5°	529.4	529.4	529.4	529.4	529.4	529.4	528.5	527.4	526.8	528.0	530.4
180°	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4



TEST NUMBER: P935231

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8	1192.8
2.5°	1151.1	1147.7	1152.2	1139.7	1152.2	1147.7	1151.1	1159.0	1152.2	1156.7	1161.3
5°	1010.0	1004.4	986.3	971.7	986.3	1004.4	1010.0	1033.8	1045.0	1065.3	1092.4
7.5°	902.8	898.3	893.8	884.7	893.8	898.3	902.8	909.6	920.8	938.9	959.3
10°	879.1	880.3	887.0	885.9	887.0	880.3	879.1	876.8	873.4	876.8	889.2
12.5°	940.1	950.2	987.5	985.2	987.5	950.2	940.1	894.9	864.5	858.8	861.0
15°	1010.0	1013.4	1021.3	1022.4	1021.3	1013.4	1010.0	992.0	900.5	861.0	848.7
17.5°	1016.8	1017.9	1023.6	1023.6	1023.6	1017.9	1016.8	1008.9	978.4	925.4	855.4
20°	1011.1	1013.4	1024.7	1026.9	1024.7	1013.4	1011.1	1001.0	984.0	964.9	911.9
22.5°	1008.9	1013.4	1022.4	1021.3	1022.4	1013.4	1008.9	993.1	978.4	964.9	943.5
25°	997.6	997.6	998.7	999.8	998.7	997.6	997.6	985.2	955.9	952.4	940.1
27.5°	973.9	976.2	982.9	981.8	982.9	976.2	973.9	969.3	937.7	934.4	925.4
30°	952.4	950.2	944.6	940.1	944.6	950.2	952.4	945.7	914.1	905.0	907.3
32.5°	916.3	910.7	905.0	901.7	905.0	910.7	916.3	914.1	890.4	878.0	880.3
35°	873.4	874.6	873.4	870.1	873.4	874.6	873.4	875.7	861.0	849.8	848.7
37.5°	843.0	845.2	844.1	839.6	844.1	845.2	843.0	840.7	820.4	817.1	819.3
40°	811.4	812.5	811.4	808.0	811.4	812.5	811.4	806.9	778.7	779.8	787.7
42.5°	780.9	779.8	776.4	774.2	776.4	779.8	780.9	774.2	738.1	734.6	749.3
45°	745.9	747.1	740.3	736.9	740.3	747.1	745.9	741.5	704.2	695.2	705.3
47.5°	711.0	711.0	705.3	701.9	705.3	711.0	711.0	705.3	665.8	656.8	662.5
50°	673.7	672.6	664.7	663.6	664.7	672.6	673.7	670.3	628.6	620.7	620.7
52.5°	630.9	630.9	632.0	634.2	632.0	630.9	630.9	632.0	594.7	586.8	584.6
55°	593.6	594.7	602.6	604.9	602.6	594.7	593.6	593.6	559.7	551.9	547.3
57.5°	555.2	555.2	560.9	560.9	560.9	555.2	555.2	553.0	520.2	513.5	511.2
60°	511.2	513.5	517.9	516.8	517.9	513.5	511.2	509.0	480.7	476.3	468.3
62.5°	464.9	467.2	468.3	466.1	468.3	467.2	464.9	458.2	441.2	437.8	427.7
65°	416.4	418.7	419.8	417.6	419.8	418.7	416.4	413.1	400.6	394.9	386.0
67.5°	366.8	365.7	364.5	369.0	364.5	365.7	366.8	362.2	354.4	349.9	337.4
70°	315.9	315.9	314.8	317.1	314.8	315.9	315.9	312.6	308.1	304.7	293.4
72.5°	261.8	260.7	265.2	261.8	265.2	260.7	261.8	260.7	258.5	255.0	243.8
75°	208.7	211.1	208.7	212.2	208.7	211.1	208.7	209.9	208.7	206.5	198.6
77.5°	159.1	161.3	159.1	159.1	159.1	161.3	159.1	160.2	160.2	160.2	153.5
80°	112.8	111.7	111.7	110.6	111.7	111.7	112.8	112.8	113.9	111.7	109.5
82.5°	72.3	71.1	71.1	73.4	71.1	71.1	72.3	73.4	71.1	71.1	71.1
85°	39.5	40.7	38.4	38.4	38.4	40.7	39.5	37.2	39.5	39.5	38.4
87.5°	14.7	13.6	13.6	13.6	13.6	13.6	14.7	15.8	15.8	15.8	16.9
90°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	18.0	24.0	27.0	23.2
92.5°	67.5	64.8	54.1	43.3	54.1	64.8	67.5	95.7	133.2	152.0	133.5
95°	229.2	221.0	188.5	156.0	188.5	221.0	229.2	300.9	396.6	444.4	375.3
97.5°	529.0	513.5	451.6	389.7	451.6	513.5	529.0	574.3	634.8	665.0	549.9
100°	742.8	724.4	650.7	577.0	650.7	724.4	742.8	739.5	735.1	732.9	605.1
102.5°	925.4	909.6	846.5	783.4	846.5	909.6	925.4	867.7	790.7	752.1	622.5
105°	1138.6	1130.2	1096.2	1062.3	1096.2	1130.2	1138.6	1009.1	836.4	750.0	624.5
107.5°	1249.5	1251.6	1259.8	1268.0	1259.8	1251.6	1249.5	1068.8	827.8	707.3	596.6
110°	1277.9	1286.7	1322.1	1357.5	1322.1	1286.7	1277.9	1075.9	806.5	671.8	572.0



TEST NUMBER: P935231

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1259.8	1273.3	1327.7	1382.0	1327.7	1273.3	1259.8	1053.0	777.3	639.5	550.5
115°	1198.3	1217.1	1292.5	1367.8	1292.5	1217.1	1198.3	999.2	733.6	600.8	525.9
117.5°	1113.4	1134.3	1217.8	1301.3	1217.8	1134.3	1113.4	933.6	694.0	574.1	510.4
120°	1056.2	1076.5	1157.7	1238.8	1157.7	1076.5	1056.2	892.0	673.0	563.5	505.2
122.5°	999.0	1019.0	1099.1	1179.1	1099.1	1019.0	999.0	851.1	653.8	555.3	502.5
125°	923.3	941.8	1015.5	1089.3	1015.5	941.8	923.3	797.7	630.2	546.4	500.2
127.5°	862.6	878.1	940.4	1002.6	940.4	878.1	862.6	754.7	610.9	539.0	498.9
130°	824.2	838.6	896.1	953.5	896.1	838.6	824.2	728.2	600.2	536.1	499.8
132.5°	791.5	804.4	855.8	907.3	855.8	804.4	791.5	705.5	590.9	533.6	500.2
135°	745.3	756.4	800.7	845.2	800.7	756.4	745.3	673.3	577.4	529.4	499.8
137.5°	711.2	720.3	756.7	793.0	756.7	720.3	711.2	650.3	569.2	528.6	502.8
140°	683.9	692.4	726.4	760.3	726.4	692.4	683.9	631.3	561.2	526.1	503.3
142.5°	664.7	672.0	701.2	730.5	701.2	672.0	664.7	618.5	556.9	526.1	505.1
145°	635.9	641.5	663.6	685.7	663.6	641.5	635.9	598.1	547.8	522.6	505.2
147.5°	611.8	616.4	634.7	653.0	634.7	616.4	611.8	582.1	542.5	522.6	508.6
150°	597.9	601.6	616.4	631.3	616.4	601.6	597.9	572.8	539.4	522.6	510.5
152.5°	586.9	589.7	600.9	612.2	600.9	589.7	586.9	565.4	536.9	522.6	511.6
155°	573.7	575.6	583.0	590.5	583.0	575.6	573.7	556.7	534.0	522.6	514.3
157.5°	562.4	563.6	568.9	574.1	568.9	563.6	562.4	549.1	531.4	522.6	516.8
160°	556.7	557.5	560.5	563.5	560.5	557.5	556.7	545.4	530.2	522.6	518.0
162.5°	551.3	552.0	554.9	557.7	554.9	552.0	551.3	541.8	529.0	522.6	519.3
165°	543.2	544.0	547.0	550.0	547.0	544.0	543.2	536.4	527.3	522.6	521.1
167.5°	539.6	540.0	541.2	542.5	541.2	540.0	539.6	535.1	529.1	526.1	524.9
170°	539.6	539.6	539.6	539.6	539.6	539.6	539.6	535.1	529.1	526.1	526.1
172.5°	536.8	536.6	535.5	534.3	535.5	536.6	536.8	533.2	528.5	526.1	526.1
175°	532.9	532.9	532.9	532.9	532.9	532.9	532.9	530.7	527.7	526.1	526.8
177.5°	532.2	531.9	530.7	529.4	530.7	531.9	532.2	530.4	528.0	526.8	527.4
180°	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1192.8	1192.8	1192.8	1192.8	1192.8
2.5°	1178.2	1183.8	1187.2	1191.7	1203.0
5°	1133.0	1154.4	1161.3	1178.2	1198.5
7.5°	1033.8	1099.2	1117.2	1157.9	1189.5
10°	937.7	1003.3	1034.9	1130.8	1178.2
12.5°	889.2	927.7	949.1	1083.4	1162.4
15°	858.8	885.9	901.7	1020.2	1144.3
17.5°	835.1	854.3	865.6	958.1	1119.5
20°	820.4	829.4	839.6	913.0	1091.2
22.5°	810.2	804.6	812.5	881.4	1052.9
25°	803.5	782.0	791.1	856.5	1007.8
27.5°	809.1	761.7	765.1	834.0	960.4
30°	810.2	736.9	738.1	810.2	907.3
32.5°	802.4	711.0	712.1	780.9	847.5
35°	783.1	680.5	679.4	747.1	766.2
37.5°	757.2	647.8	647.8	709.9	677.1
40°	725.7	615.1	618.4	661.3	598.1
42.5°	687.2	580.0	584.6	597.0	539.5
45°	645.5	546.2	549.5	504.4	494.3
47.5°	599.3	511.2	512.3	418.7	479.6
50°	543.9	475.1	470.6	358.9	478.5
52.5°	495.4	435.6	422.0	325.0	434.5
55°	448.0	393.8	364.5	299.0	402.9
57.5°	406.2	339.7	311.5	268.6	396.1
60°	367.9	286.6	265.2	235.8	363.3
62.5°	336.3	247.2	242.7	213.3	329.5
65°	302.4	220.0	218.9	194.1	279.9
67.5°	269.7	202.0	200.9	176.0	213.3
70°	234.7	182.8	180.6	156.9	158.0
72.5°	198.6	161.3	159.1	141.1	130.9
75°	162.5	136.6	135.4	123.0	106.1
77.5°	127.5	108.3	110.6	99.3	77.9
80°	91.4	79.0	81.2	71.1	58.7
82.5°	60.9	51.9	54.2	45.1	39.5
85°	33.8	29.4	30.5	23.7	18.0
87.5°	15.8	13.6	13.6	9.1	5.6
90°	15.6	9.9	9.2	6.4	3.6
92.5°	96.4	68.6	62.5	38.4	14.2
95°	237.2	133.6	122.6	78.3	34.1
97.5°	319.5	146.7	137.0	98.0	58.9
100°	349.5	157.8	148.9	113.5	78.2
102.5°	363.3	168.8	160.5	127.5	94.5
105°	373.4	185.1	178.1	150.2	122.2
107.5°	375.3	209.3	202.8	176.7	150.7
110°	372.4	222.8	216.9	193.4	169.8



TEST NUMBER: P935231

CATALOG NUMBER: SQ4-FA-100U-100D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	372.6	239.1	233.4	211.1	188.7
115°	376.0	263.6	258.4	237.7	217.0
117.5°	383.0	287.4	282.7	263.9	245.1
120°	388.6	301.3	296.8	279.1	261.4
122.5°	396.8	317.7	313.2	295.4	277.5
125°	407.8	338.6	334.5	318.2	302.0
127.5°	418.9	358.8	354.7	338.2	321.8
130°	426.9	372.3	367.9	350.2	332.5
132.5°	433.4	383.3	378.9	361.2	343.5
135°	440.6	396.1	392.1	376.0	359.9
137.5°	451.2	412.5	408.4	392.6	376.6
140°	457.7	423.5	419.8	405.1	390.4
142.5°	463.2	431.7	428.3	414.7	401.1
145°	470.3	444.1	441.1	429.3	417.4
147.5°	480.7	459.7	456.8	445.3	433.8
150°	486.2	467.9	465.2	454.8	444.4
152.5°	489.7	473.2	471.2	463.3	455.4
155°	497.5	485.0	483.5	477.6	471.8
157.5°	505.3	496.7	495.2	489.6	483.9
160°	508.9	502.0	500.9	496.5	492.1
162.5°	512.6	507.7	506.8	503.5	500.2
165°	518.1	515.8	515.0	512.0	509.1
167.5°	522.4	520.5	520.2	518.7	517.3
170°	525.9	525.8	525.5	524.0	522.6
172.5°	526.1	526.1	526.1	525.8	525.5
175°	528.3	529.4	529.4	529.4	529.4
177.5°	528.5	529.4	529.4	529.4	529.4
180°	529.4	529.4	529.4	529.4	529.4



TEST NUMBER: P935231
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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	12.90	13.74	13.88	14.73	16.04	15.70	16.54	16.68	17.53	18.84
	3H	13.38	14.13	14.37	15.13	16.46	17.03	17.79	18.02	18.79	20.12
	4H	13.57	14.28	14.57	15.28	16.62	17.47	18.18	18.47	19.19	20.52
	6H	13.69	14.34	14.70	15.35	16.70	17.75	18.40	18.76	19.41	20.76
	8H	13.69	14.31	14.71	15.34	16.68	17.82	18.44	18.84	19.47	20.81
	12H	13.66	14.25	14.68	15.27	16.64	17.85	18.44	18.87	19.46	20.83
4H	2H	13.93	14.64	14.93	15.64	16.98	16.11	16.82	17.12	17.82	19.16
	3H	14.95	15.54	15.97	16.58	17.93	17.60	18.19	18.62	19.23	20.58
	4H	15.22	15.77	16.25	16.79	18.17	18.12	18.66	19.15	19.69	21.06
	6H	15.35	15.82	16.39	16.86	18.23	18.48	18.95	19.52	19.99	21.36
	8H	15.35	15.79	16.39	16.83	18.22	18.58	19.02	19.62	20.06	21.44
	12H	15.32	15.71	16.38	16.77	18.16	18.63	19.02	19.69	20.08	21.47
8H	4H	15.67	16.11	16.71	17.15	18.53	18.25	18.68	19.28	19.72	21.11
	6H	15.93	16.29	16.99	17.38	18.76	18.67	19.03	19.74	20.12	21.50
	8H	15.97	16.29	17.04	17.36	18.76	18.82	19.14	19.89	20.21	21.61
	12H	15.96	16.24	17.03	17.30	18.74	18.91	19.19	19.99	20.25	21.70
12H	4H	15.68	16.07	16.73	17.13	18.52	18.21	18.60	19.27	19.66	21.05
	6H	15.99	16.31	17.06	17.38	18.78	18.67	18.99	19.74	20.06	21.46
	8H	16.06	16.33	17.13	17.40	18.84	18.83	19.10	19.90	20.17	21.61