

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: P935970

Luminaire Tested: SQ4-FA-150U-075D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935970
REPORT IS A COMBINATION OF REPORTS P933774 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-150U-075D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

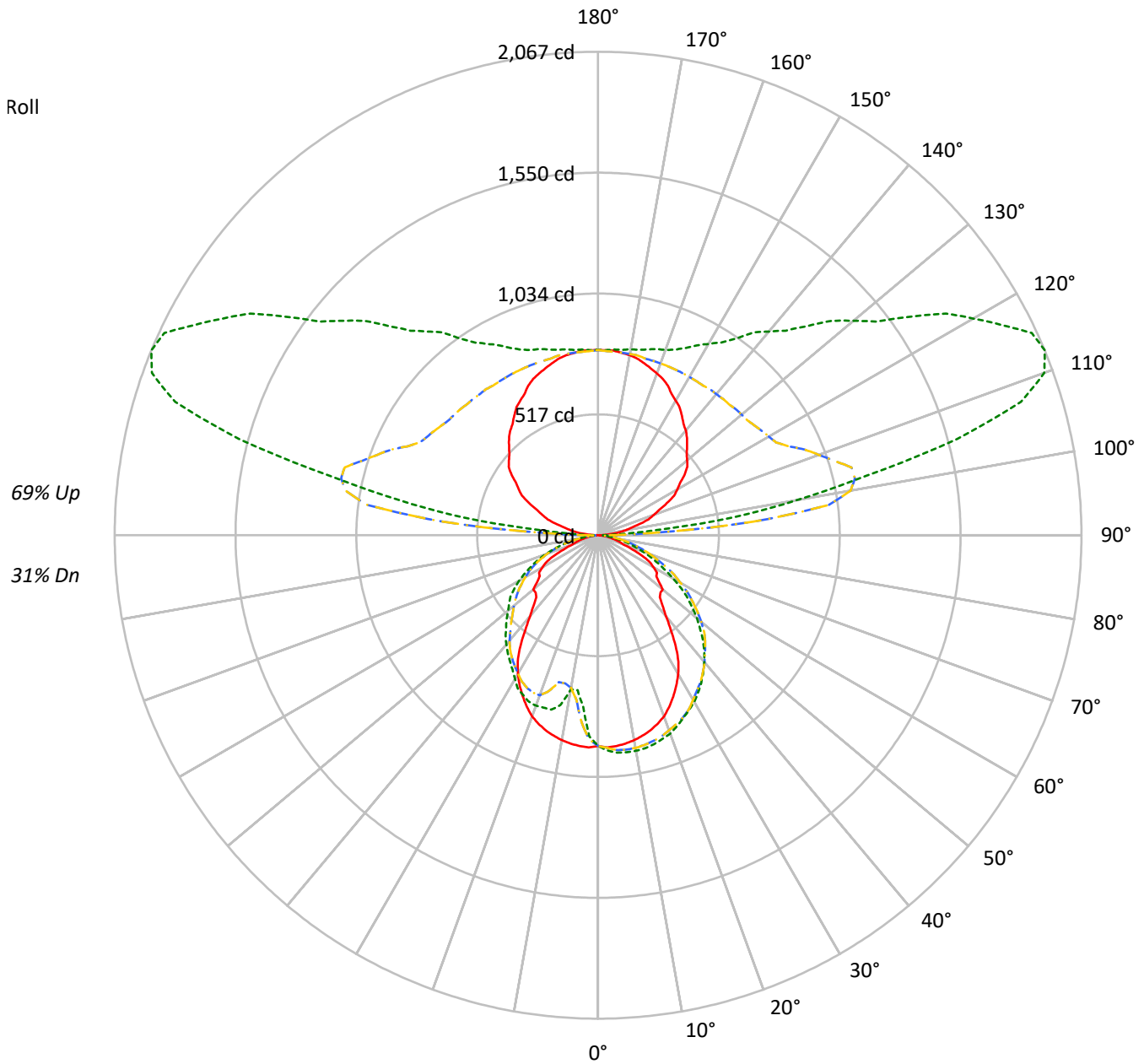
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7471.2 lumens
Efficiency: N/A
Efficacy: 117.5 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: Semi-Indirect

Input Watts (W): 63.6
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: P935970
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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	34	34	33	26
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	30	29	28	22
3	78	69	61	56	70	62	56	51	49	45	42	38	35	32	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	33	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	23	21	19	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	24	21	18	18	15	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	20	17	14	15	13	11	9
10	44	33	26	21	40	30	23	19	24	19	16	19	15	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8357	8357	8357	8357
5°	8410	8437	8410	6634
10°	8345	8311	8345	5941
15°	8245	8131	8245	6789
20°	8063	7917	8063	6803
25°	7701	7606	7701	6659
30°	7236	7348	7236	6343
35°	6442	7021	6442	5995
40°	5358	6637	5358	5732
45°	4779	6187	4779	5429
50°	5065	5650	5065	5127
55°	4752	5071	4752	4952
60°	4879	4307	4879	4535
65°	4403	3560	4403	3980
70°	3029	2836	3029	3335
75°	2627	2098	2627	2511
80°	2073	1387	2073	1510
85°	1126	735	1126	625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 7337 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.3	1.1
10°-20°	230.8	3.1
20°-30°	356.8	4.8
30°-40°	426.0	5.7
40°-50°	428.5	5.7
50°-60°	372.8	5.0
60°-70°	264.3	3.5
70°-80°	139.8	1.9
80°-90°	37.8	0.5
90°-100°	386.0	5.2
100°-110°	1014.7	13.6
110°-120°	1052.2	14.1
120°-130°	843.9	11.3
130°-140°	662.2	8.9
140°-150°	508.3	6.8
150°-160°	366.0	4.9
160°-170°	224.0	3.0
170°-180°	75.7	1.0
0°-30°	669.0	9.0
0°-40°	1095.0	14.7
0°-60°	1896.3	25.4
0°-90°	2338.3	31.3
90°-120°	2452.8	32.8
90°-150°	4467.2	59.8
90°-180°	5133.0	68.7
0°-180°	7471.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	901	901	901	901	901	
5°	905	933	905	734	905	86
15°	864	925	864	772	864	243
25°	761	862	761	755	761	349
35°	579	769	579	657	579	358
45°	373	634	373	556	373	299
55°	304	468	304	457	304	280
65°	211	282	211	315	211	202
75°	80	134	80	160	80	84
85°	14	34	14	29	14	18
90°	5	20	5	20	5	5
95°	51	233	51	233	51	57
105°	183	1589	183	1589	183	194
115°	325	2046	325	2046	325	321
125°	452	1629	452	1629	452	401
135°	538	1264	538	1264	538	416
145°	624	1026	624	1026	624	391
155°	706	883	706	883	706	324
165°	762	823	762	823	762	215
175°	792	797	792	797	792	75
180°	792	792	792	792	792	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6
2.5°	908.3	908.3	913.5	915.2	915.2	912.7	910.1	912.7	920.3	922.9	922.0
5°	904.9	911.8	921.2	922.9	924.6	923.7	922.0	923.7	932.3	934.0	934.8
7.5°	898.1	911.0	922.9	925.4	928.0	925.4	924.6	926.3	934.8	936.5	936.5
10°	889.6	907.5	921.2	922.9	925.4	922.9	922.9	926.3	934.8	936.5	937.4
12.5°	877.6	902.4	915.2	916.9	920.3	919.5	918.6	922.0	930.6	932.3	932.3
15°	864.0	893.0	904.9	906.6	912.7	911.0	911.0	914.4	923.7	926.3	925.4
17.5°	845.3	881.1	894.7	897.2	901.5	900.6	901.5	904.9	913.5	915.2	916.1
20°	824.0	864.9	881.1	883.6	887.9	887.9	887.9	892.1	900.6	904.1	904.1
22.5°	795.0	847.8	864.9	866.6	871.7	871.7	873.4	879.3	887.0	887.9	887.9
25°	760.9	829.1	843.6	848.7	853.8	856.3	858.9	862.3	864.9	864.0	864.9
27.5°	725.1	805.2	824.0	827.4	834.2	836.7	840.2	841.0	841.9	844.4	842.7
30°	685.1	772.0	800.1	803.5	814.6	816.3	812.9	814.6	818.9	820.6	822.3
32.5°	639.9	722.6	775.4	783.1	793.3	788.2	787.3	789.9	796.7	796.7	798.4
35°	578.6	684.2	752.4	759.2	766.9	760.9	764.3	765.2	769.4	772.0	771.1
37.5°	511.3	651.0	728.5	733.7	739.6	732.0	737.1	739.6	743.0	741.3	741.3
40°	451.6	599.0	700.4	703.8	708.9	703.0	708.1	709.8	711.5	709.8	708.9
42.5°	407.3	542.0	670.6	674.9	671.5	675.7	677.4	680.8	678.3	674.9	674.9
45°	373.3	526.6	638.2	643.3	638.2	645.0	647.6	647.6	639.9	638.2	637.4
47.5°	362.2	495.9	605.9	605.9	603.3	611.8	616.1	610.1	602.4	599.9	599.9
50°	361.3	461.9	561.6	558.1	570.1	580.3	576.0	570.1	564.1	554.7	554.7
52.5°	328.1	420.1	504.5	517.2	536.0	542.0	535.1	529.2	519.0	514.7	511.3
55°	304.2	376.7	452.5	478.1	497.7	505.3	492.5	486.6	471.2	468.7	467.0
57.5°	299.1	313.6	404.8	437.2	461.0	460.2	452.5	441.4	428.6	426.1	425.2
60°	274.3	226.6	353.7	392.0	416.7	414.2	407.3	397.1	385.2	383.5	381.8
62.5°	248.8	164.4	295.6	339.2	374.1	373.3	367.3	352.0	343.4	339.2	335.8
65°	211.3	138.0	210.4	282.0	332.4	334.1	321.3	310.2	300.8	295.6	294.8
67.5°	161.0	112.5	142.3	235.2	292.2	290.5	274.3	269.2	257.3	254.7	249.6
70°	119.3	75.0	98.8	190.8	253.0	248.8	236.0	230.0	219.0	213.0	209.6
72.5°	98.8	60.5	72.4	148.2	213.0	207.9	196.8	190.0	180.6	175.5	172.1
75°	80.1	63.9	55.4	109.9	173.0	169.5	159.3	152.5	144.8	138.0	138.9
77.5°	58.8	59.6	44.3	80.9	137.2	132.1	126.1	117.6	114.2	107.4	107.4
80°	44.3	46.9	33.2	55.4	98.8	98.8	93.7	87.8	81.8	78.4	78.4
82.5°	29.8	29.8	24.7	34.9	67.3	64.8	61.3	59.6	56.2	54.5	54.5
85°	13.6	17.0	15.3	21.3	36.6	38.3	38.3	36.6	35.8	34.1	34.9
87.5°	4.3	7.7	9.4	11.9	18.7	19.6	20.4	20.4	20.4	21.3	21.3
90°	5.3	9.5	13.8	14.9	23.4	34.8	40.4	35.9	26.9	20.2	20.2
92.5°	21.2	57.3	93.5	102.6	144.2	199.6	227.4	199.3	143.1	101.0	97.0
95°	51.0	117.2	183.3	199.8	354.8	561.5	664.8	593.2	450.1	342.8	330.6
97.5°	88.2	146.5	204.9	219.5	477.9	822.5	994.8	949.6	859.1	791.3	768.1
100°	116.9	169.8	222.7	235.9	522.7	905.1	1096.3	1099.6	1106.2	1111.2	1083.6
102.5°	141.3	190.8	240.1	252.4	543.3	931.1	1125.0	1182.6	1297.9	1384.3	1360.7
105°	182.8	224.7	266.4	276.9	558.5	934.0	1121.7	1250.9	1509.3	1703.1	1690.5
107.5°	225.4	264.3	303.3	313.0	561.4	892.5	1058.0	1238.2	1598.6	1868.9	1872.0
110°	254.0	289.2	324.4	333.2	557.1	855.6	1004.8	1206.3	1609.3	1911.5	1924.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	282.2	315.8	349.3	357.7	557.3	823.5	956.5	1162.7	1575.1	1884.4	1904.6
115°	324.7	355.6	386.6	394.3	562.4	786.6	898.6	1097.2	1494.5	1792.4	1820.6
117.5°	366.7	394.8	422.9	429.9	572.9	763.5	858.7	1038.0	1396.5	1665.4	1696.7
120°	391.1	417.6	444.0	450.6	581.3	755.6	842.8	1006.6	1334.1	1579.9	1610.2
122.5°	415.0	441.7	468.4	475.1	593.6	751.6	830.6	978.1	1273.1	1494.3	1524.2
125°	451.7	476.0	500.4	506.4	610.0	748.2	817.3	942.6	1193.1	1381.1	1408.7
127.5°	481.5	506.0	530.5	536.7	626.5	746.3	806.2	913.8	1128.9	1290.3	1313.5
130°	497.4	523.8	550.2	556.9	638.6	747.5	801.9	897.7	1089.2	1232.8	1254.3
132.5°	513.8	540.3	566.8	573.4	648.3	748.2	798.2	883.9	1055.4	1183.9	1203.2
135°	538.3	562.4	586.4	592.5	658.9	747.5	791.8	863.6	1007.1	1114.8	1131.5
137.5°	563.3	587.1	611.0	616.9	674.9	752.1	790.7	851.4	972.8	1063.9	1077.4
140°	584.0	606.0	628.0	633.5	684.7	752.9	787.0	839.4	944.3	1022.9	1035.6
142.5°	600.0	620.3	640.5	645.6	692.8	755.6	787.0	833.1	925.2	994.3	1005.2
145°	624.4	642.2	659.8	664.2	703.4	755.6	781.7	819.4	894.7	951.2	959.4
147.5°	648.8	666.1	683.3	687.6	719.0	760.8	781.7	811.4	870.6	915.0	921.9
150°	664.8	680.4	695.9	699.8	727.1	763.5	781.7	806.8	856.8	894.3	899.9
152.5°	681.3	693.1	704.9	707.8	732.5	765.3	781.7	803.1	845.9	877.9	882.1
155°	705.7	714.5	723.2	725.4	744.1	769.2	781.7	798.8	832.7	858.2	861.0
157.5°	723.8	732.3	740.7	742.9	755.8	773.1	781.7	794.9	821.3	841.2	843.1
160°	736.0	742.6	749.2	750.9	761.2	774.9	781.7	793.0	815.7	832.7	833.8
162.5°	748.2	753.2	758.1	759.4	766.8	776.8	781.7	791.3	810.4	824.7	825.8
165°	761.5	765.9	770.5	771.6	775.0	779.5	781.7	788.5	802.2	812.5	813.6
167.5°	773.7	775.8	778.0	778.5	781.3	785.1	787.0	791.5	800.5	807.2	807.7
170°	781.7	783.8	786.0	786.5	786.7	786.9	787.0	791.5	800.5	807.2	807.2
172.5°	786.0	786.4	786.9	787.0	787.0	787.0	787.0	790.6	797.6	802.9	802.5
175°	791.8	791.8	791.8	791.8	790.1	788.0	787.0	789.2	793.7	797.1	797.1
177.5°	791.8	791.8	791.8	791.8	790.6	789.0	788.1	789.9	793.4	796.0	795.5
180°	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6
2.5°	923.7	921.2	923.7	922.0	922.9	920.3	912.7	910.1	912.7	915.2	915.2
5°	934.8	933.1	934.8	934.8	934.0	932.3	923.7	922.0	923.7	924.6	922.9
7.5°	938.2	935.7	938.2	936.5	936.5	934.8	926.3	924.6	925.4	928.0	925.4
10°	938.2	935.7	938.2	937.4	936.5	934.8	926.3	922.9	922.9	925.4	922.9
12.5°	934.0	932.3	934.0	932.3	932.3	930.6	922.0	918.6	919.5	920.3	916.9
15°	927.1	924.6	927.1	925.4	926.3	923.7	914.4	911.0	911.0	912.7	906.6
17.5°	916.9	913.5	916.9	916.1	915.2	913.5	904.9	901.5	900.6	901.5	897.2
20°	904.9	902.4	904.9	904.1	904.1	900.6	892.1	887.9	887.9	887.9	883.6
22.5°	886.2	883.6	886.2	887.9	887.9	887.0	879.3	873.4	871.7	871.7	866.6
25°	864.9	862.3	864.9	864.9	864.0	864.9	862.3	858.9	856.3	853.8	848.7
27.5°	844.4	842.7	844.4	842.7	844.4	841.9	841.0	840.2	836.7	834.2	827.4
30°	824.0	822.3	824.0	822.3	820.6	818.9	814.6	812.9	816.3	814.6	803.5
32.5°	798.4	796.7	798.4	798.4	796.7	796.7	789.9	787.3	788.2	793.3	783.1
35°	772.0	769.4	772.0	771.1	772.0	769.4	765.2	764.3	760.9	766.9	759.2
37.5°	741.3	738.8	741.3	741.3	741.3	743.0	739.6	737.1	732.0	739.6	733.7
40°	709.8	706.4	709.8	708.9	709.8	711.5	709.8	708.1	703.0	708.9	703.8
42.5°	674.0	673.2	674.0	674.9	674.9	678.3	680.8	677.4	675.7	671.5	674.9
45°	635.7	634.0	635.7	637.4	638.2	639.9	647.6	647.6	645.0	638.2	643.3
47.5°	594.8	590.5	594.8	599.9	599.9	602.4	610.1	616.1	611.8	603.3	605.9
50°	551.3	552.2	551.3	554.7	554.7	564.1	570.1	576.0	580.3	570.1	558.1
52.5°	508.7	507.9	508.7	511.3	514.7	519.0	529.2	535.1	542.0	536.0	517.2
55°	466.1	467.8	466.1	467.0	468.7	471.2	486.6	492.5	505.3	497.7	478.1
57.5°	423.5	421.0	423.5	425.2	426.1	428.6	441.4	452.5	460.2	461.0	437.2
60°	374.1	370.7	374.1	381.8	383.5	385.2	397.1	407.3	414.2	416.7	392.0
62.5°	330.7	324.7	330.7	335.8	339.2	343.4	352.0	367.3	373.3	374.1	339.2
65°	284.6	282.0	284.6	294.8	295.6	300.8	310.2	321.3	334.1	332.4	282.0
67.5°	242.8	242.8	242.8	249.6	254.7	257.3	269.2	274.3	290.5	292.2	235.2
70°	204.5	203.6	204.5	209.6	213.0	219.0	230.0	236.0	248.8	253.0	190.8
72.5°	167.8	167.0	167.8	172.1	175.5	180.6	190.0	196.8	207.9	213.0	148.2
75°	135.5	133.8	135.5	138.9	138.0	144.8	152.5	159.3	169.5	173.0	109.9
77.5°	103.9	103.9	103.9	107.4	107.4	114.2	117.6	126.1	132.1	137.2	80.9
80°	77.5	76.7	77.5	78.4	78.4	81.8	87.8	93.7	98.8	98.8	55.4
82.5°	54.5	52.8	54.5	54.5	54.5	56.2	59.6	61.3	64.8	67.3	34.9
85°	34.1	34.1	34.1	34.9	34.1	35.8	36.6	38.3	38.3	36.6	21.3
87.5°	22.2	21.3	22.2	21.3	21.3	20.4	20.4	20.4	19.6	18.7	11.9
90°	20.2	20.2	20.2	20.2	20.2	26.9	35.9	40.4	34.8	23.4	14.9
92.5°	80.9	64.8	80.9	97.0	101.0	143.1	199.3	227.4	199.6	144.2	102.6
95°	281.9	233.3	281.9	330.6	342.8	450.1	593.2	664.8	561.5	354.8	199.8
97.5°	675.6	582.9	675.6	768.1	791.3	859.1	949.6	994.8	822.5	477.9	219.5
100°	973.3	863.0	973.3	1083.6	1111.2	1106.2	1099.6	1096.3	905.1	522.7	235.9
102.5°	1266.2	1171.8	1266.2	1360.7	1384.3	1297.9	1182.6	1125.0	931.1	543.3	252.4
105°	1639.7	1588.9	1639.7	1690.5	1703.1	1509.3	1250.9	1121.7	934.0	558.5	276.9
107.5°	1884.3	1896.6	1884.3	1872.0	1868.9	1598.6	1238.2	1058.0	892.5	561.4	313.0
110°	1977.6	2030.5	1977.6	1924.7	1911.5	1609.3	1206.3	1004.8	855.6	557.1	333.2



TEST NUMBER: P935970

CATALOG NUMBER: SQ4-FA-150U-075D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1985.9	2067.1	1985.9	1904.6	1884.4	1575.1	1162.7	956.5	823.5	557.3	357.7
115°	1933.3	2045.9	1933.3	1820.6	1792.4	1494.5	1097.2	898.6	786.6	562.4	394.3
117.5°	1821.6	1946.5	1821.6	1696.7	1665.4	1396.5	1038.0	858.7	763.5	572.9	429.9
120°	1731.6	1853.0	1731.6	1610.2	1579.9	1334.1	1006.6	842.8	755.6	581.3	450.6
122.5°	1644.0	1763.7	1644.0	1524.2	1494.3	1273.1	978.1	830.6	751.6	593.6	475.1
125°	1518.9	1629.3	1518.9	1408.7	1381.1	1193.1	942.6	817.3	748.2	610.0	506.4
127.5°	1406.6	1499.6	1406.6	1313.5	1290.3	1128.9	913.8	806.2	746.3	626.5	536.7
130°	1340.3	1426.2	1340.3	1254.3	1232.8	1089.2	897.7	801.9	747.5	638.6	556.9
132.5°	1280.1	1357.2	1280.1	1203.2	1183.9	1055.4	883.9	798.2	748.2	648.3	573.4
135°	1197.8	1264.2	1197.8	1131.5	1114.8	1007.1	863.6	791.8	747.5	658.9	592.5
137.5°	1131.8	1186.1	1131.8	1077.4	1063.9	972.8	851.4	790.7	752.1	674.9	616.9
140°	1086.4	1137.2	1086.4	1035.6	1022.9	944.3	839.4	787.0	752.9	684.7	633.5
142.5°	1048.9	1092.5	1048.9	1005.2	994.3	925.2	833.1	787.0	755.6	692.8	645.6
145°	992.6	1025.6	992.6	959.4	951.2	894.7	819.4	781.7	755.6	703.4	664.2
147.5°	949.3	976.7	949.3	921.9	915.0	870.6	811.4	781.7	760.8	719.0	687.6
150°	922.1	944.3	922.1	899.9	894.3	856.8	806.8	781.7	763.5	727.1	699.8
152.5°	898.9	915.6	898.9	882.1	877.9	845.9	803.1	781.7	765.3	732.5	707.8
155°	872.1	883.2	872.1	861.0	858.2	832.7	798.8	781.7	769.2	744.1	725.4
157.5°	850.9	858.7	850.9	843.1	841.2	821.3	794.9	781.7	773.1	755.8	742.9
160°	838.3	842.8	838.3	833.8	832.7	815.7	793.0	781.7	774.9	761.2	750.9
162.5°	830.0	834.3	830.0	825.8	824.7	810.4	791.3	781.7	776.8	766.8	759.4
165°	818.1	822.6	818.1	813.6	812.5	802.2	788.5	781.7	779.5	775.0	771.6
167.5°	809.6	811.4	809.6	807.7	807.2	800.5	791.5	787.0	785.1	781.3	778.5
170°	807.2	807.2	807.2	807.2	807.2	800.5	791.5	787.0	786.9	786.7	786.5
172.5°	800.9	799.3	800.9	802.5	802.9	797.6	790.6	787.0	787.0	787.0	787.0
175°	797.1	797.1	797.1	797.1	797.1	793.7	789.2	787.0	788.0	790.1	791.8
177.5°	793.6	791.8	793.6	795.5	796.0	793.4	789.9	788.1	789.0	790.6	791.8
180°	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8



TEST NUMBER: P935970
 CATALOG NUMBER: SQ4-FA-150U-075D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6
2.5°	913.5	908.3	908.3	899.8	896.4	893.8	889.6	876.8	873.4	870.0	875.1
5°	921.2	911.8	904.9	889.6	876.8	871.7	855.5	824.8	804.4	789.0	780.5
7.5°	922.9	911.0	898.1	874.2	843.6	829.9	780.5	724.3	708.9	695.3	686.8
10°	921.2	907.5	889.6	853.8	781.4	757.5	708.1	671.5	662.1	659.5	662.1
12.5°	915.2	902.4	877.6	818.0	716.6	700.4	671.5	650.2	648.5	652.7	675.7
15°	904.9	893.0	864.0	770.3	680.8	668.9	648.5	640.8	650.2	680.0	749.0
17.5°	894.7	881.1	845.3	723.4	653.6	645.0	630.6	645.9	698.7	738.8	761.8
20°	881.1	864.9	824.0	689.4	634.0	626.3	619.5	688.5	728.5	743.0	755.8
22.5°	864.9	847.8	795.0	665.5	613.5	607.6	611.8	712.4	728.5	738.8	749.8
25°	843.6	829.1	760.9	646.8	597.3	590.5	606.7	709.8	719.2	721.7	743.9
27.5°	824.0	805.2	725.1	629.7	577.7	575.2	611.0	698.7	705.5	708.1	732.0
30°	800.1	772.0	685.1	611.8	557.3	556.4	611.8	685.1	683.4	690.2	714.1
32.5°	775.4	722.6	639.9	589.7	537.7	536.8	605.9	664.6	662.9	672.3	690.2
35°	752.4	684.2	578.6	564.1	513.0	513.8	591.4	640.8	641.6	650.2	661.2
37.5°	728.5	651.0	511.3	536.0	489.1	489.1	571.8	618.6	616.9	619.5	634.8
40°	700.4	599.0	451.6	499.4	467.0	464.4	547.9	594.8	588.8	588.0	609.3
42.5°	670.6	542.0	407.3	450.8	441.4	438.0	519.0	565.8	554.7	557.3	584.6
45°	638.2	526.6	373.3	380.9	415.0	412.5	487.4	532.6	524.9	531.7	559.8
47.5°	605.9	495.9	362.2	316.2	386.9	386.0	452.5	500.2	495.9	502.8	532.6
50°	561.6	461.9	361.3	270.9	355.4	358.8	410.7	468.7	468.7	474.6	506.2
52.5°	504.5	420.1	328.1	245.4	318.7	329.0	374.1	441.4	443.1	449.1	477.2
55°	452.5	376.7	304.2	225.8	275.2	297.3	338.3	413.3	416.7	422.7	448.2
57.5°	404.8	313.6	299.1	202.8	235.2	256.5	306.8	386.0	387.7	392.9	417.6
60°	353.7	226.6	274.3	178.1	200.2	216.4	277.8	353.7	359.6	363.0	384.3
62.5°	295.6	164.4	248.8	161.0	183.2	186.6	253.9	323.0	330.7	333.2	346.0
65°	210.4	138.0	211.3	146.5	165.3	166.1	228.3	291.4	298.2	302.5	311.9
67.5°	142.3	112.5	161.0	132.9	151.7	152.5	203.6	254.7	264.1	267.5	273.5
70°	98.8	75.0	119.3	118.4	136.3	138.0	177.2	221.5	230.0	232.6	236.0
72.5°	72.4	60.5	98.8	106.5	120.1	121.8	150.0	184.0	192.6	195.1	196.8
75°	55.4	63.9	80.1	92.9	102.2	103.1	122.7	150.0	155.9	157.6	158.5
77.5°	44.3	59.6	58.8	75.0	83.5	81.8	96.3	115.9	121.0	121.0	121.0
80°	33.2	46.9	44.3	53.7	61.3	59.6	69.0	82.6	84.3	86.1	85.2
82.5°	24.7	29.8	29.8	34.1	40.9	39.2	46.0	53.7	53.7	53.7	55.4
85°	15.3	17.0	13.6	17.9	23.0	22.2	25.6	29.0	29.8	29.8	28.1
87.5°	9.4	7.7	4.3	6.8	10.2	10.2	11.9	12.8	11.9	11.9	11.9
90°	13.8	9.5	5.3	9.5	13.8	14.9	23.4	34.8	40.4	35.9	26.9
92.5°	93.5	57.3	21.2	57.3	93.5	102.6	144.2	199.6	227.4	199.3	143.1
95°	183.3	117.2	51.0	117.2	183.3	199.8	354.8	561.5	664.8	593.2	450.1
97.5°	204.9	146.5	88.2	146.5	204.9	219.5	477.9	822.5	994.8	949.6	859.1
100°	222.7	169.8	116.9	169.8	222.7	235.9	522.7	905.1	1096.3	1099.6	1106.2
102.5°	240.1	190.8	141.3	190.8	240.1	252.4	543.3	931.1	1125.0	1182.6	1297.9
105°	266.4	224.7	182.8	224.7	266.4	276.9	558.5	934.0	1121.7	1250.9	1509.3
107.5°	303.3	264.3	225.4	264.3	303.3	313.0	561.4	892.5	1058.0	1238.2	1598.6
110°	324.4	289.2	254.0	289.2	324.4	333.2	557.1	855.6	1004.8	1206.3	1609.3



TEST NUMBER: P935970

CATALOG NUMBER: SQ4-FA-150U-075D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	349.3	315.8	282.2	315.8	349.3	357.7	557.3	823.5	956.5	1162.7	1575.1
115°	386.6	355.6	324.7	355.6	386.6	394.3	562.4	786.6	898.6	1097.2	1494.5
117.5°	422.9	394.8	366.7	394.8	422.9	429.9	572.9	763.5	858.7	1038.0	1396.5
120°	444.0	417.6	391.1	417.6	444.0	450.6	581.3	755.6	842.8	1006.6	1334.1
122.5°	468.4	441.7	415.0	441.7	468.4	475.1	593.6	751.6	830.6	978.1	1273.1
125°	500.4	476.0	451.7	476.0	500.4	506.4	610.0	748.2	817.3	942.6	1193.1
127.5°	530.5	506.0	481.5	506.0	530.5	536.7	626.5	746.3	806.2	913.8	1128.9
130°	550.2	523.8	497.4	523.8	550.2	556.9	638.6	747.5	801.9	897.7	1089.2
132.5°	566.8	540.3	513.8	540.3	566.8	573.4	648.3	748.2	798.2	883.9	1055.4
135°	586.4	562.4	538.3	562.4	586.4	592.5	658.9	747.5	791.8	863.6	1007.1
137.5°	611.0	587.1	563.3	587.1	611.0	616.9	674.9	752.1	790.7	851.4	972.8
140°	628.0	606.0	584.0	606.0	628.0	633.5	684.7	752.9	787.0	839.4	944.3
142.5°	640.5	620.3	600.0	620.3	640.5	645.6	692.8	755.6	787.0	833.1	925.2
145°	659.8	642.2	624.4	642.2	659.8	664.2	703.4	755.6	781.7	819.4	894.7
147.5°	683.3	666.1	648.8	666.1	683.3	687.6	719.0	760.8	781.7	811.4	870.6
150°	695.9	680.4	664.8	680.4	695.9	699.8	727.1	763.5	781.7	806.8	856.8
152.5°	704.9	693.1	681.3	693.1	704.9	707.8	732.5	765.3	781.7	803.1	845.9
155°	723.2	714.5	705.7	714.5	723.2	725.4	744.1	769.2	781.7	798.8	832.7
157.5°	740.7	732.3	723.8	732.3	740.7	742.9	755.8	773.1	781.7	794.9	821.3
160°	749.2	742.6	736.0	742.6	749.2	750.9	761.2	774.9	781.7	793.0	815.7
162.5°	758.1	753.2	748.2	753.2	758.1	759.4	766.8	776.8	781.7	791.3	810.4
165°	770.5	765.9	761.5	765.9	770.5	771.6	775.0	779.5	781.7	788.5	802.2
167.5°	778.0	775.8	773.7	775.8	778.0	778.5	781.3	785.1	787.0	791.5	800.5
170°	786.0	783.8	781.7	783.8	786.0	786.5	786.7	786.9	787.0	791.5	800.5
172.5°	786.9	786.4	786.0	786.4	786.9	787.0	787.0	787.0	787.0	790.6	797.6
175°	791.8	791.8	791.8	791.8	791.8	791.8	790.1	788.0	787.0	789.2	793.7
177.5°	791.8	791.8	791.8	791.8	791.8	791.8	790.6	789.0	788.1	789.9	793.4
180°	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8



TEST NUMBER: P935970
 CATALOG NUMBER: SQ4-FA-150U-075D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6	900.6
2.5°	869.1	866.6	870.0	860.6	870.0	866.6	869.1	875.1	870.0	873.4	876.8
5°	762.6	758.4	744.7	733.7	744.7	758.4	762.6	780.5	789.0	804.4	824.8
7.5°	681.7	678.3	674.9	668.1	674.9	678.3	681.7	686.8	695.3	708.9	724.3
10°	663.8	664.6	669.8	668.9	669.8	664.6	663.8	662.1	659.5	662.1	671.5
12.5°	709.8	717.5	745.6	743.9	745.6	717.5	709.8	675.7	652.7	648.5	650.2
15°	762.6	765.2	771.1	772.0	771.1	765.2	762.6	749.0	680.0	650.2	640.8
17.5°	767.7	768.6	772.8	772.8	772.8	768.6	767.7	761.8	738.8	698.7	645.9
20°	763.5	765.2	773.7	775.4	773.7	765.2	763.5	755.8	743.0	728.5	688.5
22.5°	761.8	765.2	772.0	771.1	772.0	765.2	761.8	749.8	738.8	728.5	712.4
25°	753.3	753.3	754.1	755.0	754.1	753.3	753.3	743.9	721.7	719.2	709.8
27.5°	735.4	737.1	742.2	741.3	742.2	737.1	735.4	732.0	708.1	705.5	698.7
30°	719.2	717.5	713.2	709.8	713.2	717.5	719.2	714.1	690.2	683.4	685.1
32.5°	691.9	687.6	683.4	680.8	683.4	687.6	691.9	690.2	672.3	662.9	664.6
35°	659.5	660.4	659.5	657.0	659.5	660.4	659.5	661.2	650.2	641.6	640.8
37.5°	636.5	638.2	637.4	634.0	637.4	638.2	636.5	634.8	619.5	616.9	618.6
40°	612.7	613.5	612.7	610.1	612.7	613.5	612.7	609.3	588.0	588.8	594.8
42.5°	589.7	588.8	586.3	584.6	586.3	588.8	589.7	584.6	557.3	554.7	565.8
45°	563.3	564.1	559.0	556.4	559.0	564.1	563.3	559.8	531.7	524.9	532.6
47.5°	536.8	536.8	532.6	530.0	532.6	536.8	536.8	532.6	502.8	495.9	500.2
50°	508.7	507.9	501.9	501.1	501.9	507.9	508.7	506.2	474.6	468.7	468.7
52.5°	476.4	476.4	477.2	478.9	477.2	476.4	476.4	477.2	449.1	443.1	441.4
55°	448.2	449.1	455.1	456.8	455.1	449.1	448.2	448.2	422.7	416.7	413.3
57.5°	419.3	419.3	423.5	423.5	423.5	419.3	419.3	417.6	392.9	387.7	386.0
60°	386.0	387.7	391.2	390.3	391.2	387.7	386.0	384.3	363.0	359.6	353.7
62.5°	351.1	352.8	353.7	352.0	353.7	352.8	351.1	346.0	333.2	330.7	323.0
65°	314.5	316.2	317.0	315.3	317.0	316.2	314.5	311.9	302.5	298.2	291.4
67.5°	276.9	276.0	275.2	278.6	275.2	276.0	276.9	273.5	267.5	264.1	254.7
70°	238.6	238.6	237.7	239.4	237.7	238.6	238.6	236.0	232.6	230.0	221.5
72.5°	197.7	196.8	200.2	197.7	200.2	196.8	197.7	196.8	195.1	192.6	184.0
75°	157.6	159.3	157.6	160.2	157.6	159.3	157.6	158.5	157.6	155.9	150.0
77.5°	120.1	121.8	120.1	120.1	120.1	121.8	120.1	121.0	121.0	121.0	115.9
80°	85.2	84.3	84.3	83.5	84.3	84.3	85.2	85.2	86.1	84.3	82.6
82.5°	54.5	53.7	53.7	55.4	53.7	53.7	54.5	55.4	53.7	53.7	53.7
85°	29.8	30.7	29.0	29.0	29.0	30.7	29.8	28.1	29.8	29.8	29.0
87.5°	11.1	10.2	10.2	10.2	10.2	10.2	11.1	11.9	11.9	11.9	12.8
90°	20.2	20.2	20.2	20.2	20.2	20.2	20.2	26.9	35.9	40.4	34.8
92.5°	101.0	97.0	80.9	64.8	80.9	97.0	101.0	143.1	199.3	227.4	199.6
95°	342.8	330.6	281.9	233.3	281.9	330.6	342.8	450.1	593.2	664.8	561.5
97.5°	791.3	768.1	675.6	582.9	675.6	768.1	791.3	859.1	949.6	994.8	822.5
100°	1111.2	1083.6	973.3	863.0	973.3	1083.6	1111.2	1106.2	1099.6	1096.3	905.1
102.5°	1384.3	1360.7	1266.2	1171.8	1266.2	1360.7	1384.3	1297.9	1182.6	1125.0	931.1
105°	1703.1	1690.5	1639.7	1588.9	1639.7	1690.5	1703.1	1509.3	1250.9	1121.7	934.0
107.5°	1868.9	1872.0	1884.3	1896.6	1884.3	1872.0	1868.9	1598.6	1238.2	1058.0	892.5
110°	1911.5	1924.7	1977.6	2030.5	1977.6	1924.7	1911.5	1609.3	1206.3	1004.8	855.6



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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1884.4	1904.6	1985.9	2067.1	1985.9	1904.6	1884.4	1575.1	1162.7	956.5	823.5
115°	1792.4	1820.6	1933.3	2045.9	1933.3	1820.6	1792.4	1494.5	1097.2	898.6	786.6
117.5°	1665.4	1696.7	1821.6	1946.5	1821.6	1696.7	1665.4	1396.5	1038.0	858.7	763.5
120°	1579.9	1610.2	1731.6	1853.0	1731.6	1610.2	1579.9	1334.1	1006.6	842.8	755.6
122.5°	1494.3	1524.2	1644.0	1763.7	1644.0	1524.2	1494.3	1273.1	978.1	830.6	751.6
125°	1381.1	1408.7	1518.9	1629.3	1518.9	1408.7	1381.1	1193.1	942.6	817.3	748.2
127.5°	1290.3	1313.5	1406.6	1499.6	1406.6	1313.5	1290.3	1128.9	913.8	806.2	746.3
130°	1232.8	1254.3	1340.3	1426.2	1340.3	1254.3	1232.8	1089.2	897.7	801.9	747.5
132.5°	1183.9	1203.2	1280.1	1357.2	1280.1	1203.2	1183.9	1055.4	883.9	798.2	748.2
135°	1114.8	1131.5	1197.8	1264.2	1197.8	1131.5	1114.8	1007.1	863.6	791.8	747.5
137.5°	1063.9	1077.4	1131.8	1186.1	1131.8	1077.4	1063.9	972.8	851.4	790.7	752.1
140°	1022.9	1035.6	1086.4	1137.2	1086.4	1035.6	1022.9	944.3	839.4	787.0	752.9
142.5°	994.3	1005.2	1048.9	1092.5	1048.9	1005.2	994.3	925.2	833.1	787.0	755.6
145°	951.2	959.4	992.6	1025.6	992.6	959.4	951.2	894.7	819.4	781.7	755.6
147.5°	915.0	921.9	949.3	976.7	949.3	921.9	915.0	870.6	811.4	781.7	760.8
150°	894.3	899.9	922.1	944.3	922.1	899.9	894.3	856.8	806.8	781.7	763.5
152.5°	877.9	882.1	898.9	915.6	898.9	882.1	877.9	845.9	803.1	781.7	765.3
155°	858.2	861.0	872.1	883.2	872.1	861.0	858.2	832.7	798.8	781.7	769.2
157.5°	841.2	843.1	850.9	858.7	850.9	843.1	841.2	821.3	794.9	781.7	773.1
160°	832.7	833.8	838.3	842.8	838.3	833.8	832.7	815.7	793.0	781.7	774.9
162.5°	824.7	825.8	830.0	834.3	830.0	825.8	824.7	810.4	791.3	781.7	776.8
165°	812.5	813.6	818.1	822.6	818.1	813.6	812.5	802.2	788.5	781.7	779.5
167.5°	807.2	807.7	809.6	811.4	809.6	807.7	807.2	800.5	791.5	787.0	785.1
170°	807.2	807.2	807.2	807.2	807.2	807.2	807.2	800.5	791.5	787.0	786.9
172.5°	802.9	802.5	800.9	799.3	800.9	802.5	802.9	797.6	790.6	787.0	787.0
175°	797.1	797.1	797.1	797.1	797.1	797.1	797.1	793.7	789.2	787.0	788.0
177.5°	796.0	795.5	793.6	791.8	793.6	795.5	796.0	793.4	789.9	788.1	789.0
180°	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	900.6	900.6	900.6	900.6	900.6
2.5°	889.6	893.8	896.4	899.8	908.3
5°	855.5	871.7	876.8	889.6	904.9
7.5°	780.5	829.9	843.6	874.2	898.1
10°	708.1	757.5	781.4	853.8	889.6
12.5°	671.5	700.4	716.6	818.0	877.6
15°	648.5	668.9	680.8	770.3	864.0
17.5°	630.6	645.0	653.6	723.4	845.3
20°	619.5	626.3	634.0	689.4	824.0
22.5°	611.8	607.6	613.5	665.5	795.0
25°	606.7	590.5	597.3	646.8	760.9
27.5°	611.0	575.2	577.7	629.7	725.1
30°	611.8	556.4	557.3	611.8	685.1
32.5°	605.9	536.8	537.7	589.7	639.9
35°	591.4	513.8	513.0	564.1	578.6
37.5°	571.8	489.1	489.1	536.0	511.3
40°	547.9	464.4	467.0	499.4	451.6
42.5°	519.0	438.0	441.4	450.8	407.3
45°	487.4	412.5	415.0	380.9	373.3
47.5°	452.5	386.0	386.9	316.2	362.2
50°	410.7	358.8	355.4	270.9	361.3
52.5°	374.1	329.0	318.7	245.4	328.1
55°	338.3	297.3	275.2	225.8	304.2
57.5°	306.8	256.5	235.2	202.8	299.1
60°	277.8	216.4	200.2	178.1	274.3
62.5°	253.9	186.6	183.2	161.0	248.8
65°	228.3	166.1	165.3	146.5	211.3
67.5°	203.6	152.5	151.7	132.9	161.0
70°	177.2	138.0	136.3	118.4	119.3
72.5°	150.0	121.8	120.1	106.5	98.8
75°	122.7	103.1	102.2	92.9	80.1
77.5°	96.3	81.8	83.5	75.0	58.8
80°	69.0	59.6	61.3	53.7	44.3
82.5°	46.0	39.2	40.9	34.1	29.8
85°	25.6	22.2	23.0	17.9	13.6
87.5°	11.9	10.2	10.2	6.8	4.3
90°	23.4	14.9	13.8	9.5	5.3
92.5°	144.2	102.6	93.5	57.3	21.2
95°	354.8	199.8	183.3	117.2	51.0
97.5°	477.9	219.5	204.9	146.5	88.2
100°	522.7	235.9	222.7	169.8	116.9
102.5°	543.3	252.4	240.1	190.8	141.3
105°	558.5	276.9	266.4	224.7	182.8
107.5°	561.4	313.0	303.3	264.3	225.4
110°	557.1	333.2	324.4	289.2	254.0



TEST NUMBER: P935970

CATALOG NUMBER: SQ4-FA-150U-075D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	557.3	357.7	349.3	315.8	282.2
115°	562.4	394.3	386.6	355.6	324.7
117.5°	572.9	429.9	422.9	394.8	366.7
120°	581.3	450.6	444.0	417.6	391.1
122.5°	593.6	475.1	468.4	441.7	415.0
125°	610.0	506.4	500.4	476.0	451.7
127.5°	626.5	536.7	530.5	506.0	481.5
130°	638.6	556.9	550.2	523.8	497.4
132.5°	648.3	573.4	566.8	540.3	513.8
135°	658.9	592.5	586.4	562.4	538.3
137.5°	674.9	616.9	611.0	587.1	563.3
140°	684.7	633.5	628.0	606.0	584.0
142.5°	692.8	645.6	640.5	620.3	600.0
145°	703.4	664.2	659.8	642.2	624.4
147.5°	719.0	687.6	683.3	666.1	648.8
150°	727.1	699.8	695.9	680.4	664.8
152.5°	732.5	707.8	704.9	693.1	681.3
155°	744.1	725.4	723.2	714.5	705.7
157.5°	755.8	742.9	740.7	732.3	723.8
160°	761.2	750.9	749.2	742.6	736.0
162.5°	766.8	759.4	758.1	753.2	748.2
165°	775.0	771.6	770.5	765.9	761.5
167.5°	781.3	778.5	778.0	775.8	773.7
170°	786.7	786.5	786.0	783.8	781.7
172.5°	787.0	787.0	786.9	786.4	786.0
175°	790.1	791.8	791.8	791.8	791.8
177.5°	790.6	791.8	791.8	791.8	791.8
180°	791.8	791.8	791.8	791.8	791.8



TEST NUMBER: P935970
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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	10.13	10.85	11.23	11.95	13.46	12.93	13.64	14.03	14.74	16.26
	3H	10.60	11.24	11.71	12.34	13.88	14.25	14.89	15.36	16.00	17.53
	4H	10.78	11.39	11.90	12.50	14.04	14.68	15.29	15.80	16.40	17.94
	6H	10.89	11.45	12.02	12.56	14.11	14.95	15.51	16.08	16.62	18.17
	8H	10.89	11.42	12.02	12.55	14.09	15.02	15.55	16.15	16.68	18.22
	12H	10.86	11.36	11.99	12.48	14.05	15.05	15.55	16.18	16.67	18.24
4H	2H	11.14	11.75	12.27	12.85	14.39	13.32	13.93	14.45	15.04	16.57
	3H	12.15	12.66	13.28	13.79	15.34	14.80	15.31	15.94	16.44	17.99
	4H	12.42	12.89	13.56	14.01	15.58	15.32	15.78	16.46	16.91	18.48
	6H	12.54	12.94	13.68	14.08	15.64	15.67	16.06	16.81	17.21	18.77
	8H	12.54	12.91	13.68	14.05	15.63	15.76	16.14	16.91	17.28	18.85
	12H	12.50	12.84	13.66	13.99	15.57	15.81	16.15	16.97	17.30	18.88
8H	4H	12.86	13.23	14.00	14.37	15.95	15.43	15.80	16.58	16.94	18.52
	6H	13.11	13.42	14.28	14.60	16.17	15.85	16.16	17.02	17.34	18.92
	8H	13.15	13.42	14.32	14.58	16.18	16.00	16.27	17.17	17.43	19.02
	12H	13.13	13.37	14.30	14.52	16.15	16.08	16.32	17.26	17.48	19.11
12H	4H	12.85	13.19	14.02	14.34	15.93	15.39	15.73	16.55	16.88	18.46
	6H	13.17	13.44	14.34	14.60	16.19	15.85	16.12	17.02	17.28	18.87
	8H	13.23	13.47	14.40	14.62	16.25	16.00	16.23	17.17	17.39	19.02