

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: P935885

Luminaire Tested: SQ4-FA-150U-050D-B2750-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935885
REPORT IS A COMBINATION OF REPORTS P933770 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-150U-050D-B2750-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

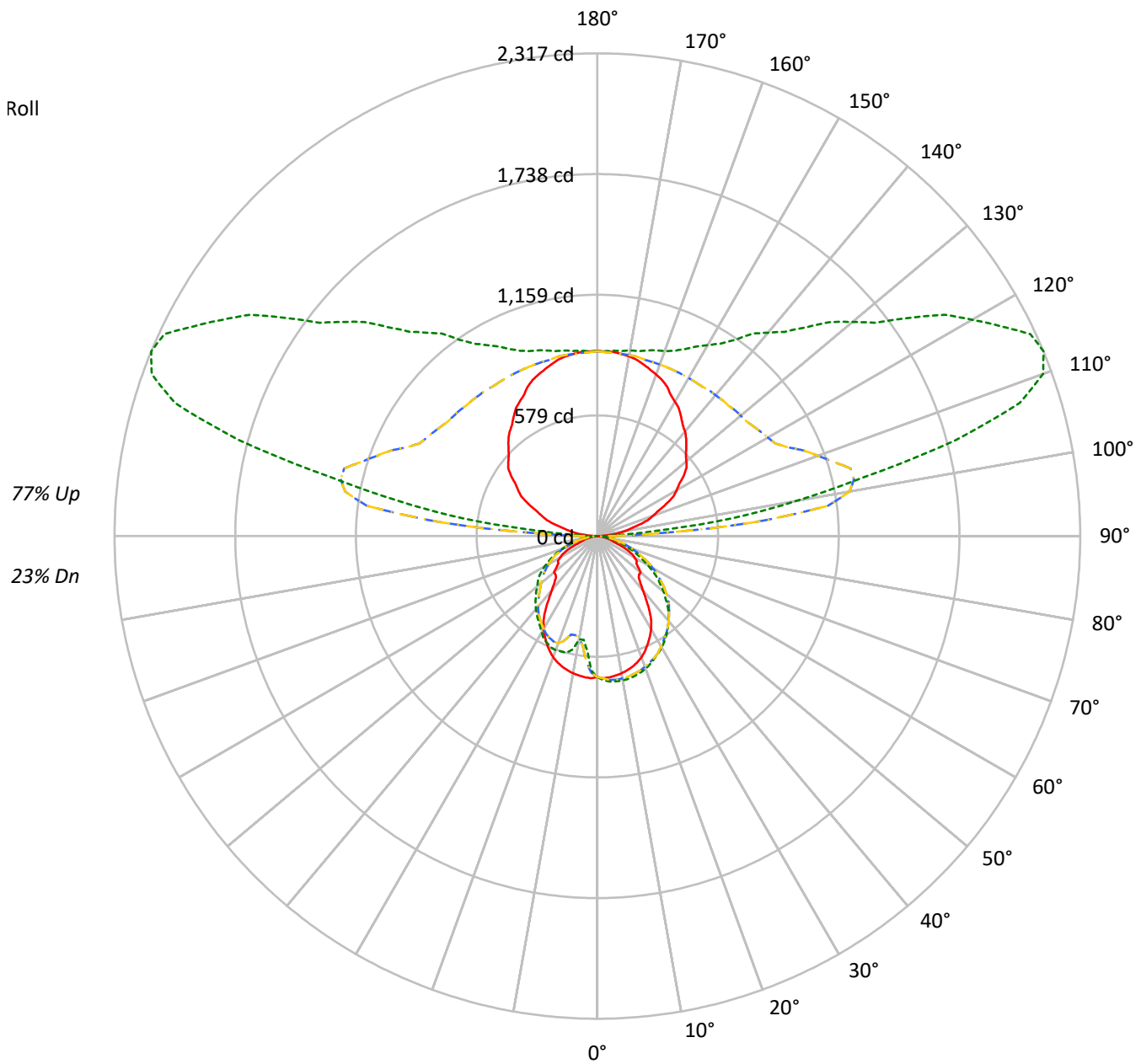
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7512.1 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P935885
CATALOG NUMBER: SQ4-FA-150U-050D-B2750-1D-UNV-STD-W-4-4000K

Luminous Intensity Polar Plot



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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	23
1	92	88	84	81	81	78	75	72	60	58	56	43	42	41	28	27	27	20
2	84	77	71	66	74	68	63	59	52	49	46	38	36	34	25	24	23	17
3	76	67	60	55	67	60	54	49	46	42	39	34	31	29	22	20	19	14
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	19	18	16	12
5	64	53	45	39	56	47	40	36	36	32	28	27	24	21	17	16	14	10
6	59	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12	9
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	14	12	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6282	6282	6282	6282
5°	6322	6342	6322	4986
10°	6273	6247	6273	4466
15°	6197	6112	6197	5103
20°	6060	5950	6060	5113
25°	5788	5717	5788	5005
30°	5439	5523	5439	4768
35°	4842	5277	4842	4506
40°	4027	4989	4027	4308
45°	3591	4650	3591	4081
50°	3807	4246	3807	3853
55°	3571	3811	3571	3721
60°	3670	3237	3670	3409
65°	3309	2676	3309	2990
70°	2277	2133	2277	2508
75°	1974	1577	1974	1888
80°	1558	1043	1558	1134
85°	845	552	845	470

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5515 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.1	0.8
10°-20°	173.5	2.3
20°-30°	268.2	3.6
30°-40°	320.2	4.3
40°-50°	322.1	4.3
50°-60°	280.2	3.7
60°-70°	198.7	2.6
70°-80°	105.1	1.4
80°-90°	29.6	0.4
90°-100°	432.6	5.8
100°-110°	1137.4	15.1
110°-120°	1179.3	15.7
120°-130°	946.0	12.6
130°-140°	742.2	9.9
140°-150°	569.7	7.6
150°-160°	410.3	5.5
160°-170°	251.0	3.3
170°-180°	84.8	1.1
0°-30°	502.8	6.7
0°-40°	823.0	11.0
0°-60°	1425.3	19.0
0°-90°	1758.7	23.4
90°-120°	2749.3	36.6
90°-150°	5007.2	66.7
90°-180°	5753.0	76.6
0°-180°	7512.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	677	677	677	677	677	
5°	680	701	680	551	680	65
15°	649	695	649	580	649	183
25°	572	648	572	568	572	263
35°	435	578	435	494	435	269
45°	280	476	280	418	280	225
55°	229	352	229	343	229	210
65°	159	212	159	237	159	152
75°	60	101	60	120	60	63
85°	10	26	10	22	10	14
90°	6	23	6	23	6	5
95°	57	262	57	262	57	63
105°	205	1781	205	1781	205	217
115°	364	2293	364	2293	364	359
125°	506	1826	506	1826	506	449
135°	603	1417	603	1417	603	467
145°	700	1150	700	1150	700	438
155°	791	990	791	990	791	363
165°	854	922	854	922	854	241
175°	888	894	888	894	888	84
180°	888	888	888	888	888	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	682.7	682.7	686.5	687.9	687.9	686.0	684.1	686.0	691.7	693.6	692.9
5°	680.2	685.3	692.4	693.6	695.0	694.3	692.9	694.3	700.7	701.9	702.6
7.5°	675.1	684.6	693.6	695.5	697.4	695.5	695.0	696.2	702.6	703.8	703.8
10°	668.7	682.1	692.4	693.6	695.5	693.6	693.6	696.2	702.6	703.8	704.5
12.5°	659.7	678.2	687.9	689.1	691.7	691.0	690.5	692.9	699.4	700.7	700.7
15°	649.4	671.2	680.2	681.5	686.0	684.6	684.6	687.2	694.3	696.2	695.5
17.5°	635.4	662.3	672.5	674.4	677.7	677.0	677.7	680.2	686.5	687.9	688.6
20°	619.3	650.1	662.3	664.2	667.4	667.4	667.4	670.6	677.0	679.6	679.6
22.5°	597.5	637.3	650.1	651.4	655.2	655.2	656.5	661.0	666.7	667.4	667.4
25°	571.9	623.1	634.0	637.9	641.8	643.7	645.6	648.2	650.1	649.4	650.1
27.5°	545.0	605.3	619.3	621.9	627.1	629.0	631.5	632.1	632.8	634.7	633.5
30°	514.9	580.3	601.4	603.9	612.3	613.6	611.0	612.3	615.5	616.7	618.1
32.5°	481.0	543.1	582.8	588.6	596.3	592.5	591.8	593.7	598.9	598.9	600.1
35°	434.9	514.3	565.6	570.7	576.4	571.9	574.5	575.1	578.3	580.3	579.6
37.5°	384.3	489.3	547.6	551.4	555.9	550.2	554.0	555.9	558.5	557.2	557.2
40°	339.4	450.3	526.5	529.1	532.9	528.4	532.2	533.6	534.8	533.6	532.9
42.5°	306.2	407.3	504.0	507.3	504.7	507.9	509.2	511.8	509.8	507.3	507.3
45°	280.5	395.8	479.7	483.5	479.7	484.9	486.8	486.8	481.0	479.7	479.0
47.5°	272.2	372.7	455.3	455.3	453.4	459.8	463.1	458.6	452.9	450.9	450.9
50°	271.6	347.1	422.1	419.5	428.5	436.1	433.0	428.5	424.0	417.0	417.0
52.5°	246.6	315.7	379.1	388.8	402.8	407.3	402.2	397.8	390.0	386.9	384.3
55°	228.6	283.1	340.1	359.3	374.1	379.8	370.2	365.7	354.2	352.3	351.0
57.5°	224.8	235.7	304.3	328.5	346.5	345.9	340.1	331.8	322.1	320.2	319.6
60°	206.3	170.4	265.8	294.6	313.1	311.2	306.2	298.4	289.5	288.2	287.0
62.5°	187.0	123.6	222.2	254.9	281.2	280.5	276.1	264.5	258.1	254.9	252.3
65°	158.8	103.7	158.2	212.0	249.8	251.1	241.4	233.1	226.0	222.2	221.6
67.5°	121.1	84.5	107.0	176.8	219.6	218.4	206.3	202.4	193.4	191.5	187.7
70°	89.7	56.3	74.3	143.4	190.2	187.0	177.4	173.0	164.6	160.2	157.6
72.5°	74.3	45.5	54.4	111.4	160.2	156.2	147.9	142.9	135.8	132.0	129.4
75°	60.2	48.0	41.6	82.6	130.0	127.5	119.8	114.6	108.9	103.7	104.4
77.5°	44.2	44.8	33.3	60.8	103.1	99.3	94.8	88.4	85.9	80.7	80.7
80°	33.3	35.2	25.0	41.6	74.3	74.3	70.5	66.0	61.5	58.9	58.9
82.5°	22.4	22.4	18.5	26.3	50.6	48.7	46.1	44.8	42.3	41.0	41.0
85°	10.2	12.8	11.6	16.0	27.5	28.8	28.8	27.5	26.9	25.6	26.3
87.5°	3.2	5.7	7.1	9.0	14.1	14.7	15.4	15.4	15.4	16.0	16.0
90°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2	22.6	22.6
92.5°	23.8	64.3	104.9	115.0	161.6	223.8	254.9	223.4	160.4	113.2	108.7
95°	57.2	131.3	205.4	223.9	397.7	629.3	745.2	665.0	504.5	384.2	370.5
97.5°	98.8	164.3	229.7	246.0	535.7	922.0	1115.1	1064.3	962.9	886.9	860.9
100°	131.0	190.3	249.6	264.4	585.9	1014.5	1228.8	1232.5	1240.0	1245.5	1214.6
102.5°	158.4	213.8	269.1	283.0	609.0	1043.6	1261.0	1325.5	1454.8	1551.7	1525.2
105°	204.9	251.8	298.6	310.4	626.0	1046.9	1257.4	1402.1	1691.8	1909.0	1894.8
107.5°	252.6	296.2	340.0	350.9	629.2	1000.4	1185.9	1387.9	1791.9	2094.9	2098.3
110°	284.7	324.1	363.7	373.5	624.5	959.0	1126.3	1352.2	1803.8	2142.5	2157.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.3	353.9	391.6	400.9	624.7	923.0	1072.2	1303.3	1765.5	2112.2	2134.9
115°	364.0	398.6	433.3	442.0	630.4	881.7	1007.2	1229.8	1675.2	2009.1	2040.7
117.5°	411.0	442.5	474.1	481.9	642.1	855.8	962.5	1163.5	1565.3	1866.7	1901.8
120°	438.3	468.0	497.7	505.1	651.6	847.0	944.7	1128.2	1495.4	1770.9	1804.9
122.5°	465.2	495.1	525.1	532.5	665.3	842.5	931.0	1096.3	1427.0	1675.0	1708.5
125°	506.3	533.6	560.9	567.7	683.8	838.7	916.1	1056.5	1337.4	1548.1	1579.0
127.5°	539.7	567.2	594.7	601.6	702.2	836.5	903.6	1024.2	1265.4	1446.3	1472.3
130°	557.5	587.1	616.7	624.2	715.8	837.8	898.8	1006.2	1220.9	1381.9	1406.0
132.5°	576.0	605.7	635.3	642.7	726.7	838.7	894.6	990.7	1183.0	1327.1	1348.7
135°	603.4	630.4	657.3	664.1	738.6	837.8	887.5	968.0	1128.9	1249.6	1268.2
137.5°	631.4	658.1	684.8	691.5	756.5	843.1	886.3	954.3	1090.4	1192.5	1207.7
140°	654.7	679.3	703.9	710.0	767.4	843.9	882.1	940.9	1058.4	1146.6	1160.8
142.5°	672.5	695.2	718.0	723.7	776.5	846.9	882.1	933.8	1037.0	1114.5	1126.7
145°	699.9	719.8	739.6	744.5	788.4	847.0	876.2	918.4	1002.8	1066.2	1075.4
147.5°	727.2	746.6	765.9	770.8	805.9	852.8	876.2	909.4	975.8	1025.7	1033.3
150°	745.2	762.7	780.0	784.4	815.0	855.8	876.2	904.3	960.3	1002.5	1008.7
152.5°	763.6	776.9	790.1	793.4	821.0	857.8	876.2	900.2	948.1	984.0	988.7
155°	791.0	800.9	810.6	813.1	834.1	862.2	876.2	895.3	933.4	962.0	965.1
157.5°	811.3	820.8	830.3	832.7	847.2	866.6	876.2	891.0	920.6	942.9	945.1
160°	824.9	832.4	839.8	841.6	853.2	868.6	876.2	888.9	914.3	933.3	934.6
162.5°	838.7	844.2	849.8	851.2	859.5	870.7	876.2	886.9	908.4	924.4	925.6
165°	853.6	858.5	863.6	864.8	868.7	873.7	876.2	883.9	899.2	910.7	911.9
167.5°	867.2	869.6	872.0	872.6	875.7	880.0	882.1	887.2	897.2	904.8	905.3
170°	876.2	878.6	881.0	881.6	881.8	882.0	882.1	887.2	897.2	904.8	904.8
172.5°	881.0	881.5	882.0	882.1	882.1	882.1	882.1	886.1	894.1	900.0	899.5
175°	887.5	887.5	887.5	887.5	885.7	883.3	882.1	884.6	889.7	893.5	893.5
177.5°	887.5	887.5	887.5	887.5	886.1	884.3	883.4	885.4	889.3	892.3	891.7
180°	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	694.3	692.4	694.3	692.9	693.6	691.7	686.0	684.1	686.0	687.9	687.9
5°	702.6	701.4	702.6	702.6	701.9	700.7	694.3	692.9	694.3	695.0	693.6
7.5°	705.2	703.3	705.2	703.8	703.8	702.6	696.2	695.0	695.5	697.4	695.5
10°	705.2	703.3	705.2	704.5	703.8	702.6	696.2	693.6	693.6	695.5	693.6
12.5°	701.9	700.7	701.9	700.7	700.7	699.4	692.9	690.5	691.0	691.7	689.1
15°	696.9	695.0	696.9	695.5	696.2	694.3	687.2	684.6	684.6	686.0	681.5
17.5°	689.1	686.5	689.1	688.6	687.9	686.5	680.2	677.7	677.0	677.7	674.4
20°	680.2	678.2	680.2	679.6	679.6	677.0	670.6	667.4	667.4	667.4	664.2
22.5°	666.1	664.2	666.1	667.4	667.4	666.7	661.0	656.5	655.2	655.2	651.4
25°	650.1	648.2	650.1	650.1	649.4	650.1	648.2	645.6	643.7	641.8	637.9
27.5°	634.7	633.5	634.7	633.5	634.7	632.8	632.1	631.5	629.0	627.1	621.9
30°	619.3	618.1	619.3	618.1	616.7	615.5	612.3	611.0	613.6	612.3	603.9
32.5°	600.1	598.9	600.1	600.1	598.9	598.9	593.7	591.8	592.5	596.3	588.6
35°	580.3	578.3	580.3	579.6	580.3	578.3	575.1	574.5	571.9	576.4	570.7
37.5°	557.2	555.3	557.2	557.2	557.2	558.5	555.9	554.0	550.2	555.9	551.4
40°	533.6	531.0	533.6	532.9	533.6	534.8	533.6	532.2	528.4	532.9	529.1
42.5°	506.6	506.0	506.6	507.3	507.3	509.8	511.8	509.2	507.9	504.7	507.3
45°	477.8	476.5	477.8	479.0	479.7	481.0	486.8	486.8	484.9	479.7	483.5
47.5°	447.0	443.9	447.0	450.9	450.9	452.9	458.6	463.1	459.8	453.4	455.3
50°	414.4	415.0	414.4	417.0	417.0	424.0	428.5	433.0	436.1	428.5	419.5
52.5°	382.4	381.7	382.4	384.3	386.9	390.0	397.8	402.2	407.3	402.8	388.8
55°	350.3	351.6	350.3	351.0	352.3	354.2	365.7	370.2	379.8	374.1	359.3
57.5°	318.3	316.4	318.3	319.6	320.2	322.1	331.8	340.1	345.9	346.5	328.5
60°	281.2	278.6	281.2	287.0	288.2	289.5	298.4	306.2	311.2	313.1	294.6
62.5°	248.5	244.0	248.5	252.3	254.9	258.1	264.5	276.1	280.5	281.2	254.9
65°	213.9	212.0	213.9	221.6	222.2	226.0	233.1	241.4	251.1	249.8	212.0
67.5°	182.5	182.5	182.5	187.7	191.5	193.4	202.4	206.3	218.4	219.6	176.8
70°	153.8	153.1	153.8	157.6	160.2	164.6	173.0	177.4	187.0	190.2	143.4
72.5°	126.2	125.5	126.2	129.4	132.0	135.8	142.9	147.9	156.2	160.2	111.4
75°	101.8	100.6	101.8	104.4	103.7	108.9	114.6	119.8	127.5	130.0	82.6
77.5°	78.1	78.1	78.1	80.7	80.7	85.9	88.4	94.8	99.3	103.1	60.8
80°	58.3	57.7	58.3	58.9	58.9	61.5	66.0	70.5	74.3	74.3	41.6
82.5°	41.0	39.7	41.0	41.0	41.0	42.3	44.8	46.1	48.7	50.6	26.3
85°	25.6	25.6	25.6	26.3	25.6	26.9	27.5	28.8	28.8	27.5	16.0
87.5°	16.6	16.0	16.6	16.0	16.0	15.4	15.4	15.4	14.7	14.1	9.0
90°	22.6	22.6	22.6	22.6	22.6	30.2	40.2	45.3	39.0	26.3	16.7
92.5°	90.6	72.7	90.6	108.7	113.2	160.4	223.4	254.9	223.8	161.6	115.0
95°	316.0	261.5	316.0	370.5	384.2	504.5	665.0	745.2	629.3	397.7	223.9
97.5°	757.2	653.4	757.2	860.9	886.9	962.9	1064.3	1115.1	922.0	535.7	246.0
100°	1091.0	967.3	1091.0	1214.6	1245.5	1240.0	1232.5	1228.8	1014.5	585.9	264.4
102.5°	1419.3	1313.4	1419.3	1525.2	1551.7	1454.8	1325.5	1261.0	1043.6	609.0	283.0
105°	1837.9	1781.0	1837.9	1894.8	1909.0	1691.8	1402.1	1257.4	1046.9	626.0	310.4
107.5°	2112.1	2125.8	2112.1	2098.3	2094.9	1791.9	1387.9	1185.9	1000.4	629.2	350.9
110°	2216.7	2276.0	2216.7	2157.3	2142.5	1803.8	1352.2	1126.3	959.0	624.5	373.5



TEST NUMBER: P935885

CATALOG NUMBER: SQ4-FA-150U-050D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2226.0	2317.0	2226.0	2134.9	2112.2	1765.5	1303.3	1072.2	923.0	624.7	400.9
115°	2167.0	2293.2	2167.0	2040.7	2009.1	1675.2	1229.8	1007.2	881.7	630.4	442.0
117.5°	2041.8	2181.8	2041.8	1901.8	1866.7	1565.3	1163.5	962.5	855.8	642.1	481.9
120°	1940.9	2077.0	1940.9	1804.9	1770.9	1495.4	1128.2	944.7	847.0	651.6	505.1
122.5°	1842.8	1976.9	1842.8	1708.5	1675.0	1427.0	1096.3	931.0	842.5	665.3	532.5
125°	1702.6	1826.2	1702.6	1579.0	1548.1	1337.4	1056.5	916.1	838.7	683.8	567.7
127.5°	1576.6	1680.9	1576.6	1472.3	1446.3	1265.4	1024.2	903.6	836.5	702.2	601.6
130°	1502.3	1598.7	1502.3	1406.0	1381.9	1220.9	1006.2	898.8	837.8	715.8	624.2
132.5°	1434.9	1521.2	1434.9	1348.7	1327.1	1183.0	990.7	894.6	838.7	726.7	642.7
135°	1342.6	1417.0	1342.6	1268.2	1249.6	1128.9	968.0	887.5	837.8	738.6	664.1
137.5°	1268.6	1329.5	1268.6	1207.7	1192.5	1090.4	954.3	886.3	843.1	756.5	691.5
140°	1217.7	1274.6	1217.7	1160.8	1146.6	1058.4	940.9	882.1	843.9	767.4	710.0
142.5°	1175.7	1224.6	1175.7	1126.7	1114.5	1037.0	933.8	882.1	846.9	776.5	723.7
145°	1112.6	1149.6	1112.6	1075.4	1066.2	1002.8	918.4	876.2	847.0	788.4	744.5
147.5°	1064.1	1094.8	1064.1	1033.3	1025.7	975.8	909.4	876.2	852.8	805.9	770.8
150°	1033.6	1058.4	1033.6	1008.7	1002.5	960.3	904.3	876.2	855.8	815.0	784.4
152.5°	1007.5	1026.2	1007.5	988.7	984.0	948.1	900.2	876.2	857.8	821.0	793.4
155°	977.5	990.0	977.5	965.1	962.0	933.4	895.3	876.2	862.2	834.1	813.1
157.5°	953.8	962.5	953.8	945.1	942.9	920.6	891.0	876.2	866.6	847.2	832.7
160°	939.6	944.7	939.6	934.6	933.3	914.3	888.9	876.2	868.6	853.2	841.6
162.5°	930.4	935.1	930.4	925.6	924.4	908.4	886.9	876.2	870.7	859.5	851.2
165°	917.0	922.1	917.0	911.9	910.7	899.2	883.9	876.2	873.7	868.7	864.8
167.5°	907.4	909.5	907.4	905.3	904.8	897.2	887.2	882.1	880.0	875.7	872.6
170°	904.8	904.8	904.8	904.8	904.8	897.2	887.2	882.1	882.0	881.8	881.6
172.5°	897.7	895.9	897.7	899.5	900.0	894.1	886.1	882.1	882.1	882.1	882.1
175°	893.5	893.5	893.5	893.5	893.5	889.7	884.6	882.1	883.3	885.7	887.5
177.5°	889.6	887.5	889.6	891.7	892.3	889.3	885.4	883.4	884.3	886.1	887.5
180°	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5



TEST NUMBER: P935885

CATALOG NUMBER: SQ4-FA-150U-050D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	686.5	682.7	682.7	676.3	673.8	671.8	668.7	659.0	656.5	653.9	657.8
5°	692.4	685.3	680.2	668.7	659.0	655.2	643.0	620.0	604.6	593.1	586.7
7.5°	693.6	684.6	675.1	657.1	634.0	623.8	586.7	544.4	532.9	522.7	516.2
10°	692.4	682.1	668.7	641.8	587.3	569.4	532.2	504.7	497.7	495.7	497.7
12.5°	687.9	678.2	659.7	614.8	538.6	526.5	504.7	488.7	487.4	490.6	507.9
15°	680.2	671.2	649.4	579.0	511.8	502.8	487.4	481.6	488.7	511.1	563.0
17.5°	672.5	662.3	635.4	543.8	491.3	484.9	474.0	485.5	525.2	555.3	572.6
20°	662.3	650.1	619.3	518.2	476.5	470.7	465.7	517.5	547.6	558.5	568.1
22.5°	650.1	637.3	597.5	500.2	461.2	456.7	459.8	535.5	547.6	555.3	563.6
25°	634.0	623.1	571.9	486.1	448.9	443.9	456.0	533.6	540.5	542.4	559.2
27.5°	619.3	605.3	545.0	473.3	434.2	432.3	459.3	525.2	530.3	532.2	550.2
30°	601.4	580.3	514.9	459.8	418.9	418.2	459.8	514.9	513.7	518.8	536.7
32.5°	582.8	543.1	481.0	443.2	404.2	403.5	455.3	499.6	498.3	505.3	518.8
35°	565.6	514.3	434.9	424.0	385.5	386.2	444.5	481.6	482.3	488.7	497.0
37.5°	547.6	489.3	384.3	402.8	367.7	367.7	429.8	465.0	463.7	465.7	477.1
40°	526.5	450.3	339.4	375.3	351.0	349.1	411.8	447.0	442.5	442.0	457.9
42.5°	504.0	407.3	306.2	338.8	331.8	329.2	390.0	425.3	417.0	418.9	439.4
45°	479.7	395.8	280.5	286.3	311.9	310.0	366.3	400.3	394.5	399.7	420.8
47.5°	455.3	372.7	272.2	237.6	290.8	290.1	340.1	376.0	372.7	377.9	400.3
50°	422.1	347.1	271.6	203.7	267.1	269.6	308.8	352.3	352.3	356.8	380.5
52.5°	379.1	315.7	246.6	184.4	239.5	247.2	281.2	331.8	333.0	337.5	358.7
55°	340.1	283.1	228.6	169.7	206.9	223.6	254.2	310.7	313.1	317.6	336.9
57.5°	304.3	235.7	224.8	152.4	176.8	192.8	230.5	290.1	291.4	295.3	313.8
60°	265.8	170.4	206.3	133.9	150.5	162.6	208.8	265.8	270.3	272.8	288.9
62.5°	222.2	123.6	187.0	121.1	137.7	140.3	190.9	242.8	248.5	250.4	260.0
65°	158.2	103.7	158.8	110.2	124.2	124.9	171.6	219.1	224.1	227.4	234.5
67.5°	107.0	84.5	121.1	99.9	114.0	114.6	153.1	191.5	198.5	201.1	205.6
70°	74.3	56.3	89.7	89.0	102.5	103.7	133.2	166.6	173.0	174.9	177.4
72.5°	54.4	45.5	74.3	80.0	90.3	91.6	112.7	138.4	144.8	146.7	147.9
75°	41.6	48.0	60.2	69.8	76.9	77.5	92.3	112.7	117.2	118.5	119.1
77.5°	33.3	44.8	44.2	56.3	62.7	61.5	72.4	87.1	90.9	90.9	90.9
80°	25.0	35.2	33.3	40.4	46.1	44.8	51.9	62.2	63.4	64.7	64.1
82.5°	18.5	22.4	22.4	25.6	30.8	29.5	34.6	40.4	40.4	40.4	41.6
85°	11.6	12.8	10.2	13.5	17.3	16.6	19.2	21.8	22.4	22.4	21.1
87.5°	7.1	5.7	3.2	5.2	7.6	7.6	9.0	9.6	9.0	9.0	9.0
90°	15.5	10.7	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2
92.5°	104.9	64.3	23.8	64.3	104.9	115.0	161.6	223.8	254.9	223.4	160.4
95°	205.4	131.3	57.2	131.3	205.4	223.9	397.7	629.3	745.2	665.0	504.5
97.5°	229.7	164.3	98.8	164.3	229.7	246.0	535.7	922.0	1115.1	1064.3	962.9
100°	249.6	190.3	131.0	190.3	249.6	264.4	585.9	1014.5	1228.8	1232.5	1240.0
102.5°	269.1	213.8	158.4	213.8	269.1	283.0	609.0	1043.6	1261.0	1325.5	1454.8
105°	298.6	251.8	204.9	251.8	298.6	310.4	626.0	1046.9	1257.4	1402.1	1691.8
107.5°	340.0	296.2	252.6	296.2	340.0	350.9	629.2	1000.4	1185.9	1387.9	1791.9
110°	363.7	324.1	284.7	324.1	363.7	373.5	624.5	959.0	1126.3	1352.2	1803.8



TEST NUMBER: P935885

CATALOG NUMBER: SQ4-FA-150U-050D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	391.6	353.9	316.3	353.9	391.6	400.9	624.7	923.0	1072.2	1303.3	1765.5
115°	433.3	398.6	364.0	398.6	433.3	442.0	630.4	881.7	1007.2	1229.8	1675.2
117.5°	474.1	442.5	411.0	442.5	474.1	481.9	642.1	855.8	962.5	1163.5	1565.3
120°	497.7	468.0	438.3	468.0	497.7	505.1	651.6	847.0	944.7	1128.2	1495.4
122.5°	525.1	495.1	465.2	495.1	525.1	532.5	665.3	842.5	931.0	1096.3	1427.0
125°	560.9	533.6	506.3	533.6	560.9	567.7	683.8	838.7	916.1	1056.5	1337.4
127.5°	594.7	567.2	539.7	567.2	594.7	601.6	702.2	836.5	903.6	1024.2	1265.4
130°	616.7	587.1	557.5	587.1	616.7	624.2	715.8	837.8	898.8	1006.2	1220.9
132.5°	635.3	605.7	576.0	605.7	635.3	642.7	726.7	838.7	894.6	990.7	1183.0
135°	657.3	630.4	603.4	630.4	657.3	664.1	738.6	837.8	887.5	968.0	1128.9
137.5°	684.8	658.1	631.4	658.1	684.8	691.5	756.5	843.1	886.3	954.3	1090.4
140°	703.9	679.3	654.7	679.3	703.9	710.0	767.4	843.9	882.1	940.9	1058.4
142.5°	718.0	695.2	672.5	695.2	718.0	723.7	776.5	846.9	882.1	933.8	1037.0
145°	739.6	719.8	699.9	719.8	739.6	744.5	788.4	847.0	876.2	918.4	1002.8
147.5°	765.9	746.6	727.2	746.6	765.9	770.8	805.9	852.8	876.2	909.4	975.8
150°	780.0	762.7	745.2	762.7	780.0	784.4	815.0	855.8	876.2	904.3	960.3
152.5°	790.1	776.9	763.6	776.9	790.1	793.4	821.0	857.8	876.2	900.2	948.1
155°	810.6	800.9	791.0	800.9	810.6	813.1	834.1	862.2	876.2	895.3	933.4
157.5°	830.3	820.8	811.3	820.8	830.3	832.7	847.2	866.6	876.2	891.0	920.6
160°	839.8	832.4	824.9	832.4	839.8	841.6	853.2	868.6	876.2	888.9	914.3
162.5°	849.8	844.2	838.7	844.2	849.8	851.2	859.5	870.7	876.2	886.9	908.4
165°	863.6	858.5	853.6	858.5	863.6	864.8	868.7	873.7	876.2	883.9	899.2
167.5°	872.0	869.6	867.2	869.6	872.0	872.6	875.7	880.0	882.1	887.2	897.2
170°	881.0	878.6	876.2	878.6	881.0	881.6	881.8	882.0	882.1	887.2	897.2
172.5°	882.0	881.5	881.0	881.5	882.0	882.1	882.1	882.1	882.1	886.1	894.1
175°	887.5	887.5	887.5	887.5	887.5	887.5	885.7	883.3	882.1	884.6	889.7
177.5°	887.5	887.5	887.5	887.5	887.5	887.5	886.1	884.3	883.4	885.4	889.3
180°	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5



TEST NUMBER: P935885

CATALOG NUMBER: SQ4-FA-150U-050D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0	677.0
2.5°	653.3	651.4	653.9	646.9	653.9	651.4	653.3	657.8	653.9	656.5	659.0
5°	573.2	570.0	559.8	551.4	559.8	570.0	573.2	586.7	593.1	604.6	620.0
7.5°	512.4	509.8	507.3	502.1	507.3	509.8	512.4	516.2	522.7	532.9	544.4
10°	498.9	499.6	503.4	502.8	503.4	499.6	498.9	497.7	495.7	497.7	504.7
12.5°	533.6	539.3	560.4	559.2	560.4	539.3	533.6	507.9	490.6	487.4	488.7
15°	573.2	575.1	579.6	580.3	579.6	575.1	573.2	563.0	511.1	488.7	481.6
17.5°	577.1	577.7	580.9	580.9	580.9	577.7	577.1	572.6	555.3	525.2	485.5
20°	573.9	575.1	581.6	582.8	581.6	575.1	573.9	568.1	558.5	547.6	517.5
22.5°	572.6	575.1	580.3	579.6	580.3	575.1	572.6	563.6	555.3	547.6	535.5
25°	566.2	566.2	566.8	567.5	566.8	566.2	566.2	559.2	542.4	540.5	533.6
27.5°	552.8	554.0	557.8	557.2	557.8	554.0	552.8	550.2	532.2	530.3	525.2
30°	540.5	539.3	536.0	533.6	536.0	539.3	540.5	536.7	518.8	513.7	514.9
32.5°	520.1	516.8	513.7	511.8	513.7	516.8	520.1	518.8	505.3	498.3	499.6
35°	495.7	496.4	495.7	493.8	495.7	496.4	495.7	497.0	488.7	482.3	481.6
37.5°	478.5	479.7	479.0	476.5	479.0	479.7	478.5	477.1	465.7	463.7	465.0
40°	460.5	461.2	460.5	458.6	460.5	461.2	460.5	457.9	442.0	442.5	447.0
42.5°	443.2	442.5	440.6	439.4	440.6	442.5	443.2	439.4	418.9	417.0	425.3
45°	423.4	424.0	420.1	418.2	420.1	424.0	423.4	420.8	399.7	394.5	400.3
47.5°	403.5	403.5	400.3	398.3	400.3	403.5	403.5	400.3	377.9	372.7	376.0
50°	382.4	381.7	377.2	376.6	377.2	381.7	382.4	380.5	356.8	352.3	352.3
52.5°	358.0	358.0	358.7	359.9	358.7	358.0	358.0	358.7	337.5	333.0	331.8
55°	336.9	337.5	342.0	343.3	342.0	337.5	336.9	336.9	317.6	313.1	310.7
57.5°	315.2	315.2	318.3	318.3	318.3	315.2	315.2	313.8	295.3	291.4	290.1
60°	290.1	291.4	293.9	293.4	293.9	291.4	290.1	288.9	272.8	270.3	265.8
62.5°	263.9	265.2	265.8	264.5	265.8	265.2	263.9	260.0	250.4	248.5	242.8
65°	236.4	237.6	238.3	236.9	238.3	237.6	236.4	234.5	227.4	224.1	219.1
67.5°	208.2	207.5	206.9	209.4	206.9	207.5	208.2	205.6	201.1	198.5	191.5
70°	179.3	179.3	178.7	180.0	178.7	179.3	179.3	177.4	174.9	173.0	166.6
72.5°	148.6	147.9	150.5	148.6	150.5	147.9	148.6	147.9	146.7	144.8	138.4
75°	118.5	119.8	118.5	120.4	118.5	119.8	118.5	119.1	118.5	117.2	112.7
77.5°	90.3	91.6	90.3	90.3	90.3	91.6	90.3	90.9	90.9	90.9	87.1
80°	64.1	63.4	63.4	62.7	63.4	63.4	64.1	64.1	64.7	63.4	62.2
82.5°	41.0	40.4	40.4	41.6	40.4	40.4	41.0	41.6	40.4	40.4	40.4
85°	22.4	23.0	21.8	21.8	21.8	23.0	22.4	21.1	22.4	22.4	21.8
87.5°	8.3	7.6	7.6	7.6	7.6	7.6	8.3	9.0	9.0	9.0	9.6
90°	22.6	22.6	22.6	22.6	22.6	22.6	22.6	30.2	40.2	45.3	39.0
92.5°	113.2	108.7	90.6	72.7	90.6	108.7	113.2	160.4	223.4	254.9	223.8
95°	384.2	370.5	316.0	261.5	316.0	370.5	384.2	504.5	665.0	745.2	629.3
97.5°	886.9	860.9	757.2	653.4	757.2	860.9	886.9	962.9	1064.3	1115.1	922.0
100°	1245.5	1214.6	1091.0	967.3	1091.0	1214.6	1245.5	1240.0	1232.5	1228.8	1014.5
102.5°	1551.7	1525.2	1419.3	1313.4	1419.3	1525.2	1551.7	1454.8	1325.5	1261.0	1043.6
105°	1909.0	1894.8	1837.9	1781.0	1837.9	1894.8	1909.0	1691.8	1402.1	1257.4	1046.9
107.5°	2094.9	2098.3	2112.1	2125.8	2112.1	2098.3	2094.9	1791.9	1387.9	1185.9	1000.4
110°	2142.5	2157.3	2216.7	2276.0	2216.7	2157.3	2142.5	1803.8	1352.2	1126.3	959.0



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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	2112.2	2134.9	2226.0	2317.0	2226.0	2134.9	2112.2	1765.5	1303.3	1072.2	923.0
115°	2009.1	2040.7	2167.0	2293.2	2167.0	2040.7	2009.1	1675.2	1229.8	1007.2	881.7
117.5°	1866.7	1901.8	2041.8	2181.8	2041.8	1901.8	1866.7	1565.3	1163.5	962.5	855.8
120°	1770.9	1804.9	1940.9	2077.0	1940.9	1804.9	1770.9	1495.4	1128.2	944.7	847.0
122.5°	1675.0	1708.5	1842.8	1976.9	1842.8	1708.5	1675.0	1427.0	1096.3	931.0	842.5
125°	1548.1	1579.0	1702.6	1826.2	1702.6	1579.0	1548.1	1337.4	1056.5	916.1	838.7
127.5°	1446.3	1472.3	1576.6	1680.9	1576.6	1472.3	1446.3	1265.4	1024.2	903.6	836.5
130°	1381.9	1406.0	1502.3	1598.7	1502.3	1406.0	1381.9	1220.9	1006.2	898.8	837.8
132.5°	1327.1	1348.7	1434.9	1521.2	1434.9	1348.7	1327.1	1183.0	990.7	894.6	838.7
135°	1249.6	1268.2	1342.6	1417.0	1342.6	1268.2	1249.6	1128.9	968.0	887.5	837.8
137.5°	1192.5	1207.7	1268.6	1329.5	1268.6	1207.7	1192.5	1090.4	954.3	886.3	843.1
140°	1146.6	1160.8	1217.7	1274.6	1217.7	1160.8	1146.6	1058.4	940.9	882.1	843.9
142.5°	1114.5	1126.7	1175.7	1224.6	1175.7	1126.7	1114.5	1037.0	933.8	882.1	846.9
145°	1066.2	1075.4	1112.6	1149.6	1112.6	1075.4	1066.2	1002.8	918.4	876.2	847.0
147.5°	1025.7	1033.3	1064.1	1094.8	1064.1	1033.3	1025.7	975.8	909.4	876.2	852.8
150°	1002.5	1008.7	1033.6	1058.4	1033.6	1008.7	1002.5	960.3	904.3	876.2	855.8
152.5°	984.0	988.7	1007.5	1026.2	1007.5	988.7	984.0	948.1	900.2	876.2	857.8
155°	962.0	965.1	977.5	990.0	977.5	965.1	962.0	933.4	895.3	876.2	862.2
157.5°	942.9	945.1	953.8	962.5	953.8	945.1	942.9	920.6	891.0	876.2	866.6
160°	933.3	934.6	939.6	944.7	939.6	934.6	933.3	914.3	888.9	876.2	868.6
162.5°	924.4	925.6	930.4	935.1	930.4	925.6	924.4	908.4	886.9	876.2	870.7
165°	910.7	911.9	917.0	922.1	917.0	911.9	910.7	899.2	883.9	876.2	873.7
167.5°	904.8	905.3	907.4	909.5	907.4	905.3	904.8	897.2	887.2	882.1	880.0
170°	904.8	904.8	904.8	904.8	904.8	904.8	904.8	897.2	887.2	882.1	882.0
172.5°	900.0	899.5	897.7	895.9	897.7	899.5	900.0	894.1	886.1	882.1	882.1
175°	893.5	893.5	893.5	893.5	893.5	893.5	893.5	889.7	884.6	882.1	883.3
177.5°	892.3	891.7	889.6	887.5	889.6	891.7	892.3	889.3	885.4	883.4	884.3
180°	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5



TEST NUMBER: P935885

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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	677.0	677.0	677.0	677.0	677.0
2.5°	668.7	671.8	673.8	676.3	682.7
5°	643.0	655.2	659.0	668.7	680.2
7.5°	586.7	623.8	634.0	657.1	675.1
10°	532.2	569.4	587.3	641.8	668.7
12.5°	504.7	526.5	538.6	614.8	659.7
15°	487.4	502.8	511.8	579.0	649.4
17.5°	474.0	484.9	491.3	543.8	635.4
20°	465.7	470.7	476.5	518.2	619.3
22.5°	459.8	456.7	461.2	500.2	597.5
25°	456.0	443.9	448.9	486.1	571.9
27.5°	459.3	432.3	434.2	473.3	545.0
30°	459.8	418.2	418.9	459.8	514.9
32.5°	455.3	403.5	404.2	443.2	481.0
35°	444.5	386.2	385.5	424.0	434.9
37.5°	429.8	367.7	367.7	402.8	384.3
40°	411.8	349.1	351.0	375.3	339.4
42.5°	390.0	329.2	331.8	338.8	306.2
45°	366.3	310.0	311.9	286.3	280.5
47.5°	340.1	290.1	290.8	237.6	272.2
50°	308.8	269.6	267.1	203.7	271.6
52.5°	281.2	247.2	239.5	184.4	246.6
55°	254.2	223.6	206.9	169.7	228.6
57.5°	230.5	192.8	176.8	152.4	224.8
60°	208.8	162.6	150.5	133.9	206.3
62.5°	190.9	140.3	137.7	121.1	187.0
65°	171.6	124.9	124.2	110.2	158.8
67.5°	153.1	114.6	114.0	99.9	121.1
70°	133.2	103.7	102.5	89.0	89.7
72.5°	112.7	91.6	90.3	80.0	74.3
75°	92.3	77.5	76.9	69.8	60.2
77.5°	72.4	61.5	62.7	56.3	44.2
80°	51.9	44.8	46.1	40.4	33.3
82.5°	34.6	29.5	30.8	25.6	22.4
85°	19.2	16.6	17.3	13.5	10.2
87.5°	9.0	7.6	7.6	5.2	3.2
90°	26.3	16.7	15.5	10.7	5.9
92.5°	161.6	115.0	104.9	64.3	23.8
95°	397.7	223.9	205.4	131.3	57.2
97.5°	535.7	246.0	229.7	164.3	98.8
100°	585.9	264.4	249.6	190.3	131.0
102.5°	609.0	283.0	269.1	213.8	158.4
105°	626.0	310.4	298.6	251.8	204.9
107.5°	629.2	350.9	340.0	296.2	252.6
110°	624.5	373.5	363.7	324.1	284.7



TEST NUMBER: P935885

CATALOG NUMBER: SQ4-FA-150U-050D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	624.7	400.9	391.6	353.9	316.3
115°	630.4	442.0	433.3	398.6	364.0
117.5°	642.1	481.9	474.1	442.5	411.0
120°	651.6	505.1	497.7	468.0	438.3
122.5°	665.3	532.5	525.1	495.1	465.2
125°	683.8	567.7	560.9	533.6	506.3
127.5°	702.2	601.6	594.7	567.2	539.7
130°	715.8	624.2	616.7	587.1	557.5
132.5°	726.7	642.7	635.3	605.7	576.0
135°	738.6	664.1	657.3	630.4	603.4
137.5°	756.5	691.5	684.8	658.1	631.4
140°	767.4	710.0	703.9	679.3	654.7
142.5°	776.5	723.7	718.0	695.2	672.5
145°	788.4	744.5	739.6	719.8	699.9
147.5°	805.9	770.8	765.9	746.6	727.2
150°	815.0	784.4	780.0	762.7	745.2
152.5°	821.0	793.4	790.1	776.9	763.6
155°	834.1	813.1	810.6	800.9	791.0
157.5°	847.2	832.7	830.3	820.8	811.3
160°	853.2	841.6	839.8	832.4	824.9
162.5°	859.5	851.2	849.8	844.2	838.7
165°	868.7	864.8	863.6	858.5	853.6
167.5°	875.7	872.6	872.0	869.6	867.2
170°	881.8	881.6	881.0	878.6	876.2
172.5°	882.1	882.1	882.0	881.5	881.0
175°	885.7	887.5	887.5	887.5	887.5
177.5°	886.1	887.5	887.5	887.5	887.5
180°	887.5	887.5	887.5	887.5	887.5



TEST NUMBER: P935885
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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	7.97	8.63	9.13	9.78	11.38	10.77	11.43	11.92	12.57	14.18
	3H	8.43	9.03	9.59	10.18	11.80	12.09	12.68	13.25	13.83	15.45
	4H	8.61	9.18	9.78	10.33	11.95	12.51	13.08	13.69	14.23	15.86
	6H	8.72	9.24	9.90	10.39	12.03	12.78	13.30	13.96	14.45	16.09
	8H	8.72	9.21	9.90	10.38	12.01	12.85	13.34	14.03	14.51	16.14
	12H	8.68	9.15	9.87	10.31	11.96	12.87	13.34	14.06	14.50	16.15
4H	2H	8.97	9.53	10.15	10.69	12.31	11.15	11.72	12.33	12.87	14.49
	3H	9.98	10.45	11.16	11.62	13.26	12.63	13.10	13.81	14.28	15.91
	4H	10.24	10.68	11.43	11.84	13.50	13.14	13.58	14.33	14.74	16.40
	6H	10.36	10.73	11.55	11.92	13.56	13.49	13.86	14.68	15.05	16.69
	8H	10.36	10.71	11.55	11.88	13.55	13.59	13.93	14.77	15.11	16.77
	12H	10.32	10.63	11.52	11.82	13.49	13.63	13.94	14.83	15.13	16.80
8H	4H	10.68	11.02	11.87	12.20	13.86	13.25	13.60	14.44	14.78	16.44
	6H	10.93	11.22	12.14	12.44	14.10	13.67	13.96	14.88	15.18	16.84
	8H	10.97	11.22	12.18	12.42	14.10	13.82	14.06	15.03	15.26	16.94
	12H	10.95	11.16	12.16	12.36	14.07	13.90	14.12	15.12	15.31	17.02
12H	4H	10.67	10.99	11.88	12.18	13.84	13.21	13.52	14.41	14.71	16.38
	6H	10.99	11.24	12.20	12.43	14.11	13.67	13.92	14.88	15.11	16.79
	8H	11.04	11.26	12.26	12.46	14.17	13.81	14.03	15.03	15.23	16.94