

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: P935833

Luminaire Tested: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

**Test Information**

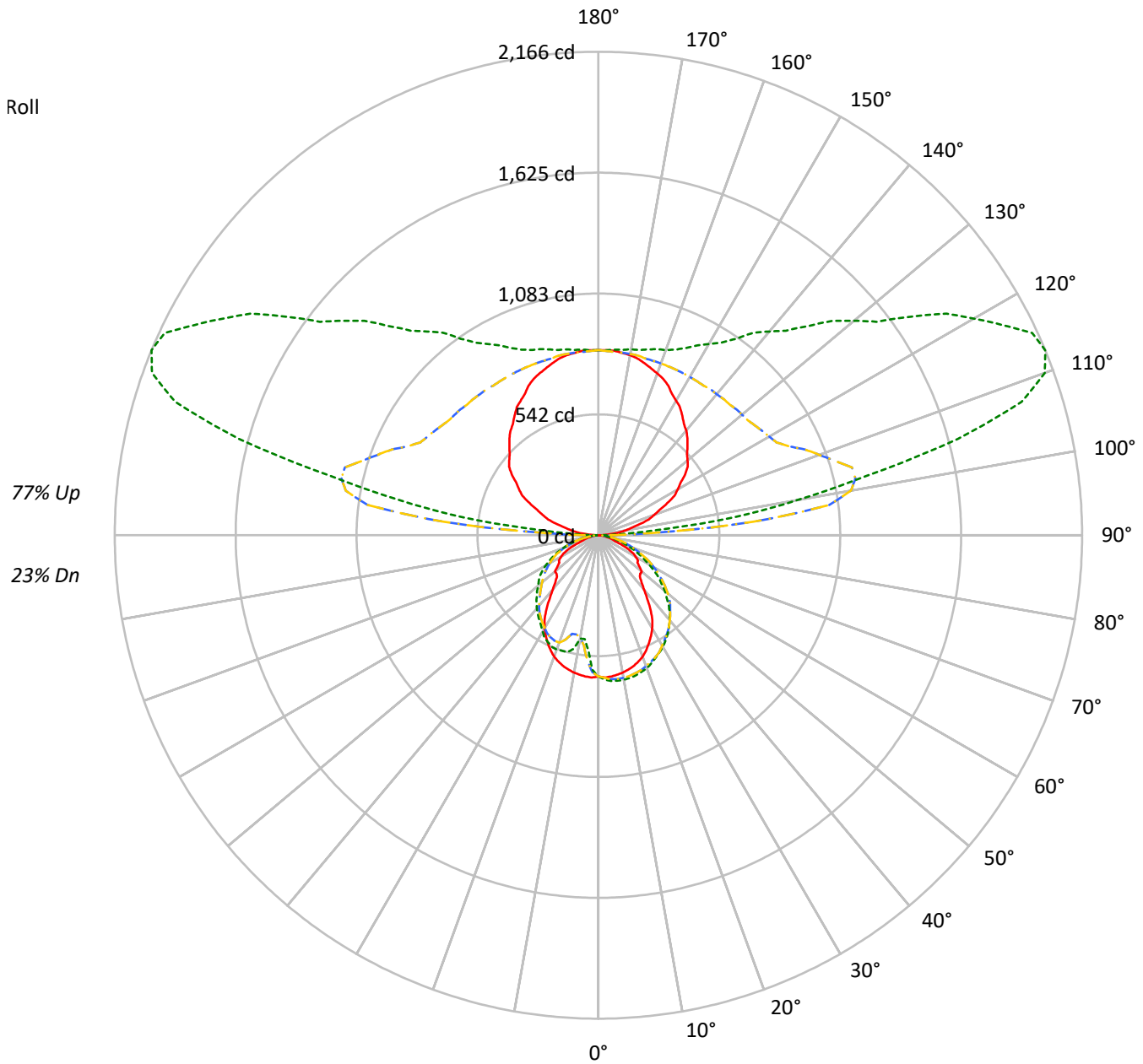
Test Method: LM-79-2019  
Report Number: P935833  
REPORT IS A COMBINATION OF REPORTS P933770 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7021.4 lumens  
Efficiency: N/A  
Efficacy: 126.3 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: P935833  
CATALOG NUMBER: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-3500K

### 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°	5872	5872	5872	5872
5°	5908	5927	5908	4660
10°	5863	5838	5863	4175
15°	5792	5713	5792	4770
20°	5665	5562	5665	4780
25°	5410	5343	5410	4678
30°	5084	5162	5084	4456
35°	4526	4933	4526	4212
40°	3763	4663	3763	4027
45°	3357	4346	3357	3814
50°	3559	3969	3559	3601
55°	3338	3563	3338	3478
60°	3430	3026	3430	3186
65°	3093	2502	3093	2796
70°	2127	1994	2127	2345
75°	1843	1474	1843	1765
80°	1460	975	1460	1059
85°	795	515	795	440

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 5155 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.1	0.8
10°-20°	162.2	2.3
20°-30°	250.7	3.6
30°-40°	299.3	4.3
40°-50°	301.0	4.3
50°-60°	261.9	3.7
60°-70°	185.7	2.6
70°-80°	98.3	1.4
80°-90°	27.6	0.4
90°-100°	404.4	5.8
100°-110°	1063.1	15.1
110°-120°	1102.3	15.7
120°-130°	884.2	12.6
130°-140°	693.8	9.9
140°-150°	532.5	7.6
150°-160°	383.5	5.5
160°-170°	234.6	3.3
170°-180°	79.3	1.1
<b>0°-30°</b>	<b>470.0</b>	<b>6.7</b>
<b>0°-40°</b>	<b>769.3</b>	<b>11.0</b>
<b>0°-60°</b>	<b>1332.2</b>	<b>19.0</b>
<b>0°-90°</b>	<b>1643.8</b>	<b>23.4</b>
<b>90°-120°</b>	<b>2569.7</b>	<b>36.6</b>
<b>90°-150°</b>	<b>4680.2</b>	<b>66.7</b>
<b>90°-180°</b>	<b>5378.0</b>	<b>76.6</b>
<b>0°-180°</b>	<b>7021.4</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	633	633	633	633	633	
5°	636	656	636	515	636	60
15°	607	650	607	542	607	171
25°	535	606	535	530	535	245
35°	406	541	406	462	406	251
45°	262	445	262	391	262	210
55°	214	329	214	321	214	196
65°	148	198	148	222	148	142
75°	56	94	56	113	56	59
85°	10	24	10	20	10	13
90°	6	21	6	21	6	5
95°	54	244	54	244	54	59
105°	192	1665	192	1665	192	203
115°	340	2143	340	2143	340	336
125°	473	1707	473	1707	473	420
135°	564	1324	564	1324	564	436
145°	654	1074	654	1074	654	410
155°	739	925	739	925	739	340
165°	798	862	798	862	798	225
175°	830	835	830	835	830	79
180°	830	830	830	830	830	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8
2.5°	638.1	638.1	641.7	643.0	643.0	641.2	639.4	641.2	646.5	648.3	647.7
5°	635.7	640.5	647.1	648.3	649.6	648.9	647.7	648.9	654.9	656.1	656.7
7.5°	631.0	639.9	648.3	650.1	651.9	650.1	649.6	650.7	656.7	657.9	657.9
10°	625.0	637.5	647.1	648.3	650.1	648.3	648.3	650.7	656.7	657.9	658.5
12.5°	616.6	633.9	643.0	644.1	646.5	645.9	645.4	647.7	653.8	654.9	654.9
15°	607.0	627.3	635.7	637.0	641.2	639.9	639.9	642.3	648.9	650.7	650.1
17.5°	593.9	619.0	628.6	630.4	633.4	632.8	633.4	635.7	641.7	643.0	643.6
20°	578.9	607.6	619.0	620.8	623.8	623.8	623.8	626.8	632.8	635.2	635.2
22.5°	558.5	595.6	607.6	608.9	612.4	612.4	613.6	617.8	623.1	623.8	623.8
25°	534.6	582.4	592.6	596.3	599.8	601.6	603.4	605.8	607.6	607.0	607.6
27.5°	509.4	565.7	578.9	581.3	586.1	587.9	590.3	590.8	591.5	593.2	592.1
30°	481.3	542.4	562.1	564.5	572.3	573.5	571.1	572.3	575.3	576.5	577.7
32.5°	449.6	507.6	544.8	550.1	557.4	553.8	553.2	554.9	559.8	559.8	560.9
35°	406.5	480.7	528.6	533.4	538.8	534.6	537.0	537.5	540.6	542.4	541.7
37.5°	359.2	457.4	511.8	515.4	519.6	514.2	517.8	519.6	522.0	520.8	520.8
40°	317.2	420.9	492.1	494.5	498.1	493.9	497.5	498.7	499.9	498.7	498.1
42.5°	286.2	380.7	471.1	474.2	471.7	474.7	475.9	478.4	476.5	474.2	474.2
45°	262.2	370.0	448.4	451.9	448.4	453.2	455.0	455.0	449.6	448.4	447.7
47.5°	254.4	348.4	425.6	425.6	423.8	429.8	432.8	428.6	423.3	421.4	421.4
50°	253.9	324.5	394.5	392.1	400.5	407.7	404.7	400.5	396.3	389.7	389.7
52.5°	230.5	295.1	354.4	363.4	376.5	380.7	376.0	371.8	364.5	361.6	359.2
55°	213.7	264.6	317.9	335.8	349.6	355.0	346.0	341.8	331.1	329.3	328.0
57.5°	210.1	220.3	284.4	307.1	323.8	323.3	317.9	310.1	301.1	299.3	298.8
60°	192.8	159.2	248.4	275.4	292.7	290.9	286.2	278.9	270.6	269.4	268.2
62.5°	174.8	115.5	207.7	238.2	262.8	262.2	258.1	247.3	241.3	238.2	235.8
65°	148.4	96.9	147.9	198.2	233.5	234.7	225.7	217.9	211.3	207.7	207.1
67.5°	113.2	79.0	100.0	165.2	205.3	204.1	192.8	189.1	180.8	179.0	175.4
70°	83.8	52.7	69.4	134.1	177.8	174.8	165.8	161.7	153.9	149.7	147.3
72.5°	69.4	42.5	50.9	104.2	149.7	146.0	138.3	133.5	126.9	123.4	121.0
75°	56.2	44.9	38.9	77.2	121.5	119.2	111.9	107.1	101.8	96.9	97.6
77.5°	41.3	41.9	31.2	56.9	96.4	92.8	88.6	82.7	80.2	75.4	75.4
80°	31.2	32.9	23.4	38.9	69.4	69.4	65.9	61.7	57.5	55.1	55.1
82.5°	21.0	21.0	17.3	24.5	47.3	45.5	43.1	41.9	39.5	38.3	38.3
85°	9.6	12.0	10.8	15.0	25.7	27.0	27.0	25.7	25.2	23.9	24.5
87.5°	3.0	5.4	6.6	8.4	13.2	13.7	14.4	14.4	14.4	15.0	15.0
90°	5.5	10.0	14.5	15.6	24.5	36.4	42.3	37.6	28.2	21.2	21.2
92.5°	22.2	60.1	98.0	107.5	151.0	209.1	238.2	208.8	150.0	105.8	101.6
95°	53.5	122.7	192.0	209.3	371.7	588.2	696.5	621.5	471.6	359.1	346.3
97.5°	92.4	153.5	214.7	229.9	500.7	861.7	1042.2	994.8	900.0	829.0	804.7
100°	122.5	177.9	233.3	247.2	547.6	948.2	1148.5	1152.0	1159.0	1164.2	1135.2
102.5°	148.1	199.9	251.5	264.5	569.2	975.5	1178.6	1239.0	1359.7	1450.3	1425.6
105°	191.6	235.4	279.1	290.1	585.1	978.5	1175.2	1310.5	1581.3	1784.3	1771.0
107.5°	236.1	276.9	317.8	327.9	588.1	935.0	1108.5	1297.2	1674.8	1958.1	1961.3
110°	266.1	303.0	339.9	349.1	583.7	896.4	1052.8	1263.9	1686.0	2002.6	2016.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	295.6	330.8	366.0	374.7	583.9	862.7	1002.1	1218.2	1650.2	1974.2	1995.5
115°	340.2	372.6	405.0	413.1	589.2	824.1	941.4	1149.5	1565.7	1877.9	1907.4
117.5°	384.2	413.6	443.1	450.4	600.2	799.9	899.7	1087.5	1463.1	1744.8	1777.6
120°	409.7	437.5	465.1	472.1	609.0	791.7	883.0	1054.5	1397.8	1655.2	1687.0
122.5°	434.8	462.7	490.8	497.7	621.9	787.5	870.2	1024.7	1333.8	1565.6	1596.9
125°	473.3	498.7	524.2	530.6	639.1	783.9	856.3	987.5	1250.0	1446.9	1475.9
127.5°	504.4	530.1	555.8	562.3	656.3	781.8	844.6	957.3	1182.7	1351.8	1376.2
130°	521.1	548.8	576.5	583.4	669.0	783.1	840.1	940.5	1141.1	1291.6	1314.1
132.5°	538.3	566.1	593.8	600.7	679.2	783.9	836.2	926.0	1105.7	1240.4	1260.6
135°	564.0	589.2	614.4	620.7	690.4	783.1	829.5	904.8	1055.2	1168.0	1185.4
137.5°	590.1	615.1	640.1	646.3	707.0	788.0	828.4	892.0	1019.2	1114.6	1128.8
140°	611.9	634.9	658.0	663.7	717.3	788.8	824.5	879.4	989.3	1071.7	1085.0
142.5°	628.6	649.8	671.1	676.4	725.8	791.6	824.5	872.8	969.3	1041.7	1053.1
145°	654.2	672.8	691.2	695.9	736.9	791.7	819.0	858.4	937.3	996.5	1005.2
147.5°	679.7	697.9	715.9	720.4	753.3	797.1	819.0	850.0	912.1	958.7	965.8
150°	696.5	712.8	729.1	733.2	761.8	799.9	819.0	845.2	897.6	937.0	942.8
152.5°	713.7	726.1	738.5	741.6	767.4	801.8	819.0	841.4	886.2	919.8	924.1
155°	739.4	748.6	757.7	760.0	779.6	805.9	819.0	836.8	872.4	899.1	902.1
157.5°	758.3	767.2	776.0	778.3	791.8	810.0	819.0	832.8	860.5	881.3	883.3
160°	771.0	778.0	785.0	786.7	797.5	811.8	819.0	830.9	854.6	872.4	873.5
162.5°	783.9	789.1	794.3	795.6	803.4	813.8	819.0	829.0	849.1	864.1	865.1
165°	797.8	802.5	807.2	808.4	811.9	816.7	819.0	826.1	840.5	851.2	852.4
167.5°	810.6	812.8	815.1	815.6	818.5	822.5	824.5	829.2	838.6	845.7	846.2
170°	819.0	821.2	823.4	824.0	824.2	824.4	824.5	829.2	838.6	845.7	845.7
172.5°	823.4	823.9	824.4	824.5	824.5	824.5	824.5	828.3	835.7	841.2	840.8
175°	829.5	829.5	829.5	829.5	827.8	825.6	824.5	826.8	831.6	835.1	835.1
177.5°	829.5	829.5	829.5	829.5	828.3	826.6	825.7	827.5	831.2	834.0	833.4
180°	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8
2.5°	648.9	647.1	648.9	647.7	648.3	646.5	641.2	639.4	641.2	643.0	643.0
5°	656.7	655.5	656.7	656.7	656.1	654.9	648.9	647.7	648.9	649.6	648.3
7.5°	659.1	657.3	659.1	657.9	657.9	656.7	650.7	649.6	650.1	651.9	650.1
10°	659.1	657.3	659.1	658.5	657.9	656.7	650.7	648.3	648.3	650.1	648.3
12.5°	656.1	654.9	656.1	654.9	654.9	653.8	647.7	645.4	645.9	646.5	644.1
15°	651.3	649.6	651.3	650.1	650.7	648.9	642.3	639.9	639.9	641.2	637.0
17.5°	644.1	641.7	644.1	643.6	643.0	641.7	635.7	633.4	632.8	633.4	630.4
20°	635.7	633.9	635.7	635.2	635.2	632.8	626.8	623.8	623.8	623.8	620.8
22.5°	622.6	620.8	622.6	623.8	623.8	623.1	617.8	613.6	612.4	612.4	608.9
25°	607.6	605.8	607.6	607.6	607.0	607.6	605.8	603.4	601.6	599.8	596.3
27.5°	593.2	592.1	593.2	592.1	593.2	591.5	590.8	590.3	587.9	586.1	581.3
30°	578.9	577.7	578.9	577.7	576.5	575.3	572.3	571.1	573.5	572.3	564.5
32.5°	560.9	559.8	560.9	560.9	559.8	559.8	554.9	553.2	553.8	557.4	550.1
35°	542.4	540.6	542.4	541.7	542.4	540.6	537.5	537.0	534.6	538.8	533.4
37.5°	520.8	519.1	520.8	520.8	520.8	522.0	519.6	517.8	514.2	519.6	515.4
40°	498.7	496.3	498.7	498.1	498.7	499.9	498.7	497.5	493.9	498.1	494.5
42.5°	473.5	472.9	473.5	474.2	474.2	476.5	478.4	475.9	474.7	471.7	474.2
45°	446.6	445.4	446.6	447.7	448.4	449.6	455.0	455.0	453.2	448.4	451.9
47.5°	417.8	414.9	417.8	421.4	421.4	423.3	428.6	432.8	429.8	423.8	425.6
50°	387.3	387.9	387.3	389.7	389.7	396.3	400.5	404.7	407.7	400.5	392.1
52.5°	357.4	356.8	357.4	359.2	361.6	364.5	371.8	376.0	380.7	376.5	363.4
55°	327.4	328.7	327.4	328.0	329.3	331.1	341.8	346.0	355.0	349.6	335.8
57.5°	297.5	295.7	297.5	298.8	299.3	301.1	310.1	317.9	323.3	323.8	307.1
60°	262.8	260.4	262.8	268.2	269.4	270.6	278.9	286.2	290.9	292.7	275.4
62.5°	232.3	228.1	232.3	235.8	238.2	241.3	247.3	258.1	262.2	262.8	238.2
65°	199.9	198.2	199.9	207.1	207.7	211.3	217.9	225.7	234.7	233.5	198.2
67.5°	170.6	170.6	170.6	175.4	179.0	180.8	189.1	192.8	204.1	205.3	165.2
70°	143.7	143.1	143.7	147.3	149.7	153.9	161.7	165.8	174.8	177.8	134.1
72.5°	117.9	117.3	117.9	121.0	123.4	126.9	133.5	138.3	146.0	149.7	104.2
75°	95.2	94.0	95.2	97.6	96.9	101.8	107.1	111.9	119.2	121.5	77.2
77.5°	73.0	73.0	73.0	75.4	75.4	80.2	82.7	88.6	92.8	96.4	56.9
80°	54.4	53.9	54.4	55.1	55.1	57.5	61.7	65.9	69.4	69.4	38.9
82.5°	38.3	37.1	38.3	38.3	38.3	39.5	41.9	43.1	45.5	47.3	24.5
85°	23.9	23.9	23.9	24.5	23.9	25.2	25.7	27.0	27.0	25.7	15.0
87.5°	15.5	15.0	15.5	15.0	15.0	14.4	14.4	14.4	13.7	13.2	8.4
90°	21.2	21.2	21.2	21.2	21.2	28.2	37.6	42.3	36.4	24.5	15.6
92.5°	84.7	67.9	84.7	101.6	105.8	150.0	208.8	238.2	209.1	151.0	107.5
95°	295.4	244.4	295.4	346.3	359.1	471.6	621.5	696.5	588.2	371.7	209.3
97.5°	707.8	610.7	707.8	804.7	829.0	900.0	994.8	1042.2	861.7	500.7	229.9
100°	1019.7	904.1	1019.7	1135.2	1164.2	1159.0	1152.0	1148.5	948.2	547.6	247.2
102.5°	1326.6	1227.6	1326.6	1425.6	1450.3	1359.7	1239.0	1178.6	975.5	569.2	264.5
105°	1717.8	1664.6	1717.8	1771.0	1784.3	1581.3	1310.5	1175.2	978.5	585.1	290.1
107.5°	1974.1	1987.0	1974.1	1961.3	1958.1	1674.8	1297.2	1108.5	935.0	588.1	327.9
110°	2071.9	2127.3	2071.9	2016.4	2002.6	1686.0	1263.9	1052.8	896.4	583.7	349.1





TEST NUMBER: P935833

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**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2080.6	2165.7	2080.6	1995.5	1974.2	1650.2	1218.2	1002.1	862.7	583.9	374.7
115°	2025.4	2143.4	2025.4	1907.4	1877.9	1565.7	1149.5	941.4	824.1	589.2	413.1
117.5°	1908.4	2039.3	1908.4	1777.6	1744.8	1463.1	1087.5	899.7	799.9	600.2	450.4
120°	1814.2	1941.4	1814.2	1687.0	1655.2	1397.8	1054.5	883.0	791.7	609.0	472.1
122.5°	1722.4	1847.8	1722.4	1596.9	1565.6	1333.8	1024.7	870.2	787.5	621.9	497.7
125°	1591.4	1707.0	1591.4	1475.9	1446.9	1250.0	987.5	856.3	783.9	639.1	530.6
127.5°	1473.6	1571.1	1473.6	1376.2	1351.8	1182.7	957.3	844.6	781.8	656.3	562.3
130°	1404.2	1494.2	1404.2	1314.1	1291.6	1141.1	940.5	840.1	783.1	669.0	583.4
132.5°	1341.2	1421.9	1341.2	1260.6	1240.4	1105.7	926.0	836.2	783.9	679.2	600.7
135°	1254.9	1324.5	1254.9	1185.4	1168.0	1055.2	904.8	829.5	783.1	690.4	620.7
137.5°	1185.8	1242.6	1185.8	1128.8	1114.6	1019.2	892.0	828.4	788.0	707.0	646.3
140°	1138.2	1191.4	1138.2	1085.0	1071.7	989.3	879.4	824.5	788.8	717.3	663.7
142.5°	1098.9	1144.6	1098.9	1053.1	1041.7	969.3	872.8	824.5	791.6	725.8	676.4
145°	1039.9	1074.5	1039.9	1005.2	996.5	937.3	858.4	819.0	791.7	736.9	695.9
147.5°	994.6	1023.3	994.6	965.8	958.7	912.1	850.0	819.0	797.1	753.3	720.4
150°	966.1	989.3	966.1	942.8	937.0	897.6	845.2	819.0	799.9	761.8	733.2
152.5°	941.7	959.2	941.7	924.1	919.8	886.2	841.4	819.0	801.8	767.4	741.6
155°	913.7	925.3	913.7	902.1	899.1	872.4	836.8	819.0	805.9	779.6	760.0
157.5°	891.5	899.7	891.5	883.3	881.3	860.5	832.8	819.0	810.0	791.8	778.3
160°	878.2	883.0	878.2	873.5	872.4	854.6	830.9	819.0	811.8	797.5	786.7
162.5°	869.6	874.1	869.6	865.1	864.1	849.1	829.0	819.0	813.8	803.4	795.6
165°	857.1	861.8	857.1	852.4	851.2	840.5	826.1	819.0	816.7	811.9	808.4
167.5°	848.2	850.1	848.2	846.2	845.7	838.6	829.2	824.5	822.5	818.5	815.6
170°	845.7	845.7	845.7	845.7	845.7	838.6	829.2	824.5	824.4	824.2	824.0
172.5°	839.1	837.4	839.1	840.8	841.2	835.7	828.3	824.5	824.5	824.5	824.5
175°	835.1	835.1	835.1	835.1	835.1	831.6	826.8	824.5	825.6	827.8	829.5
177.5°	831.5	829.5	831.5	833.4	834.0	831.2	827.5	825.7	826.6	828.3	829.5
180°	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5



TEST NUMBER: P935833

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**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8
2.5°	641.7	638.1	638.1	632.2	629.7	628.0	625.0	616.0	613.6	611.2	614.8
5°	647.1	640.5	635.7	625.0	616.0	612.4	601.0	579.5	565.1	554.3	548.3
7.5°	648.3	639.9	631.0	614.2	592.6	583.1	548.3	508.9	498.1	488.5	482.5
10°	647.1	637.5	625.0	599.8	549.0	532.2	497.5	471.7	465.1	463.4	465.1
12.5°	643.0	633.9	616.6	574.7	503.4	492.1	471.7	456.8	455.6	458.5	474.7
15°	635.7	627.3	607.0	541.2	478.4	470.0	455.6	450.1	456.8	477.7	526.2
17.5°	628.6	619.0	593.9	508.3	459.2	453.2	443.0	453.8	490.9	519.1	535.2
20°	619.0	607.6	578.9	484.3	445.4	440.0	435.2	483.7	511.8	522.0	531.0
22.5°	607.6	595.6	558.5	467.6	431.0	426.9	429.8	500.5	511.8	519.1	526.8
25°	592.6	582.4	534.6	454.3	419.6	414.9	426.2	498.7	505.2	507.0	522.6
27.5°	578.9	565.7	509.4	442.4	405.9	404.1	429.3	490.9	495.7	497.5	514.2
30°	562.1	542.4	481.3	429.8	391.5	390.9	429.8	481.3	480.1	484.9	501.7
32.5°	544.8	507.6	449.6	414.3	377.8	377.1	425.6	466.9	465.8	472.3	484.9
35°	528.6	480.7	406.5	396.3	360.4	361.0	415.4	450.1	450.8	456.8	464.5
37.5°	511.8	457.4	359.2	376.5	343.7	343.7	401.7	434.6	433.5	435.2	446.0
40°	492.1	420.9	317.2	350.8	328.0	326.3	384.9	417.8	413.6	413.1	428.0
42.5°	471.1	380.7	286.2	316.7	310.1	307.7	364.5	397.5	389.7	391.5	410.7
45°	448.4	370.0	262.2	267.6	291.5	289.7	342.4	374.2	368.7	373.6	393.3
47.5°	425.6	348.4	254.4	222.1	271.8	271.2	317.9	351.4	348.4	353.2	374.2
50°	394.5	324.5	253.9	190.4	249.7	252.0	288.6	329.3	329.3	333.5	355.6
52.5°	354.4	295.1	230.5	172.4	223.9	231.1	262.8	310.1	311.3	315.5	335.3
55°	317.9	264.6	213.7	158.6	193.3	209.0	237.6	290.4	292.7	296.9	314.9
57.5°	284.4	220.3	210.1	142.5	165.2	180.2	215.5	271.2	272.3	276.0	293.3
60°	248.4	159.2	192.8	125.1	140.7	152.0	195.1	248.4	252.6	255.0	270.0
62.5°	207.7	115.5	174.8	113.2	128.7	131.1	178.4	226.9	232.3	234.0	243.1
65°	147.9	96.9	148.4	103.0	116.1	116.8	160.4	204.8	209.5	212.5	219.1
67.5°	100.0	79.0	113.2	93.4	106.6	107.1	143.1	179.0	185.6	188.0	192.2
70°	69.4	52.7	83.8	83.2	95.8	96.9	124.5	155.7	161.7	163.4	165.8
72.5°	50.9	42.5	69.4	74.8	84.4	85.6	105.3	129.3	135.3	137.1	138.3
75°	38.9	44.9	56.2	65.3	71.9	72.4	86.2	105.3	109.5	110.8	111.3
77.5°	31.2	41.9	41.3	52.7	58.6	57.5	67.7	81.4	85.0	85.0	85.0
80°	23.4	32.9	31.2	37.8	43.1	41.9	48.5	58.1	59.3	60.4	59.9
82.5°	17.3	21.0	21.0	23.9	28.7	27.6	32.3	37.8	37.8	37.8	38.9
85°	10.8	12.0	9.6	12.6	16.2	15.5	17.9	20.4	21.0	21.0	19.7
87.5°	6.6	5.4	3.0	4.8	7.1	7.1	8.4	9.0	8.4	8.4	8.4
90°	14.5	10.0	5.5	10.0	14.5	15.6	24.5	36.4	42.3	37.6	28.2
92.5°	98.0	60.1	22.2	60.1	98.0	107.5	151.0	209.1	238.2	208.8	150.0
95°	192.0	122.7	53.5	122.7	192.0	209.3	371.7	588.2	696.5	621.5	471.6
97.5°	214.7	153.5	92.4	153.5	214.7	229.9	500.7	861.7	1042.2	994.8	900.0
100°	233.3	177.9	122.5	177.9	233.3	247.2	547.6	948.2	1148.5	1152.0	1159.0
102.5°	251.5	199.9	148.1	199.9	251.5	264.5	569.2	975.5	1178.6	1239.0	1359.7
105°	279.1	235.4	191.6	235.4	279.1	290.1	585.1	978.5	1175.2	1310.5	1581.3
107.5°	317.8	276.9	236.1	276.9	317.8	327.9	588.1	935.0	1108.5	1297.2	1674.8
110°	339.9	303.0	266.1	303.0	339.9	349.1	583.7	896.4	1052.8	1263.9	1686.0



TEST NUMBER: P935833

CATALOG NUMBER: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-3500K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	366.0	330.8	295.6	330.8	366.0	374.7	583.9	862.7	1002.1	1218.2	1650.2
115°	405.0	372.6	340.2	372.6	405.0	413.1	589.2	824.1	941.4	1149.5	1565.7
117.5°	443.1	413.6	384.2	413.6	443.1	450.4	600.2	799.9	899.7	1087.5	1463.1
120°	465.1	437.5	409.7	437.5	465.1	472.1	609.0	791.7	883.0	1054.5	1397.8
122.5°	490.8	462.7	434.8	462.7	490.8	497.7	621.9	787.5	870.2	1024.7	1333.8
125°	524.2	498.7	473.3	498.7	524.2	530.6	639.1	783.9	856.3	987.5	1250.0
127.5°	555.8	530.1	504.4	530.1	555.8	562.3	656.3	781.8	844.6	957.3	1182.7
130°	576.5	548.8	521.1	548.8	576.5	583.4	669.0	783.1	840.1	940.5	1141.1
132.5°	593.8	566.1	538.3	566.1	593.8	600.7	679.2	783.9	836.2	926.0	1105.7
135°	614.4	589.2	564.0	589.2	614.4	620.7	690.4	783.1	829.5	904.8	1055.2
137.5°	640.1	615.1	590.1	615.1	640.1	646.3	707.0	788.0	828.4	892.0	1019.2
140°	658.0	634.9	611.9	634.9	658.0	663.7	717.3	788.8	824.5	879.4	989.3
142.5°	671.1	649.8	628.6	649.8	671.1	676.4	725.8	791.6	824.5	872.8	969.3
145°	691.2	672.8	654.2	672.8	691.2	695.9	736.9	791.7	819.0	858.4	937.3
147.5°	715.9	697.9	679.7	697.9	715.9	720.4	753.3	797.1	819.0	850.0	912.1
150°	729.1	712.8	696.5	712.8	729.1	733.2	761.8	799.9	819.0	845.2	897.6
152.5°	738.5	726.1	713.7	726.1	738.5	741.6	767.4	801.8	819.0	841.4	886.2
155°	757.7	748.6	739.4	748.6	757.7	760.0	779.6	805.9	819.0	836.8	872.4
157.5°	776.0	767.2	758.3	767.2	776.0	778.3	791.8	810.0	819.0	832.8	860.5
160°	785.0	778.0	771.0	778.0	785.0	786.7	797.5	811.8	819.0	830.9	854.6
162.5°	794.3	789.1	783.9	789.1	794.3	795.6	803.4	813.8	819.0	829.0	849.1
165°	807.2	802.5	797.8	802.5	807.2	808.4	811.9	816.7	819.0	826.1	840.5
167.5°	815.1	812.8	810.6	812.8	815.1	815.6	818.5	822.5	824.5	829.2	838.6
170°	823.4	821.2	819.0	821.2	823.4	824.0	824.2	824.4	824.5	829.2	838.6
172.5°	824.4	823.9	823.4	823.9	824.4	824.5	824.5	824.5	824.5	828.3	835.7
175°	829.5	829.5	829.5	829.5	829.5	829.5	827.8	825.6	824.5	826.8	831.6
177.5°	829.5	829.5	829.5	829.5	829.5	829.5	828.3	826.6	825.7	827.5	831.2
180°	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5



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**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8	632.8
2.5°	610.6	608.9	611.2	604.7	611.2	608.9	610.6	614.8	611.2	613.6	616.0
5°	535.8	532.8	523.3	515.4	523.3	532.8	535.8	548.3	554.3	565.1	579.5
7.5°	478.9	476.5	474.2	469.3	474.2	476.5	478.9	482.5	488.5	498.1	508.9
10°	466.3	466.9	470.5	470.0	470.5	466.9	466.3	465.1	463.4	465.1	471.7
12.5°	498.7	504.1	523.8	522.6	523.8	504.1	498.7	474.7	458.5	455.6	456.8
15°	535.8	537.5	541.7	542.4	541.7	537.5	535.8	526.2	477.7	456.8	450.1
17.5°	539.4	539.9	543.0	543.0	543.0	539.9	539.4	535.2	519.1	490.9	453.8
20°	536.4	537.5	543.6	544.8	543.6	537.5	536.4	531.0	522.0	511.8	483.7
22.5°	535.2	537.5	542.4	541.7	542.4	537.5	535.2	526.8	519.1	511.8	500.5
25°	529.2	529.2	529.8	530.4	529.8	529.2	529.2	522.6	507.0	505.2	498.7
27.5°	516.6	517.8	521.4	520.8	521.4	517.8	516.6	514.2	497.5	495.7	490.9
30°	505.2	504.1	501.0	498.7	501.0	504.1	505.2	501.7	484.9	480.1	481.3
32.5°	486.1	483.1	480.1	478.4	480.1	483.1	486.1	484.9	472.3	465.8	466.9
35°	463.4	464.0	463.4	461.6	463.4	464.0	463.4	464.5	456.8	450.8	450.1
37.5°	447.2	448.4	447.7	445.4	447.7	448.4	447.2	446.0	435.2	433.5	434.6
40°	430.4	431.0	430.4	428.6	430.4	431.0	430.4	428.0	413.1	413.6	417.8
42.5°	414.3	413.6	411.9	410.7	411.9	413.6	414.3	410.7	391.5	389.7	397.5
45°	395.7	396.3	392.7	390.9	392.7	396.3	395.7	393.3	373.6	368.7	374.2
47.5°	377.1	377.1	374.2	372.3	374.2	377.1	377.1	374.2	353.2	348.4	351.4
50°	357.4	356.8	352.6	352.0	352.6	356.8	357.4	355.6	333.5	329.3	329.3
52.5°	334.6	334.6	335.3	336.4	335.3	334.6	334.6	335.3	315.5	311.3	310.1
55°	314.9	315.5	319.6	320.9	319.6	315.5	314.9	314.9	296.9	292.7	290.4
57.5°	294.6	294.6	297.5	297.5	297.5	294.6	294.6	293.3	276.0	272.3	271.2
60°	271.2	272.3	274.7	274.2	274.7	272.3	271.2	270.0	255.0	252.6	248.4
62.5°	246.6	247.9	248.4	247.3	248.4	247.9	246.6	243.1	234.0	232.3	226.9
65°	220.9	222.1	222.7	221.5	222.7	222.1	220.9	219.1	212.5	209.5	204.8
67.5°	194.6	194.0	193.3	195.8	193.3	194.0	194.6	192.2	188.0	185.6	179.0
70°	167.6	167.6	167.0	168.3	167.0	167.6	167.6	165.8	163.4	161.7	155.7
72.5°	138.9	138.3	140.7	138.9	140.7	138.3	138.9	138.3	137.1	135.3	129.3
75°	110.8	111.9	110.8	112.6	110.8	111.9	110.8	111.3	110.8	109.5	105.3
77.5°	84.4	85.6	84.4	84.4	84.4	85.6	84.4	85.0	85.0	85.0	81.4
80°	59.9	59.3	59.3	58.6	59.3	59.3	59.9	59.9	60.4	59.3	58.1
82.5°	38.3	37.8	37.8	38.9	37.8	37.8	38.3	38.9	37.8	37.8	37.8
85°	21.0	21.5	20.4	20.4	20.4	21.5	21.0	19.7	21.0	21.0	20.4
87.5°	7.8	7.1	7.1	7.1	7.1	7.1	7.8	8.4	8.4	8.4	9.0
90°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	28.2	37.6	42.3	36.4
92.5°	105.8	101.6	84.7	67.9	84.7	101.6	105.8	150.0	208.8	238.2	209.1
95°	359.1	346.3	295.4	244.4	295.4	346.3	359.1	471.6	621.5	696.5	588.2
97.5°	829.0	804.7	707.8	610.7	707.8	804.7	829.0	900.0	994.8	1042.2	861.7
100°	1164.2	1135.2	1019.7	904.1	1019.7	1135.2	1164.2	1159.0	1152.0	1148.5	948.2
102.5°	1450.3	1425.6	1326.6	1227.6	1326.6	1425.6	1450.3	1359.7	1239.0	1178.6	975.5
105°	1784.3	1771.0	1717.8	1664.6	1717.8	1771.0	1784.3	1581.3	1310.5	1175.2	978.5
107.5°	1958.1	1961.3	1974.1	1987.0	1974.1	1961.3	1958.1	1674.8	1297.2	1108.5	935.0
110°	2002.6	2016.4	2071.9	2127.3	2071.9	2016.4	2002.6	1686.0	1263.9	1052.8	896.4



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**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1974.2	1995.5	2080.6	2165.7	2080.6	1995.5	1974.2	1650.2	1218.2	1002.1	862.7
115°	1877.9	1907.4	2025.4	2143.4	2025.4	1907.4	1877.9	1565.7	1149.5	941.4	824.1
117.5°	1744.8	1777.6	1908.4	2039.3	1908.4	1777.6	1744.8	1463.1	1087.5	899.7	799.9
120°	1655.2	1687.0	1814.2	1941.4	1814.2	1687.0	1655.2	1397.8	1054.5	883.0	791.7
122.5°	1565.6	1596.9	1722.4	1847.8	1722.4	1596.9	1565.6	1333.8	1024.7	870.2	787.5
125°	1446.9	1475.9	1591.4	1707.0	1591.4	1475.9	1446.9	1250.0	987.5	856.3	783.9
127.5°	1351.8	1376.2	1473.6	1571.1	1473.6	1376.2	1351.8	1182.7	957.3	844.6	781.8
130°	1291.6	1314.1	1404.2	1494.2	1404.2	1314.1	1291.6	1141.1	940.5	840.1	783.1
132.5°	1240.4	1260.6	1341.2	1421.9	1341.2	1260.6	1240.4	1105.7	926.0	836.2	783.9
135°	1168.0	1185.4	1254.9	1324.5	1254.9	1185.4	1168.0	1055.2	904.8	829.5	783.1
137.5°	1114.6	1128.8	1185.8	1242.6	1185.8	1128.8	1114.6	1019.2	892.0	828.4	788.0
140°	1071.7	1085.0	1138.2	1191.4	1138.2	1085.0	1071.7	989.3	879.4	824.5	788.8
142.5°	1041.7	1053.1	1098.9	1144.6	1098.9	1053.1	1041.7	969.3	872.8	824.5	791.6
145°	996.5	1005.2	1039.9	1074.5	1039.9	1005.2	996.5	937.3	858.4	819.0	791.7
147.5°	958.7	965.8	994.6	1023.3	994.6	965.8	958.7	912.1	850.0	819.0	797.1
150°	937.0	942.8	966.1	989.3	966.1	942.8	937.0	897.6	845.2	819.0	799.9
152.5°	919.8	924.1	941.7	959.2	941.7	924.1	919.8	886.2	841.4	819.0	801.8
155°	899.1	902.1	913.7	925.3	913.7	902.1	899.1	872.4	836.8	819.0	805.9
157.5°	881.3	883.3	891.5	899.7	891.5	883.3	881.3	860.5	832.8	819.0	810.0
160°	872.4	873.5	878.2	883.0	878.2	873.5	872.4	854.6	830.9	819.0	811.8
162.5°	864.1	865.1	869.6	874.1	869.6	865.1	864.1	849.1	829.0	819.0	813.8
165°	851.2	852.4	857.1	861.8	857.1	852.4	851.2	840.5	826.1	819.0	816.7
167.5°	845.7	846.2	848.2	850.1	848.2	846.2	845.7	838.6	829.2	824.5	822.5
170°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	838.6	829.2	824.5	824.4
172.5°	841.2	840.8	839.1	837.4	839.1	840.8	841.2	835.7	828.3	824.5	824.5
175°	835.1	835.1	835.1	835.1	835.1	835.1	835.1	831.6	826.8	824.5	825.6
177.5°	834.0	833.4	831.5	829.5	831.5	833.4	834.0	831.2	827.5	825.7	826.6
180°	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5	829.5



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**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	632.8	632.8	632.8	632.8	632.8
2.5°	625.0	628.0	629.7	632.2	638.1
5°	601.0	612.4	616.0	625.0	635.7
7.5°	548.3	583.1	592.6	614.2	631.0
10°	497.5	532.2	549.0	599.8	625.0
12.5°	471.7	492.1	503.4	574.7	616.6
15°	455.6	470.0	478.4	541.2	607.0
17.5°	443.0	453.2	459.2	508.3	593.9
20°	435.2	440.0	445.4	484.3	578.9
22.5°	429.8	426.9	431.0	467.6	558.5
25°	426.2	414.9	419.6	454.3	534.6
27.5°	429.3	404.1	405.9	442.4	509.4
30°	429.8	390.9	391.5	429.8	481.3
32.5°	425.6	377.1	377.8	414.3	449.6
35°	415.4	361.0	360.4	396.3	406.5
37.5°	401.7	343.7	343.7	376.5	359.2
40°	384.9	326.3	328.0	350.8	317.2
42.5°	364.5	307.7	310.1	316.7	286.2
45°	342.4	289.7	291.5	267.6	262.2
47.5°	317.9	271.2	271.8	222.1	254.4
50°	288.6	252.0	249.7	190.4	253.9
52.5°	262.8	231.1	223.9	172.4	230.5
55°	237.6	209.0	193.3	158.6	213.7
57.5°	215.5	180.2	165.2	142.5	210.1
60°	195.1	152.0	140.7	125.1	192.8
62.5°	178.4	131.1	128.7	113.2	174.8
65°	160.4	116.8	116.1	103.0	148.4
67.5°	143.1	107.1	106.6	93.4	113.2
70°	124.5	96.9	95.8	83.2	83.8
72.5°	105.3	85.6	84.4	74.8	69.4
75°	86.2	72.4	71.9	65.3	56.2
77.5°	67.7	57.5	58.6	52.7	41.3
80°	48.5	41.9	43.1	37.8	31.2
82.5°	32.3	27.6	28.7	23.9	21.0
85°	17.9	15.5	16.2	12.6	9.6
87.5°	8.4	7.1	7.1	4.8	3.0
90°	24.5	15.6	14.5	10.0	5.5
92.5°	151.0	107.5	98.0	60.1	22.2
95°	371.7	209.3	192.0	122.7	53.5
97.5°	500.7	229.9	214.7	153.5	92.4
100°	547.6	247.2	233.3	177.9	122.5
102.5°	569.2	264.5	251.5	199.9	148.1
105°	585.1	290.1	279.1	235.4	191.6
107.5°	588.1	327.9	317.8	276.9	236.1
110°	583.7	349.1	339.9	303.0	266.1



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CATALOG NUMBER: SQ4-FA-150U-050D-92765-1D-UNV-STD-W-4-3500K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	583.9	374.7	366.0	330.8	295.6
115°	589.2	413.1	405.0	372.6	340.2
117.5°	600.2	450.4	443.1	413.6	384.2
120°	609.0	472.1	465.1	437.5	409.7
122.5°	621.9	497.7	490.8	462.7	434.8
125°	639.1	530.6	524.2	498.7	473.3
127.5°	656.3	562.3	555.8	530.1	504.4
130°	669.0	583.4	576.5	548.8	521.1
132.5°	679.2	600.7	593.8	566.1	538.3
135°	690.4	620.7	614.4	589.2	564.0
137.5°	707.0	646.3	640.1	615.1	590.1
140°	717.3	663.7	658.0	634.9	611.9
142.5°	725.8	676.4	671.1	649.8	628.6
145°	736.9	695.9	691.2	672.8	654.2
147.5°	753.3	720.4	715.9	697.9	679.7
150°	761.8	733.2	729.1	712.8	696.5
152.5°	767.4	741.6	738.5	726.1	713.7
155°	779.6	760.0	757.7	748.6	739.4
157.5°	791.8	778.3	776.0	767.2	758.3
160°	797.5	786.7	785.0	778.0	771.0
162.5°	803.4	795.6	794.3	789.1	783.9
165°	811.9	808.4	807.2	802.5	797.8
167.5°	818.5	815.6	815.1	812.8	810.6
170°	824.2	824.0	823.4	821.2	819.0
172.5°	824.5	824.5	824.4	823.9	823.4
175°	827.8	829.5	829.5	829.5	829.5
177.5°	828.3	829.5	829.5	829.5	829.5
180°	829.5	829.5	829.5	829.5	829.5



TEST NUMBER: P935833  
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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	7.73	8.40	8.89	9.54	11.15	10.53	11.20	11.69	12.34	13.95
	3H	8.20	8.79	9.36	9.94	11.56	11.85	12.45	13.02	13.60	15.22
	4H	8.38	8.94	9.55	10.09	11.72	12.28	12.85	13.45	14.00	15.62
	6H	8.49	9.01	9.67	10.16	11.80	12.55	13.07	13.73	14.22	15.86
	8H	8.48	8.98	9.66	10.14	11.77	12.61	13.11	13.79	14.27	15.90
	12H	8.45	8.92	9.63	10.08	11.73	12.64	13.11	13.82	14.27	15.92
4H	2H	8.73	9.30	9.91	10.45	12.08	10.92	11.48	12.10	12.63	14.26
	3H	9.74	10.21	10.93	11.39	13.03	12.40	12.87	13.58	14.04	15.68
	4H	10.01	10.44	11.20	11.61	13.26	12.91	13.34	14.09	14.51	16.16
	6H	10.12	10.49	11.31	11.68	13.33	13.25	13.62	14.44	14.81	16.46
	8H	10.13	10.47	11.31	11.65	13.31	13.35	13.70	14.54	14.88	16.54
	12H	10.08	10.40	11.29	11.59	13.25	13.39	13.71	14.60	14.90	16.56
8H	4H	10.44	10.79	11.63	11.97	13.63	13.02	13.36	14.21	14.54	16.20
	6H	10.70	10.98	11.90	12.20	13.86	13.44	13.72	14.65	14.94	16.60
	8H	10.74	10.98	11.95	12.18	13.86	13.58	13.83	14.80	15.03	16.71
	12H	10.71	10.93	11.93	12.13	13.84	13.67	13.88	14.88	15.08	16.79
12H	4H	10.44	10.75	11.64	11.94	13.61	12.97	13.29	14.18	14.48	16.14
	6H	10.75	11.00	11.97	12.20	13.88	13.43	13.68	14.65	14.88	16.56
	8H	10.81	11.03	12.03	12.22	13.93	13.58	13.80	14.80	14.99	16.70