

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: P933898

Luminaire Tested: SQ4-FA-025U-050D-B35-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P933898
REPORT IS A COMBINATION OF REPORTS P933674 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-025U-050D-B35-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

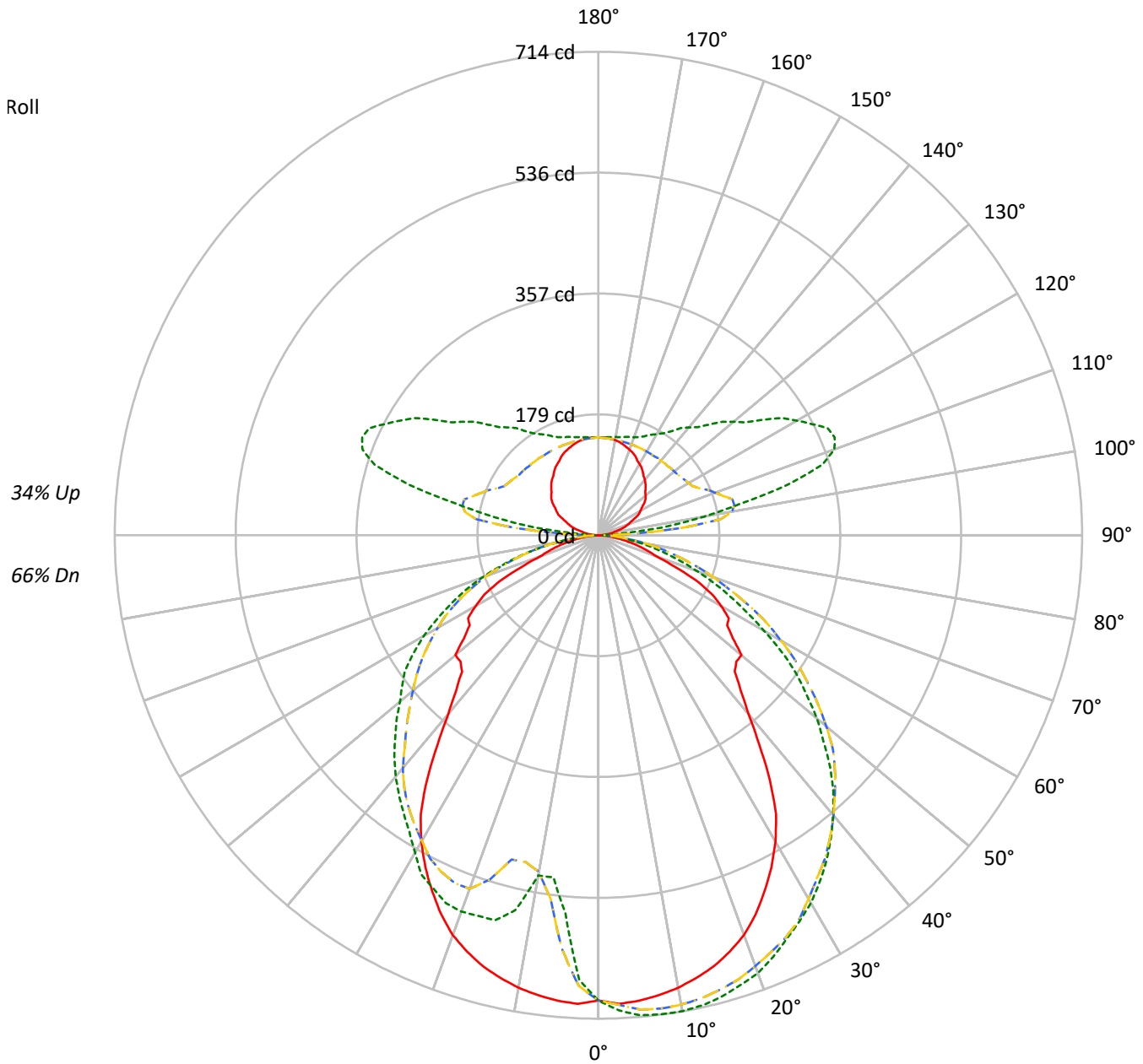
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2719.0 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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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				20	
RC	80				70				50				30				10				0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66				66
1	101	97	93	89	95	91	88	85	81	78	76	71	69	68	62	61	60	55				55
2	92	85	78	73	87	80	74	70	71	67	63	63	59	56	55	52	50	46				46
3	84	75	67	61	79	70	64	58	63	57	53	55	51	48	49	46	43	39				39
4	77	66	58	52	72	62	55	49	56	50	45	49	45	41	43	40	37	34				34
5	71	59	50	44	66	56	48	43	50	44	39	44	39	35	39	35	32	29				29
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	35	31	28	26				26
7	60	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25	23				23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	20				20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18				18
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	16				16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6374	6374	6374	6374
5°	6414	6434	6414	5059
10°	6365	6338	6365	4532
15°	6288	6201	6288	5178
20°	6149	6038	6149	5189
25°	5873	5801	5873	5079
30°	5519	5604	5519	4838
35°	4913	5354	4913	4572
40°	4086	5062	4086	4371
45°	3644	4718	3644	4140
50°	3863	4308	3863	3909
55°	3624	3868	3624	3777
60°	3723	3285	3723	3459
65°	3357	2715	3357	3034
70°	2310	2164	2310	2545
75°	2000	1599	2000	1916
80°	1582	1058	1582	1152
85°	861	560	861	476

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5596 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	2.3
10°-20°	176.0	6.5
20°-30°	272.1	10.0
30°-40°	324.9	11.9
40°-50°	326.8	12.0
50°-60°	284.3	10.5
60°-70°	201.6	7.4
70°-80°	106.7	3.9
80°-90°	27.1	1.0
90°-100°	70.5	2.6
100°-110°	185.3	6.8
110°-120°	192.2	7.1
120°-130°	154.1	5.7
130°-140°	120.9	4.4
140°-150°	92.8	3.4
150°-160°	66.8	2.5
160°-170°	40.9	1.5
170°-180°	13.8	0.5
0°-30°	510.2	18.8
0°-40°	835.1	30.7
0°-60°	1446.2	53.2
0°-90°	1781.6	65.5
90°-120°	448.0	16.5
90°-150°	815.9	30.0
90°-180°	937.0	34.5
0°-180°	2719.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	687	687	687	687	687	
5°	690	712	690	560	690	65
15°	659	705	659	589	659	185
25°	580	658	580	576	580	266
35°	441	587	441	501	441	273
45°	285	484	285	424	285	228
55°	232	357	232	348	232	213
65°	161	215	161	240	161	154
75°	61	102	61	122	61	64
85°	10	26	10	22	10	14
90°	1	4	1	4	1	1
95°	9	43	9	43	9	10
105°	33	290	33	290	33	35
115°	59	374	59	374	59	59
125°	82	298	82	298	82	73
135°	98	231	98	231	98	76
145°	114	187	114	187	114	71
155°	129	161	129	161	129	59
165°	139	150	139	150	139	39
175°	145	146	145	146	145	14
180°	145	145	145	145	145	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9
2.5°	692.7	692.7	696.6	698.0	698.0	696.0	694.1	696.0	701.8	703.8	703.1
5°	690.1	695.4	702.5	703.8	705.1	704.5	703.1	704.5	711.0	712.2	712.9
7.5°	685.0	694.7	703.8	705.7	707.7	705.7	705.1	706.4	712.9	714.2	714.2
10°	678.5	692.1	702.5	703.8	705.7	703.8	703.8	706.4	712.9	714.2	714.8
12.5°	669.4	688.2	698.0	699.2	701.8	701.2	700.6	703.1	709.7	711.0	711.0
15°	658.9	681.0	690.1	691.5	696.0	694.7	694.7	697.3	704.5	706.4	705.7
17.5°	644.7	672.0	682.4	684.3	687.6	686.9	687.6	690.1	696.6	698.0	698.6
20°	628.4	659.6	672.0	673.9	677.1	677.1	677.1	680.4	686.9	689.5	689.5
22.5°	606.3	646.6	659.6	661.0	664.8	664.8	666.1	670.6	676.5	677.1	677.1
25°	580.3	632.3	643.3	647.3	651.2	653.1	655.0	657.7	659.6	658.9	659.6
27.5°	553.0	614.2	628.4	631.0	636.2	638.2	640.8	641.4	642.1	644.0	642.7
30°	522.5	588.8	610.2	612.8	621.2	622.6	620.0	621.2	624.5	625.8	627.1
32.5°	488.1	551.1	591.4	597.2	605.0	601.2	600.5	602.4	607.7	607.7	608.9
35°	441.3	521.8	573.8	579.1	584.9	580.3	583.0	583.5	586.8	588.8	588.1
37.5°	389.9	496.5	555.6	559.5	564.1	558.2	562.1	564.1	566.7	565.4	565.4
40°	344.4	456.9	534.2	536.8	540.7	536.1	540.0	541.4	542.6	541.4	540.7
42.5°	310.7	413.3	511.4	514.7	512.1	515.3	516.7	519.3	517.3	514.7	514.7
45°	284.6	401.7	486.7	490.6	486.7	492.0	493.9	493.9	488.1	486.7	486.1
47.5°	276.2	378.2	462.0	462.0	460.1	466.6	469.9	465.3	459.5	457.5	457.5
50°	275.6	352.2	428.3	425.7	434.8	442.5	439.3	434.8	430.2	423.1	423.1
52.5°	250.2	320.4	384.7	394.5	408.7	413.3	408.1	403.6	395.7	392.5	389.9
55°	232.0	287.2	345.1	364.5	379.6	385.4	375.6	371.0	359.4	357.5	356.1
57.5°	228.1	239.1	308.7	333.3	351.6	351.0	345.1	336.6	326.8	324.9	324.3
60°	209.3	172.9	269.7	298.9	317.7	315.8	310.7	302.8	293.7	292.4	291.2
62.5°	189.7	125.4	225.5	258.6	285.3	284.6	280.1	268.4	261.9	258.6	256.0
65°	161.1	105.2	160.6	215.1	253.5	254.8	245.0	236.5	229.4	225.5	224.8
67.5°	122.9	85.8	108.5	179.4	222.9	221.6	209.3	205.3	196.2	194.3	190.4
70°	91.0	57.2	75.4	145.5	193.0	189.7	180.0	175.5	167.1	162.5	159.9
72.5°	75.4	46.1	55.2	113.1	162.5	158.5	150.1	145.0	137.8	133.9	131.3
75°	61.0	48.7	42.2	83.8	131.9	129.4	121.5	116.3	110.5	105.2	105.9
77.5°	44.9	45.4	33.8	61.7	104.7	100.8	96.2	89.7	87.1	81.9	81.9
80°	33.8	35.8	25.4	42.2	75.4	75.4	71.5	67.0	62.4	59.8	59.8
82.5°	22.8	22.8	18.8	26.6	51.4	49.4	46.8	45.4	42.9	41.6	41.6
85°	10.4	13.0	11.7	16.3	27.9	29.3	29.3	27.9	27.3	26.0	26.6
87.5°	3.3	5.8	7.2	9.1	14.3	14.9	15.6	15.6	15.6	16.3	16.3
90°	1.0	1.7	2.5	2.7	4.3	6.3	7.4	6.6	4.9	3.7	3.7
92.5°	3.9	10.5	17.1	18.7	26.4	36.5	41.6	36.4	26.2	18.4	17.6
95°	9.3	21.4	33.5	36.5	64.8	102.5	121.4	108.3	82.2	62.6	60.4
97.5°	16.1	26.7	37.4	40.1	87.3	150.2	181.7	173.5	156.9	144.5	140.2
100°	21.3	31.0	40.7	43.1	95.4	165.3	200.2	200.8	202.0	202.9	197.9
102.5°	25.8	34.8	43.9	46.1	99.2	170.1	205.4	216.0	237.0	252.8	248.5
105°	33.4	41.1	48.6	50.6	102.0	170.5	204.8	228.5	275.7	311.0	308.7
107.5°	41.2	48.3	55.4	57.2	102.5	163.0	193.2	226.2	292.0	341.4	342.0
110°	46.4	52.8	59.2	60.9	101.7	156.3	183.5	220.4	293.9	349.1	351.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	51.6	57.7	63.8	65.3	101.7	150.4	174.7	212.4	287.7	344.2	347.9
115°	59.3	64.9	70.5	72.0	102.7	143.7	164.1	200.4	273.0	327.3	332.5
117.5°	67.0	72.1	77.2	78.5	104.7	139.4	156.9	189.6	255.0	304.2	309.9
120°	71.4	76.3	81.1	82.3	106.1	138.0	153.9	183.8	243.7	288.6	294.1
122.5°	75.8	80.6	85.5	86.7	108.3	137.2	151.6	178.6	232.5	272.9	278.3
125°	82.5	86.9	91.4	92.5	111.4	136.6	149.2	172.1	217.9	252.2	257.3
127.5°	87.9	92.4	96.9	98.1	114.4	136.2	147.2	166.9	206.2	235.7	239.9
130°	90.8	95.6	100.5	101.7	116.7	136.5	146.4	164.0	198.9	225.2	229.1
132.5°	93.9	98.7	103.6	104.7	118.4	136.6	145.7	161.4	192.7	216.3	219.8
135°	98.4	102.7	107.2	108.2	120.3	136.5	144.6	157.7	183.9	203.6	206.6
137.5°	102.9	107.3	111.6	112.7	123.3	137.3	144.4	155.4	177.6	194.3	196.8
140°	106.7	110.7	114.7	115.7	125.0	137.5	143.7	153.3	172.5	186.8	189.1
142.5°	109.6	113.3	117.0	117.9	126.6	138.0	143.7	152.1	169.0	181.6	183.6
145°	114.1	117.2	120.5	121.3	128.5	138.0	142.7	149.6	163.4	173.7	175.3
147.5°	118.5	121.6	124.8	125.6	131.3	139.0	142.7	148.2	159.0	167.2	168.4
150°	121.4	124.2	127.1	127.8	132.8	139.4	142.7	147.3	156.5	163.4	164.3
152.5°	124.4	126.6	128.7	129.3	133.7	139.7	142.7	146.6	154.5	160.4	161.1
155°	128.9	130.4	132.1	132.5	135.9	140.4	142.7	145.8	152.1	156.8	157.3
157.5°	132.2	133.7	135.3	135.7	138.0	141.2	142.7	145.2	150.0	153.6	154.0
160°	134.4	135.6	136.8	137.1	139.0	141.5	142.7	144.8	148.9	152.0	152.2
162.5°	136.6	137.5	138.5	138.7	140.0	141.9	142.7	144.5	148.0	150.6	150.8
165°	139.1	139.8	140.7	140.9	141.5	142.3	142.7	144.0	146.5	148.4	148.5
167.5°	141.3	141.7	142.1	142.2	142.6	143.3	143.7	144.5	146.1	147.4	147.5
170°	142.7	143.1	143.5	143.6	143.6	143.7	143.7	144.5	146.1	147.4	147.4
172.5°	143.5	143.6	143.7	143.7	143.7	143.7	143.7	144.4	145.6	146.6	146.5
175°	144.6	144.6	144.6	144.6	144.3	143.9	143.7	144.1	145.0	145.5	145.5
177.5°	144.6	144.6	144.6	144.6	144.4	144.1	143.9	144.2	144.9	145.4	145.3
180°	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9
2.5°	704.5	702.5	704.5	703.1	703.8	701.8	696.0	694.1	696.0	698.0	698.0
5°	712.9	711.6	712.9	712.9	712.2	711.0	704.5	703.1	704.5	705.1	703.8
7.5°	715.5	713.6	715.5	714.2	714.2	712.9	706.4	705.1	705.7	707.7	705.7
10°	715.5	713.6	715.5	714.8	714.2	712.9	706.4	703.8	703.8	705.7	703.8
12.5°	712.2	711.0	712.2	711.0	711.0	709.7	703.1	700.6	701.2	701.8	699.2
15°	707.1	705.1	707.1	705.7	706.4	704.5	697.3	694.7	694.7	696.0	691.5
17.5°	699.2	696.6	699.2	698.6	698.0	696.6	690.1	687.6	686.9	687.6	684.3
20°	690.1	688.2	690.1	689.5	689.5	686.9	680.4	677.1	677.1	677.1	673.9
22.5°	675.9	673.9	675.9	677.1	677.1	676.5	670.6	666.1	664.8	664.8	661.0
25°	659.6	657.7	659.6	659.6	658.9	659.6	657.7	655.0	653.1	651.2	647.3
27.5°	644.0	642.7	644.0	642.7	644.0	642.1	641.4	640.8	638.2	636.2	631.0
30°	628.4	627.1	628.4	627.1	625.8	624.5	621.2	620.0	622.6	621.2	612.8
32.5°	608.9	607.7	608.9	608.9	607.7	607.7	602.4	600.5	601.2	605.0	597.2
35°	588.8	586.8	588.8	588.1	588.8	586.8	583.5	583.0	580.3	584.9	579.1
37.5°	565.4	563.5	565.4	565.4	565.4	566.7	564.1	562.1	558.2	564.1	559.5
40°	541.4	538.8	541.4	540.7	541.4	542.6	541.4	540.0	536.1	540.7	536.8
42.5°	514.1	513.4	514.1	514.7	514.7	517.3	519.3	516.7	515.3	512.1	514.7
45°	484.8	483.5	484.8	486.1	486.7	488.1	493.9	493.9	492.0	486.7	490.6
47.5°	453.6	450.4	453.6	457.5	457.5	459.5	465.3	469.9	466.6	460.1	462.0
50°	420.4	421.1	420.4	423.1	423.1	430.2	434.8	439.3	442.5	434.8	425.7
52.5°	388.0	387.3	388.0	389.9	392.5	395.7	403.6	408.1	413.3	408.7	394.5
55°	355.4	356.8	355.4	356.1	357.5	359.4	371.0	375.6	385.4	379.6	364.5
57.5°	323.0	321.0	323.0	324.3	324.9	326.8	336.6	345.1	351.0	351.6	333.3
60°	285.3	282.7	285.3	291.2	292.4	293.7	302.8	310.7	315.8	317.7	298.9
62.5°	252.1	247.6	252.1	256.0	258.6	261.9	268.4	280.1	284.6	285.3	258.6
65°	217.1	215.1	217.1	224.8	225.5	229.4	236.5	245.0	254.8	253.5	215.1
67.5°	185.2	185.2	185.2	190.4	194.3	196.2	205.3	209.3	221.6	222.9	179.4
70°	156.0	155.3	156.0	159.9	162.5	167.1	175.5	180.0	189.7	193.0	145.5
72.5°	128.0	127.3	128.0	131.3	133.9	137.8	145.0	150.1	158.5	162.5	113.1
75°	103.3	102.0	103.3	105.9	105.2	110.5	116.3	121.5	129.4	131.9	83.8
77.5°	79.3	79.3	79.3	81.9	81.9	87.1	89.7	96.2	100.8	104.7	61.7
80°	59.1	58.5	59.1	59.8	59.8	62.4	67.0	71.5	75.4	75.4	42.2
82.5°	41.6	40.3	41.6	41.6	41.6	42.9	45.4	46.8	49.4	51.4	26.6
85°	26.0	26.0	26.0	26.6	26.0	27.3	27.9	29.3	29.3	27.9	16.3
87.5°	16.9	16.3	16.9	16.3	16.3	15.6	15.6	15.6	14.9	14.3	9.1
90°	3.7	3.7	3.7	3.7	3.7	4.9	6.6	7.4	6.3	4.3	2.7
92.5°	14.7	11.8	14.7	17.6	18.4	26.2	36.4	41.6	36.5	26.4	18.7
95°	51.6	42.6	51.6	60.4	62.6	82.2	108.3	121.4	102.5	64.8	36.5
97.5°	123.4	106.5	123.4	140.2	144.5	156.9	173.5	181.7	150.2	87.3	40.1
100°	177.8	157.7	177.8	197.9	202.9	202.0	200.8	200.2	165.3	95.4	43.1
102.5°	231.2	214.0	231.2	248.5	252.8	237.0	216.0	205.4	170.1	99.2	46.1
105°	299.5	290.2	299.5	308.7	311.0	275.7	228.5	204.8	170.5	102.0	50.6
107.5°	344.2	346.4	344.2	342.0	341.4	292.0	226.2	193.2	163.0	102.5	57.2
110°	361.1	370.8	361.1	351.6	349.1	293.9	220.4	183.5	156.3	101.7	60.9



TEST NUMBER: P933898

CATALOG NUMBER: SQ4-FA-025U-050D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	362.7	377.5	362.7	347.9	344.2	287.7	212.4	174.7	150.4	101.7	65.3
115°	353.1	373.6	353.1	332.5	327.3	273.0	200.4	164.1	143.7	102.7	72.0
117.5°	332.7	355.5	332.7	309.9	304.2	255.0	189.6	156.9	139.4	104.7	78.5
120°	316.3	338.4	316.3	294.1	288.6	243.7	183.8	153.9	138.0	106.1	82.3
122.5°	300.2	322.1	300.2	278.3	272.9	232.5	178.6	151.6	137.2	108.3	86.7
125°	277.4	297.6	277.4	257.3	252.2	217.9	172.1	149.2	136.6	111.4	92.5
127.5°	256.9	273.8	256.9	239.9	235.7	206.2	166.9	147.2	136.2	114.4	98.1
130°	244.8	260.5	244.8	229.1	225.2	198.9	164.0	146.4	136.5	116.7	101.7
132.5°	233.8	247.9	233.8	219.8	216.3	192.7	161.4	145.7	136.6	118.4	104.7
135°	218.8	230.9	218.8	206.6	203.6	183.9	157.7	144.6	136.5	120.3	108.2
137.5°	206.7	216.7	206.7	196.8	194.3	177.6	155.4	144.4	137.3	123.3	112.7
140°	198.4	207.7	198.4	189.1	186.8	172.5	153.3	143.7	137.5	125.0	115.7
142.5°	191.6	199.5	191.6	183.6	181.6	169.0	152.1	143.7	138.0	126.6	117.9
145°	181.3	187.3	181.3	175.3	173.7	163.4	149.6	142.7	138.0	128.5	121.3
147.5°	173.4	178.4	173.4	168.4	167.2	159.0	148.2	142.7	139.0	131.3	125.6
150°	168.4	172.5	168.4	164.3	163.4	156.5	147.3	142.7	139.4	132.8	127.8
152.5°	164.1	167.2	164.1	161.1	160.4	154.5	146.6	142.7	139.7	133.7	129.3
155°	159.3	161.3	159.3	157.3	156.8	152.1	145.8	142.7	140.4	135.9	132.5
157.5°	155.4	156.9	155.4	154.0	153.6	150.0	145.2	142.7	141.2	138.0	135.7
160°	153.1	153.9	153.1	152.2	152.0	148.9	144.8	142.7	141.5	139.0	137.1
162.5°	151.6	152.3	151.6	150.8	150.6	148.0	144.5	142.7	141.9	140.0	138.7
165°	149.4	150.2	149.4	148.5	148.4	146.5	144.0	142.7	142.3	141.5	140.9
167.5°	147.8	148.2	147.8	147.5	147.4	146.1	144.5	143.7	143.3	142.6	142.2
170°	147.4	147.4	147.4	147.4	147.4	146.1	144.5	143.7	143.7	143.6	143.6
172.5°	146.2	145.9	146.2	146.5	146.6	145.6	144.4	143.7	143.7	143.7	143.7
175°	145.5	145.5	145.5	145.5	145.5	145.0	144.1	143.7	143.9	144.3	144.6
177.5°	145.0	144.6	145.0	145.3	145.4	144.9	144.2	143.9	144.1	144.4	144.6
180°	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6



TEST NUMBER: P933898

CATALOG NUMBER: SQ4-FA-025U-050D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9
2.5°	696.6	692.7	692.7	686.2	683.6	681.7	678.5	668.7	666.1	663.5	667.4
5°	702.5	695.4	690.1	678.5	668.7	664.8	652.4	629.1	613.5	601.7	595.3
7.5°	703.8	694.7	685.0	666.8	643.3	633.0	595.3	552.4	540.7	530.3	523.7
10°	702.5	692.1	678.5	651.2	595.9	577.7	540.0	512.1	504.9	503.0	504.9
12.5°	698.0	688.2	669.4	623.8	546.5	534.2	512.1	495.8	494.6	497.8	515.3
15°	690.1	681.0	658.9	587.5	519.3	510.2	494.6	488.7	495.8	518.6	571.2
17.5°	682.4	672.0	644.7	551.7	498.5	492.0	480.9	492.6	532.9	563.5	581.0
20°	672.0	659.6	628.4	525.8	483.5	477.6	472.5	525.1	555.6	566.7	576.5
22.5°	659.6	646.6	606.3	507.6	467.9	463.4	466.6	543.3	555.6	563.5	571.9
25°	643.3	632.3	580.3	493.2	455.5	450.4	462.7	541.4	548.5	550.4	567.3
27.5°	628.4	614.2	553.0	480.2	440.6	438.7	466.0	532.9	538.1	540.0	558.2
30°	610.2	588.8	522.5	466.6	425.0	424.3	466.6	522.5	521.2	526.4	544.6
32.5°	591.4	551.1	488.1	449.7	410.1	409.4	462.0	506.9	505.6	512.7	526.4
35°	573.8	521.8	441.3	430.2	391.2	391.9	451.0	488.7	489.3	495.8	504.3
37.5°	555.6	496.5	389.9	408.7	373.1	373.1	436.0	471.8	470.5	472.5	484.1
40°	534.2	456.9	344.4	380.8	356.1	354.2	417.8	453.6	449.0	448.5	464.6
42.5°	511.4	413.3	310.7	343.8	336.6	334.0	395.7	431.5	423.1	425.0	445.8
45°	486.7	401.7	284.6	290.5	316.5	314.5	371.7	406.2	400.3	405.5	426.9
47.5°	462.0	378.2	276.2	241.1	295.1	294.4	345.1	381.5	378.2	383.4	406.2
50°	428.3	352.2	275.6	206.7	271.0	273.5	313.3	357.5	357.5	362.0	386.0
52.5°	384.7	320.4	250.2	187.1	243.0	250.9	285.3	336.6	337.9	342.4	364.0
55°	345.1	287.2	232.0	172.2	209.9	226.8	257.9	315.2	317.7	322.3	341.9
57.5°	308.7	239.1	228.1	154.7	179.4	195.6	233.9	294.4	295.6	299.6	318.4
60°	269.7	172.9	209.3	135.9	152.7	165.0	211.8	269.7	274.2	276.8	293.1
62.5°	225.5	125.4	189.7	122.9	139.7	142.3	193.7	246.3	252.1	254.1	263.9
65°	160.6	105.2	161.1	111.8	126.1	126.7	174.1	222.3	227.4	230.7	237.9
67.5°	108.5	85.8	122.9	101.4	115.7	116.3	155.3	194.3	201.5	204.1	208.6
70°	75.4	57.2	91.0	90.3	104.0	105.2	135.2	169.0	175.5	177.4	180.0
72.5°	55.2	46.1	75.4	81.2	91.7	92.9	114.3	140.4	146.9	148.8	150.1
75°	42.2	48.7	61.0	70.8	78.0	78.6	93.6	114.3	118.9	120.3	120.8
77.5°	33.8	45.4	44.9	57.2	63.7	62.4	73.5	88.4	92.2	92.2	92.2
80°	25.4	35.8	33.8	41.0	46.8	45.4	52.6	63.1	64.3	65.6	65.0
82.5°	18.8	22.8	22.8	26.0	31.2	29.9	35.1	41.0	41.0	41.0	42.2
85°	11.7	13.0	10.4	13.7	17.5	16.9	19.5	22.1	22.8	22.8	21.4
87.5°	7.2	5.8	3.3	5.2	7.8	7.8	9.1	9.8	9.1	9.1	9.1
90°	2.5	1.7	1.0	1.7	2.5	2.7	4.3	6.3	7.4	6.6	4.9
92.5°	17.1	10.5	3.9	10.5	17.1	18.7	26.4	36.5	41.6	36.4	26.2
95°	33.5	21.4	9.3	21.4	33.5	36.5	64.8	102.5	121.4	108.3	82.2
97.5°	37.4	26.7	16.1	26.7	37.4	40.1	87.3	150.2	181.7	173.5	156.9
100°	40.7	31.0	21.3	31.0	40.7	43.1	95.4	165.3	200.2	200.8	202.0
102.5°	43.9	34.8	25.8	34.8	43.9	46.1	99.2	170.1	205.4	216.0	237.0
105°	48.6	41.1	33.4	41.1	48.6	50.6	102.0	170.5	204.8	228.5	275.7
107.5°	55.4	48.3	41.2	48.3	55.4	57.2	102.5	163.0	193.2	226.2	292.0
110°	59.2	52.8	46.4	52.8	59.2	60.9	101.7	156.3	183.5	220.4	293.9



TEST NUMBER: P933898

CATALOG NUMBER: SQ4-FA-025U-050D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	63.8	57.7	51.6	57.7	63.8	65.3	101.7	150.4	174.7	212.4	287.7
115°	70.5	64.9	59.3	64.9	70.5	72.0	102.7	143.7	164.1	200.4	273.0
117.5°	77.2	72.1	67.0	72.1	77.2	78.5	104.7	139.4	156.9	189.6	255.0
120°	81.1	76.3	71.4	76.3	81.1	82.3	106.1	138.0	153.9	183.8	243.7
122.5°	85.5	80.6	75.8	80.6	85.5	86.7	108.3	137.2	151.6	178.6	232.5
125°	91.4	86.9	82.5	86.9	91.4	92.5	111.4	136.6	149.2	172.1	217.9
127.5°	96.9	92.4	87.9	92.4	96.9	98.1	114.4	136.2	147.2	166.9	206.2
130°	100.5	95.6	90.8	95.6	100.5	101.7	116.7	136.5	146.4	164.0	198.9
132.5°	103.6	98.7	93.9	98.7	103.6	104.7	118.4	136.6	145.7	161.4	192.7
135°	107.2	102.7	98.4	102.7	107.2	108.2	120.3	136.5	144.6	157.7	183.9
137.5°	111.6	107.3	102.9	107.3	111.6	112.7	123.3	137.3	144.4	155.4	177.6
140°	114.7	110.7	106.7	110.7	114.7	115.7	125.0	137.5	143.7	153.3	172.5
142.5°	117.0	113.3	109.6	113.3	117.0	117.9	126.6	138.0	143.7	152.1	169.0
145°	120.5	117.2	114.1	117.2	120.5	121.3	128.5	138.0	142.7	149.6	163.4
147.5°	124.8	121.6	118.5	121.6	124.8	125.6	131.3	139.0	142.7	148.2	159.0
150°	127.1	124.2	121.4	124.2	127.1	127.8	132.8	139.4	142.7	147.3	156.5
152.5°	128.7	126.6	124.4	126.6	128.7	129.3	133.7	139.7	142.7	146.6	154.5
155°	132.1	130.4	128.9	130.4	132.1	132.5	135.9	140.4	142.7	145.8	152.1
157.5°	135.3	133.7	132.2	133.7	135.3	135.7	138.0	141.2	142.7	145.2	150.0
160°	136.8	135.6	134.4	135.6	136.8	137.1	139.0	141.5	142.7	144.8	148.9
162.5°	138.5	137.5	136.6	137.5	138.5	138.7	140.0	141.9	142.7	144.5	148.0
165°	140.7	139.8	139.1	139.8	140.7	140.9	141.5	142.3	142.7	144.0	146.5
167.5°	142.1	141.7	141.3	141.7	142.1	142.2	142.6	143.3	143.7	144.5	146.1
170°	143.5	143.1	142.7	143.1	143.5	143.6	143.6	143.7	143.7	144.5	146.1
172.5°	143.7	143.6	143.5	143.6	143.7	143.7	143.7	143.7	143.7	144.4	145.6
175°	144.6	144.6	144.6	144.6	144.6	144.6	144.3	143.9	143.7	144.1	145.0
177.5°	144.6	144.6	144.6	144.6	144.6	144.6	144.4	144.1	143.9	144.2	144.9
180°	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6



TEST NUMBER: P933898

CATALOG NUMBER: SQ4-FA-025U-050D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9	686.9
2.5°	662.9	661.0	663.5	656.4	663.5	661.0	662.9	667.4	663.5	666.1	668.7
5°	581.6	578.4	568.0	559.5	568.0	578.4	581.6	595.3	601.7	613.5	629.1
7.5°	519.9	517.3	514.7	509.5	514.7	517.3	519.9	523.7	530.3	540.7	552.4
10°	506.2	506.9	510.8	510.2	510.8	506.9	506.2	504.9	503.0	504.9	512.1
12.5°	541.4	547.2	568.6	567.3	568.6	547.2	541.4	515.3	497.8	494.6	495.8
15°	581.6	583.5	588.1	588.8	588.1	583.5	581.6	571.2	518.6	495.8	488.7
17.5°	585.6	586.1	589.4	589.4	589.4	586.1	585.6	581.0	563.5	532.9	492.6
20°	582.3	583.5	590.1	591.4	590.1	583.5	582.3	576.5	566.7	555.6	525.1
22.5°	581.0	583.5	588.8	588.1	588.8	583.5	581.0	571.9	563.5	555.6	543.3
25°	574.5	574.5	575.1	575.8	575.1	574.5	574.5	567.3	550.4	548.5	541.4
27.5°	560.9	562.1	566.0	565.4	566.0	562.1	560.9	558.2	540.0	538.1	532.9
30°	548.5	547.2	543.9	541.4	543.9	547.2	548.5	544.6	526.4	521.2	522.5
32.5°	527.7	524.4	521.2	519.3	521.2	524.4	527.7	526.4	512.7	505.6	506.9
35°	503.0	503.7	503.0	501.1	503.0	503.7	503.0	504.3	495.8	489.3	488.7
37.5°	485.5	486.7	486.1	483.5	486.1	486.7	485.5	484.1	472.5	470.5	471.8
40°	467.3	467.9	467.3	465.3	467.3	467.9	467.3	464.6	448.5	449.0	453.6
42.5°	449.7	449.0	447.1	445.8	447.1	449.0	449.7	445.8	425.0	423.1	431.5
45°	429.6	430.2	426.3	424.3	426.3	430.2	429.6	426.9	405.5	400.3	406.2
47.5°	409.4	409.4	406.2	404.2	406.2	409.4	409.4	406.2	383.4	378.2	381.5
50°	388.0	387.3	382.8	382.1	382.8	387.3	388.0	386.0	362.0	357.5	357.5
52.5°	363.3	363.3	364.0	365.2	364.0	363.3	363.3	364.0	342.4	337.9	336.6
55°	341.9	342.4	347.0	348.4	347.0	342.4	341.9	341.9	322.3	317.7	315.2
57.5°	319.8	319.8	323.0	323.0	323.0	319.8	319.8	318.4	299.6	295.6	294.4
60°	294.4	295.6	298.3	297.7	298.3	295.6	294.4	293.1	276.8	274.2	269.7
62.5°	267.7	269.1	269.7	268.4	269.7	269.1	267.7	263.9	254.1	252.1	246.3
65°	239.8	241.1	241.8	240.4	241.8	241.1	239.8	237.9	230.7	227.4	222.3
67.5°	211.2	210.6	209.9	212.5	209.9	210.6	211.2	208.6	204.1	201.5	194.3
70°	182.0	182.0	181.3	182.7	181.3	182.0	182.0	180.0	177.4	175.5	169.0
72.5°	150.8	150.1	152.7	150.8	152.7	150.1	150.8	150.1	148.8	146.9	140.4
75°	120.3	121.5	120.3	122.2	120.3	121.5	120.3	120.8	120.3	118.9	114.3
77.5°	91.7	92.9	91.7	91.7	91.7	92.9	91.7	92.2	92.2	92.2	88.4
80°	65.0	64.3	64.3	63.7	64.3	64.3	65.0	65.0	65.6	64.3	63.1
82.5°	41.6	41.0	41.0	42.2	41.0	41.0	41.6	42.2	41.0	41.0	41.0
85°	22.8	23.4	22.1	22.1	22.1	23.4	22.8	21.4	22.8	22.8	22.1
87.5°	8.4	7.8	7.8	7.8	7.8	7.8	8.4	9.1	9.1	9.1	9.8
90°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	4.9	6.6	7.4	6.3
92.5°	18.4	17.6	14.7	11.8	14.7	17.6	18.4	26.2	36.4	41.6	36.5
95°	62.6	60.4	51.6	42.6	51.6	60.4	62.6	82.2	108.3	121.4	102.5
97.5°	144.5	140.2	123.4	106.5	123.4	140.2	144.5	156.9	173.5	181.7	150.2
100°	202.9	197.9	177.8	157.7	177.8	197.9	202.9	202.0	200.8	200.2	165.3
102.5°	252.8	248.5	231.2	214.0	231.2	248.5	252.8	237.0	216.0	205.4	170.1
105°	311.0	308.7	299.5	290.2	299.5	308.7	311.0	275.7	228.5	204.8	170.5
107.5°	341.4	342.0	344.2	346.4	344.2	342.0	341.4	292.0	226.2	193.2	163.0
110°	349.1	351.6	361.1	370.8	361.1	351.6	349.1	293.9	220.4	183.5	156.3



TEST NUMBER: P933898

CATALOG NUMBER: SQ4-FA-025U-050D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	344.2	347.9	362.7	377.5	362.7	347.9	344.2	287.7	212.4	174.7	150.4
115°	327.3	332.5	353.1	373.6	353.1	332.5	327.3	273.0	200.4	164.1	143.7
117.5°	304.2	309.9	332.7	355.5	332.7	309.9	304.2	255.0	189.6	156.9	139.4
120°	288.6	294.1	316.3	338.4	316.3	294.1	288.6	243.7	183.8	153.9	138.0
122.5°	272.9	278.3	300.2	322.1	300.2	278.3	272.9	232.5	178.6	151.6	137.2
125°	252.2	257.3	277.4	297.6	277.4	257.3	252.2	217.9	172.1	149.2	136.6
127.5°	235.7	239.9	256.9	273.8	256.9	239.9	235.7	206.2	166.9	147.2	136.2
130°	225.2	229.1	244.8	260.5	244.8	229.1	225.2	198.9	164.0	146.4	136.5
132.5°	216.3	219.8	233.8	247.9	233.8	219.8	216.3	192.7	161.4	145.7	136.6
135°	203.6	206.6	218.8	230.9	218.8	206.6	203.6	183.9	157.7	144.6	136.5
137.5°	194.3	196.8	206.7	216.7	206.7	196.8	194.3	177.6	155.4	144.4	137.3
140°	186.8	189.1	198.4	207.7	198.4	189.1	186.8	172.5	153.3	143.7	137.5
142.5°	181.6	183.6	191.6	199.5	191.6	183.6	181.6	169.0	152.1	143.7	138.0
145°	173.7	175.3	181.3	187.3	181.3	175.3	173.7	163.4	149.6	142.7	138.0
147.5°	167.2	168.4	173.4	178.4	173.4	168.4	167.2	159.0	148.2	142.7	139.0
150°	163.4	164.3	168.4	172.5	168.4	164.3	163.4	156.5	147.3	142.7	139.4
152.5°	160.4	161.1	164.1	167.2	164.1	161.1	160.4	154.5	146.6	142.7	139.7
155°	156.8	157.3	159.3	161.3	159.3	157.3	156.8	152.1	145.8	142.7	140.4
157.5°	153.6	154.0	155.4	156.9	155.4	154.0	153.6	150.0	145.2	142.7	141.2
160°	152.0	152.2	153.1	153.9	153.1	152.2	152.0	148.9	144.8	142.7	141.5
162.5°	150.6	150.8	151.6	152.3	151.6	150.8	150.6	148.0	144.5	142.7	141.9
165°	148.4	148.5	149.4	150.2	149.4	148.5	148.4	146.5	144.0	142.7	142.3
167.5°	147.4	147.5	147.8	148.2	147.8	147.5	147.4	146.1	144.5	143.7	143.3
170°	147.4	147.4	147.4	147.4	147.4	147.4	147.4	146.1	144.5	143.7	143.7
172.5°	146.6	146.5	146.2	145.9	146.2	146.5	146.6	145.6	144.4	143.7	143.7
175°	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.0	144.1	143.7	143.9
177.5°	145.4	145.3	145.0	144.6	145.0	145.3	145.4	144.9	144.2	143.9	144.1
180°	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	686.9	686.9	686.9	686.9	686.9
2.5°	678.5	681.7	683.6	686.2	692.7
5°	652.4	664.8	668.7	678.5	690.1
7.5°	595.3	633.0	643.3	666.8	685.0
10°	540.0	577.7	595.9	651.2	678.5
12.5°	512.1	534.2	546.5	623.8	669.4
15°	494.6	510.2	519.3	587.5	658.9
17.5°	480.9	492.0	498.5	551.7	644.7
20°	472.5	477.6	483.5	525.8	628.4
22.5°	466.6	463.4	467.9	507.6	606.3
25°	462.7	450.4	455.5	493.2	580.3
27.5°	466.0	438.7	440.6	480.2	553.0
30°	466.6	424.3	425.0	466.6	522.5
32.5°	462.0	409.4	410.1	449.7	488.1
35°	451.0	391.9	391.2	430.2	441.3
37.5°	436.0	373.1	373.1	408.7	389.9
40°	417.8	354.2	356.1	380.8	344.4
42.5°	395.7	334.0	336.6	343.8	310.7
45°	371.7	314.5	316.5	290.5	284.6
47.5°	345.1	294.4	295.1	241.1	276.2
50°	313.3	273.5	271.0	206.7	275.6
52.5°	285.3	250.9	243.0	187.1	250.2
55°	257.9	226.8	209.9	172.2	232.0
57.5°	233.9	195.6	179.4	154.7	228.1
60°	211.8	165.0	152.7	135.9	209.3
62.5°	193.7	142.3	139.7	122.9	189.7
65°	174.1	126.7	126.1	111.8	161.1
67.5°	155.3	116.3	115.7	101.4	122.9
70°	135.2	105.2	104.0	90.3	91.0
72.5°	114.3	92.9	91.7	81.2	75.4
75°	93.6	78.6	78.0	70.8	61.0
77.5°	73.5	62.4	63.7	57.2	44.9
80°	52.6	45.4	46.8	41.0	33.8
82.5°	35.1	29.9	31.2	26.0	22.8
85°	19.5	16.9	17.5	13.7	10.4
87.5°	9.1	7.8	7.8	5.2	3.3
90°	4.3	2.7	2.5	1.7	1.0
92.5°	26.4	18.7	17.1	10.5	3.9
95°	64.8	36.5	33.5	21.4	9.3
97.5°	87.3	40.1	37.4	26.7	16.1
100°	95.4	43.1	40.7	31.0	21.3
102.5°	99.2	46.1	43.9	34.8	25.8
105°	102.0	50.6	48.6	41.1	33.4
107.5°	102.5	57.2	55.4	48.3	41.2
110°	101.7	60.9	59.2	52.8	46.4



TEST NUMBER: P933898

CATALOG NUMBER: SQ4-FA-025U-050D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	101.7	65.3	63.8	57.7	51.6
115°	102.7	72.0	70.5	64.9	59.3
117.5°	104.7	78.5	77.2	72.1	67.0
120°	106.1	82.3	81.1	76.3	71.4
122.5°	108.3	86.7	85.5	80.6	75.8
125°	111.4	92.5	91.4	86.9	82.5
127.5°	114.4	98.1	96.9	92.4	87.9
130°	116.7	101.7	100.5	95.6	90.8
132.5°	118.4	104.7	103.6	98.7	93.9
135°	120.3	108.2	107.2	102.7	98.4
137.5°	123.3	112.7	111.6	107.3	102.9
140°	125.0	115.7	114.7	110.7	106.7
142.5°	126.6	117.9	117.0	113.3	109.6
145°	128.5	121.3	120.5	117.2	114.1
147.5°	131.3	125.6	124.8	121.6	118.5
150°	132.8	127.8	127.1	124.2	121.4
152.5°	133.7	129.3	128.7	126.6	124.4
155°	135.9	132.5	132.1	130.4	128.9
157.5°	138.0	135.7	135.3	133.7	132.2
160°	139.0	137.1	136.8	135.6	134.4
162.5°	140.0	138.7	138.5	137.5	136.6
165°	141.5	140.9	140.7	139.8	139.1
167.5°	142.6	142.2	142.1	141.7	141.3
170°	143.6	143.6	143.5	143.1	142.7
172.5°	143.7	143.7	143.7	143.6	143.5
175°	144.3	144.6	144.6	144.6	144.6
177.5°	144.4	144.6	144.6	144.6	144.6
180°	144.6	144.6	144.6	144.6	144.6



TEST NUMBER: P933898
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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	12.55	13.57	13.36	14.41	15.44	15.35	16.37	16.16	17.20	18.23
	3H	13.04	13.96	13.86	14.80	15.86	16.70	17.61	17.52	18.45	19.51
	4H	13.24	14.10	14.08	14.95	16.02	17.14	18.00	17.98	18.86	19.93
	6H	13.37	14.16	14.22	15.02	16.11	17.43	18.22	18.28	19.08	20.17
	8H	13.37	14.13	14.23	15.01	16.09	17.50	18.26	18.36	19.14	20.22
	12H	13.35	14.07	14.22	14.94	16.05	17.54	18.26	18.41	19.13	20.24
4H	2H	13.59	14.46	14.44	15.31	16.38	15.78	16.64	16.62	17.49	18.56
	3H	14.64	15.36	15.49	16.24	17.33	17.29	18.01	18.15	18.89	19.98
	4H	14.92	15.57	15.79	16.46	17.57	17.82	18.47	18.69	19.35	20.47
	6H	15.05	15.62	15.94	16.53	17.64	18.18	18.75	19.07	19.66	20.77
	8H	15.06	15.59	15.95	16.49	17.62	18.29	18.82	19.18	19.72	20.85
	12H	15.04	15.51	15.95	16.43	17.57	18.35	18.83	19.26	19.74	20.88
8H	4H	15.38	15.91	16.27	16.81	17.94	17.96	18.48	18.84	19.38	20.51
	6H	15.65	16.09	16.56	17.03	18.16	18.39	18.83	19.31	19.77	20.90
	8H	15.69	16.08	16.62	17.01	18.16	18.54	18.93	19.46	19.86	21.01
	12H	15.68	16.03	16.61	16.95	18.15	18.64	18.98	19.57	19.91	21.10
12H	4H	15.39	15.87	16.30	16.79	17.92	17.93	18.40	18.84	19.32	20.46
	6H	15.71	16.10	16.63	17.03	18.18	18.39	18.78	19.31	19.71	20.86
	8H	15.78	16.13	16.71	17.05	18.25	18.55	18.89	19.48	19.82	21.02