

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: P933906

Luminaire Tested: SQ4-FA-025U-050D-B50-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P933906
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-B50-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

Summary

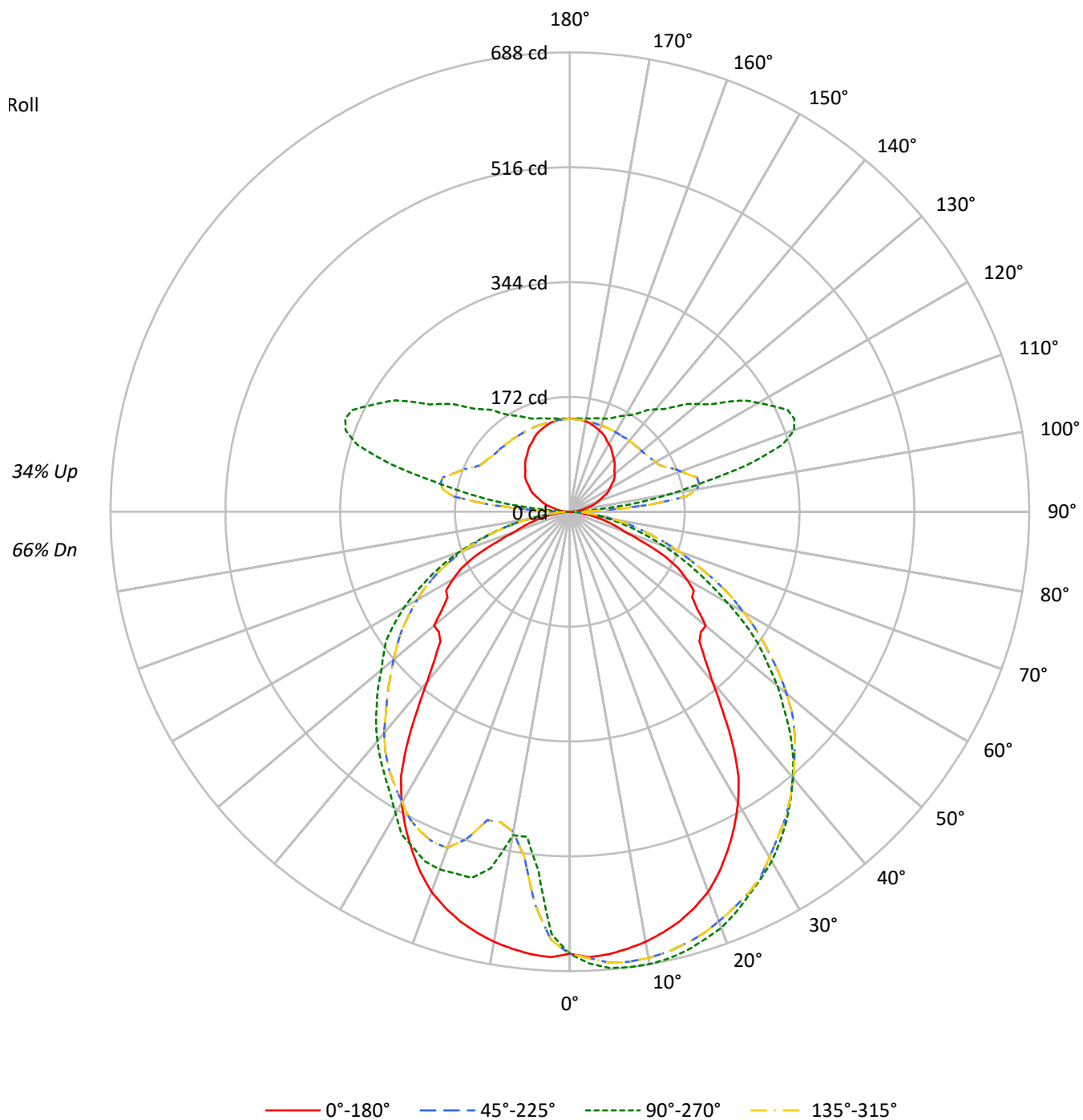
Lumens per Lamp: N/A
Luminaire Lumens: 2620.8 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6144	6144	6144	6144
5°	6183	6202	6183	4876
10°	6135	6109	6135	4368
15°	6061	5977	6061	4991
20°	5927	5820	5927	5001
25°	5661	5591	5661	4895
30°	5319	5402	5319	4663
35°	4735	5161	4735	4407
40°	3938	4879	3938	4214
45°	3512	4548	3512	3991
50°	3723	4153	3723	3768
55°	3493	3728	3493	3640
60°	3588	3165	3588	3333
65°	3236	2617	3236	2925
70°	2226	2086	2226	2453
75°	1928	1543	1928	1847
80°	1526	1020	1526	1110
85°	828	539	828	459

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°

Vertical Angle: 45°

Luminance: 5393 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	2.3
10°-20°	169.7	6.5
20°-30°	262.3	10.0
30°-40°	313.1	11.9
40°-50°	315.0	12.0
50°-60°	274.1	10.5
60°-70°	194.3	7.4
70°-80°	102.8	3.9
80°-90°	26.1	1.0
90°-100°	67.9	2.6
100°-110°	178.6	6.8
110°-120°	185.2	7.1
120°-130°	148.6	5.7
130°-140°	116.6	4.4
140°-150°	89.5	3.4
150°-160°	64.4	2.5
160°-170°	39.4	1.5
170°-180°	13.3	0.5
0°-30°	491.8	18.8
0°-40°	804.9	30.7
0°-60°	1394.0	53.2
0°-90°	1717.2	65.5
90°-120°	431.8	16.5
90°-150°	786.4	30.0
90°-180°	904.0	34.5
0°-180°	2620.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	662	662	662	662	662	
5°	665	686	665	539	665	63
15°	635	680	635	568	635	179
25°	559	634	559	555	559	257
35°	425	566	425	483	425	263
45°	274	466	274	409	274	220
55°	224	344	224	336	224	206
65°	155	207	155	232	155	148
75°	59	98	59	118	59	62
85°	10	25	10	21	10	14
90°	1	4	1	4	1	1
95°	9	41	9	41	9	10
105°	32	280	32	280	32	34
115°	57	360	57	360	57	56
125°	80	287	80	287	80	71
135°	95	223	95	223	95	73
145°	110	180	110	180	110	69
155°	124	156	124	156	124	57
165°	134	145	134	145	134	38
175°	139	140	139	140	139	13
180°	139	139	139	139	139	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1
2.5°	667.7	667.7	671.5	672.8	672.8	670.9	669.0	670.9	676.5	678.4	677.7
5°	665.2	670.2	677.2	678.4	679.7	679.0	677.7	679.0	685.3	686.5	687.1
7.5°	660.2	669.6	678.4	680.2	682.1	680.2	679.7	680.9	687.1	688.4	688.4
10°	654.0	667.1	677.2	678.4	680.2	678.4	678.4	680.9	687.1	688.4	689.0
12.5°	645.2	663.3	672.8	674.0	676.5	675.8	675.3	677.7	684.1	685.3	685.3
15°	635.1	656.4	665.2	666.5	670.9	669.6	669.6	672.1	679.0	680.9	680.2
17.5°	621.4	647.7	657.7	659.6	662.8	662.1	662.8	665.2	671.5	672.8	673.4
20°	605.7	635.8	647.7	649.6	652.7	652.7	652.7	655.9	662.1	664.6	664.6
22.5°	584.4	623.3	635.8	637.1	640.8	640.8	642.0	646.4	652.0	652.7	652.7
25°	559.4	609.4	620.1	623.9	627.6	629.5	631.4	633.9	635.8	635.1	635.8
27.5°	533.0	592.0	605.7	608.2	613.3	615.1	617.7	618.2	618.9	620.7	619.5
30°	503.6	567.5	588.1	590.7	598.8	600.1	597.6	598.8	602.0	603.2	604.5
32.5°	470.5	531.2	570.0	575.6	583.2	579.5	578.8	580.7	585.7	585.7	586.9
35°	425.3	503.0	553.1	558.2	563.8	559.4	561.9	562.5	565.6	567.5	566.8
37.5°	375.8	478.6	535.6	539.3	543.7	538.1	541.8	543.7	546.2	545.0	545.0
40°	331.9	440.4	514.9	517.4	521.2	516.8	520.5	521.8	523.0	521.8	521.2
42.5°	299.4	398.4	493.0	496.1	493.6	496.7	498.0	500.5	498.6	496.1	496.1
45°	274.3	387.1	469.1	472.9	469.1	474.2	476.1	476.1	470.5	469.1	468.5
47.5°	266.2	364.5	445.3	445.3	443.5	449.7	452.9	448.5	442.9	440.9	440.9
50°	265.6	339.5	412.8	410.3	419.1	426.6	423.5	419.1	414.7	407.8	407.8
52.5°	241.2	308.8	370.8	380.2	394.0	398.4	393.4	389.0	381.4	378.4	375.8
55°	223.6	276.8	332.6	351.4	365.8	371.5	362.0	357.6	346.4	344.6	343.2
57.5°	219.9	230.5	297.6	321.3	338.9	338.3	332.6	324.5	315.0	313.2	312.6
60°	201.7	166.6	259.9	288.1	306.3	304.4	299.4	291.9	283.1	281.9	280.7
62.5°	182.9	120.9	217.3	249.3	275.0	274.3	270.0	258.7	252.5	249.3	246.8
65°	155.3	101.4	154.8	207.3	244.3	245.5	236.1	228.0	221.1	217.3	216.7
67.5°	118.4	82.7	104.6	172.9	214.8	213.6	201.7	197.9	189.1	187.3	183.5
70°	87.7	55.1	72.7	140.3	186.1	182.9	173.5	169.1	161.0	156.6	154.1
72.5°	72.7	44.5	53.2	109.0	156.6	152.8	144.7	139.7	132.8	129.1	126.6
75°	58.8	47.0	40.7	80.8	127.1	124.7	117.1	112.1	106.5	101.4	102.1
77.5°	43.2	43.8	32.6	59.5	100.9	97.1	92.7	86.5	84.0	78.9	78.9
80°	32.6	34.5	24.5	40.7	72.7	72.7	68.9	64.5	60.1	57.6	57.6
82.5°	21.9	21.9	18.1	25.7	49.5	47.6	45.1	43.8	41.4	40.1	40.1
85°	10.0	12.5	11.3	15.7	26.9	28.2	28.2	26.9	26.3	25.0	25.7
87.5°	3.2	5.6	6.9	8.8	13.8	14.4	15.0	15.0	15.0	15.7	15.7
90°	0.9	1.7	2.4	2.6	4.1	6.1	7.1	6.4	4.8	3.5	3.5
92.5°	3.7	10.1	16.4	18.0	25.4	35.2	40.1	35.1	25.2	17.7	17.0
95°	9.0	20.6	32.3	35.2	62.5	98.8	117.0	104.4	79.2	60.3	58.2
97.5°	15.5	25.8	36.1	38.7	84.2	144.8	175.1	167.2	151.2	139.3	135.1
100°	20.5	29.9	39.2	41.6	92.0	159.3	193.0	193.5	194.7	195.6	190.7
102.5°	24.8	33.5	42.3	44.5	95.6	163.9	198.0	208.2	228.5	243.7	239.5
105°	32.2	39.6	46.9	48.8	98.4	164.4	197.4	220.2	265.7	299.8	297.6
107.5°	39.7	46.5	53.4	55.1	98.8	157.1	186.2	218.0	281.4	329.0	329.6
110°	44.7	50.9	57.1	58.7	98.1	150.7	176.9	212.4	283.3	336.5	338.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	49.7	55.6	61.5	63.0	98.1	145.0	168.4	204.7	277.3	331.8	335.3
115°	57.2	62.6	68.0	69.4	99.0	138.5	158.2	193.2	263.1	315.5	320.5
117.5°	64.5	69.5	74.4	75.7	100.9	134.4	151.2	182.8	245.8	293.2	298.7
120°	68.8	73.5	78.2	79.3	102.3	133.0	148.3	177.2	234.9	278.1	283.5
122.5°	73.0	77.7	82.4	83.6	104.4	132.3	146.2	172.1	224.1	263.0	268.2
125°	79.5	83.8	88.1	89.2	107.4	131.7	143.8	165.9	210.1	243.1	248.0
127.5°	84.7	89.1	93.4	94.5	110.3	131.3	141.9	160.8	198.8	227.1	231.3
130°	87.5	92.2	96.9	98.1	112.5	131.6	141.1	158.0	191.8	217.1	220.8
132.5°	90.5	95.2	99.8	101.0	114.1	131.7	140.5	155.6	185.8	208.5	211.8
135°	94.8	99.0	103.3	104.3	116.0	131.6	139.4	152.0	177.3	196.2	199.1
137.5°	99.2	103.4	107.6	108.6	118.8	132.3	139.2	149.8	171.2	187.3	189.7
140°	102.8	106.7	110.6	111.5	120.5	132.5	138.5	147.8	166.3	180.1	182.3
142.5°	105.6	109.2	112.7	113.7	122.0	133.0	138.5	146.6	162.9	175.0	177.0
145°	109.9	113.0	116.2	116.9	123.8	133.0	137.6	144.2	157.5	167.5	169.0
147.5°	114.2	117.2	120.3	121.0	126.6	133.9	137.6	142.8	153.3	161.1	162.3
150°	117.0	119.7	122.5	123.2	128.0	134.4	137.6	142.0	150.8	157.5	158.4
152.5°	119.9	122.0	124.0	124.6	128.9	134.7	137.6	141.3	148.9	154.6	155.3
155°	124.2	125.7	127.3	127.7	130.9	135.3	137.6	140.6	146.6	151.1	151.6
157.5°	127.4	128.9	130.4	130.8	133.0	136.1	137.6	139.9	144.6	148.0	148.4
160°	129.5	130.7	131.9	132.2	133.9	136.4	137.6	139.5	143.6	146.5	146.7
162.5°	131.7	132.5	133.5	133.7	135.0	136.7	137.6	139.3	142.6	145.1	145.3
165°	134.0	134.8	135.6	135.8	136.4	137.2	137.6	138.8	141.2	143.0	143.2
167.5°	136.2	136.6	136.9	137.0	137.5	138.1	138.5	139.3	140.8	142.1	142.2
170°	137.6	138.0	138.3	138.4	138.4	138.5	138.5	139.3	140.8	142.1	142.1
172.5°	138.3	138.4	138.5	138.5	138.5	138.5	138.5	139.2	140.4	141.3	141.2
175°	139.4	139.4	139.4	139.4	139.1	138.7	138.5	138.9	139.7	140.3	140.3
177.5°	139.4	139.4	139.4	139.4	139.2	138.9	138.7	139.0	139.6	140.1	140.0
180°	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4

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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1
2.5°	679.0	677.2	679.0	677.7	678.4	676.5	670.9	669.0	670.9	672.8	672.8
5°	687.1	685.9	687.1	687.1	686.5	685.3	679.0	677.7	679.0	679.7	678.4
7.5°	689.7	687.8	689.7	688.4	688.4	687.1	680.9	679.7	680.2	682.1	680.2
10°	689.7	687.8	689.7	689.0	688.4	687.1	680.9	678.4	678.4	680.2	678.4
12.5°	686.5	685.3	686.5	685.3	685.3	684.1	677.7	675.3	675.8	676.5	674.0
15°	681.5	679.7	681.5	680.2	680.9	679.0	672.1	669.6	669.6	670.9	666.5
17.5°	674.0	671.5	674.0	673.4	672.8	671.5	665.2	662.8	662.1	662.8	659.6
20°	665.2	663.3	665.2	664.6	664.6	662.1	655.9	652.7	652.7	652.7	649.6
22.5°	651.5	649.6	651.5	652.7	652.7	652.0	646.4	642.0	640.8	640.8	637.1
25°	635.8	633.9	635.8	635.8	635.1	635.8	633.9	631.4	629.5	627.6	623.9
27.5°	620.7	619.5	620.7	619.5	620.7	618.9	618.2	617.7	615.1	613.3	608.2
30°	605.7	604.5	605.7	604.5	603.2	602.0	598.8	597.6	600.1	598.8	590.7
32.5°	586.9	585.7	586.9	586.9	585.7	585.7	580.7	578.8	579.5	583.2	575.6
35°	567.5	565.6	567.5	566.8	567.5	565.6	562.5	561.9	559.4	563.8	558.2
37.5°	545.0	543.1	545.0	545.0	545.0	546.2	543.7	541.8	538.1	543.7	539.3
40°	521.8	519.3	521.8	521.2	521.8	523.0	521.8	520.5	516.8	521.2	517.4
42.5°	495.5	494.8	495.5	496.1	496.1	498.6	500.5	498.0	496.7	493.6	496.1
45°	467.3	466.1	467.3	468.5	469.1	470.5	476.1	476.1	474.2	469.1	472.9
47.5°	437.2	434.1	437.2	440.9	440.9	442.9	448.5	452.9	449.7	443.5	445.3
50°	405.3	405.9	405.3	407.8	407.8	414.7	419.1	423.5	426.6	419.1	410.3
52.5°	374.0	373.3	374.0	375.8	378.4	381.4	389.0	393.4	398.4	394.0	380.2
55°	342.6	343.9	342.6	343.2	344.6	346.4	357.6	362.0	371.5	365.8	351.4
57.5°	311.3	309.4	311.3	312.6	313.2	315.0	324.5	332.6	338.3	338.9	321.3
60°	275.0	272.4	275.0	280.7	281.9	283.1	291.9	299.4	304.4	306.3	288.1
62.5°	243.0	238.6	243.0	246.8	249.3	252.5	258.7	270.0	274.3	275.0	249.3
65°	209.2	207.3	209.2	216.7	217.3	221.1	228.0	236.1	245.5	244.3	207.3
67.5°	178.5	178.5	178.5	183.5	187.3	189.1	197.9	201.7	213.6	214.8	172.9
70°	150.4	149.7	150.4	154.1	156.6	161.0	169.1	173.5	182.9	186.1	140.3
72.5°	123.4	122.7	123.4	126.6	129.1	132.8	139.7	144.7	152.8	156.6	109.0
75°	99.6	98.4	99.6	102.1	101.4	106.5	112.1	117.1	124.7	127.1	80.8
77.5°	76.4	76.4	76.4	78.9	78.9	84.0	86.5	92.7	97.1	100.9	59.5
80°	57.0	56.4	57.0	57.6	57.6	60.1	64.5	68.9	72.7	72.7	40.7
82.5°	40.1	38.9	40.1	40.1	40.1	41.4	43.8	45.1	47.6	49.5	25.7
85°	25.0	25.0	25.0	25.7	25.0	26.3	26.9	28.2	28.2	26.9	15.7
87.5°	16.3	15.7	16.3	15.7	15.7	15.0	15.0	15.0	14.4	13.8	8.8
90°	3.5	3.5	3.5	3.5	3.5	4.8	6.4	7.1	6.1	4.1	2.6
92.5°	14.2	11.4	14.2	17.0	17.7	25.2	35.1	40.1	35.2	25.4	18.0
95°	49.7	41.1	49.7	58.2	60.3	79.2	104.4	117.0	98.8	62.5	35.2
97.5°	118.9	102.6	118.9	135.1	139.3	151.2	167.2	175.1	144.8	84.2	38.7
100°	171.4	152.0	171.4	190.7	195.6	194.7	193.5	193.0	159.3	92.0	41.6
102.5°	222.9	206.2	222.9	239.5	243.7	228.5	208.2	198.0	163.9	95.6	44.5
105°	288.7	279.7	288.7	297.6	299.8	265.7	220.2	197.4	164.4	98.4	48.8
107.5°	331.8	333.9	331.8	329.6	329.0	281.4	218.0	186.2	157.1	98.8	55.1
110°	348.1	357.4	348.1	338.9	336.5	283.3	212.4	176.9	150.7	98.1	58.7

TEST NUMBER: P933906

CATALOG NUMBER: SQ4-FA-025U-050D-B50-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	349.6	363.9	349.6	335.3	331.8	277.3	204.7	168.4	145.0	98.1	63.0
115°	340.3	360.2	340.3	320.5	315.5	263.1	193.2	158.2	138.5	99.0	69.4
117.5°	320.6	342.7	320.6	298.7	293.2	245.8	182.8	151.2	134.4	100.9	75.7
120°	304.9	326.2	304.9	283.5	278.1	234.9	177.2	148.3	133.0	102.3	79.3
122.5°	289.4	310.5	289.4	268.2	263.0	224.1	172.1	146.2	132.3	104.4	83.6
125°	267.4	286.8	267.4	248.0	243.1	210.1	165.9	143.8	131.7	107.4	89.2
127.5°	247.6	263.9	247.6	231.3	227.1	198.8	160.8	141.9	131.3	110.3	94.5
130°	235.9	251.1	235.9	220.8	217.1	191.8	158.0	141.1	131.6	112.5	98.1
132.5°	225.4	238.9	225.4	211.8	208.5	185.8	155.6	140.5	131.7	114.1	101.0
135°	210.9	222.6	210.9	199.1	196.2	177.3	152.0	139.4	131.6	116.0	104.3
137.5°	199.2	208.8	199.2	189.7	187.3	171.2	149.8	139.2	132.3	118.8	108.6
140°	191.2	200.2	191.2	182.3	180.1	166.3	147.8	138.5	132.5	120.5	111.5
142.5°	184.7	192.3	184.7	177.0	175.0	162.9	146.6	138.5	133.0	122.0	113.7
145°	174.8	180.5	174.8	169.0	167.5	157.5	144.2	137.6	133.0	123.8	116.9
147.5°	167.1	171.9	167.1	162.3	161.1	153.3	142.8	137.6	133.9	126.6	121.0
150°	162.3	166.3	162.3	158.4	157.5	150.8	142.0	137.6	134.4	128.0	123.2
152.5°	158.2	161.2	158.2	155.3	154.6	148.9	141.3	137.6	134.7	128.9	124.6
155°	153.5	155.5	153.5	151.6	151.1	146.6	140.6	137.6	135.3	130.9	127.7
157.5°	149.8	151.2	149.8	148.4	148.0	144.6	139.9	137.6	136.1	133.0	130.8
160°	147.6	148.3	147.6	146.7	146.5	143.6	139.5	137.6	136.4	133.9	132.2
162.5°	146.1	146.8	146.1	145.3	145.1	142.6	139.3	137.6	136.7	135.0	133.7
165°	144.0	144.8	144.0	143.2	143.0	141.2	138.8	137.6	137.2	136.4	135.8
167.5°	142.4	142.8	142.4	142.2	142.1	140.8	139.3	138.5	138.1	137.5	137.0
170°	142.1	142.1	142.1	142.1	142.1	140.8	139.3	138.5	138.5	138.4	138.4
172.5°	140.9	140.7	140.9	141.2	141.3	140.4	139.2	138.5	138.5	138.5	138.5
175°	140.3	140.3	140.3	140.3	140.3	139.7	138.9	138.5	138.7	139.1	139.4
177.5°	139.7	139.4	139.7	140.0	140.1	139.6	139.0	138.7	138.9	139.2	139.4
180°	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4

TEST NUMBER: P933906

CATALOG NUMBER: SQ4-FA-025U-050D-B50-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1
2.5°	671.5	667.7	667.7	661.5	658.9	657.1	654.0	644.6	642.0	639.5	643.3
5°	677.2	670.2	665.2	654.0	644.6	640.8	628.9	606.4	591.3	580.0	573.8
7.5°	678.4	669.6	660.2	642.7	620.1	610.1	573.8	532.5	521.2	511.2	504.8
10°	677.2	667.1	654.0	627.6	574.4	556.9	520.5	493.6	486.7	484.8	486.7
12.5°	672.8	663.3	645.2	601.3	526.8	514.9	493.6	477.9	476.7	479.8	496.7
15°	665.2	656.4	635.1	566.3	500.5	491.8	476.7	471.0	477.9	499.9	550.6
17.5°	657.7	647.7	621.4	531.8	480.4	474.2	463.5	474.8	513.6	543.1	560.0
20°	647.7	635.8	605.7	506.8	466.1	460.4	455.4	506.1	535.6	546.2	555.6
22.5°	635.8	623.3	584.4	489.2	451.0	446.6	449.7	523.7	535.6	543.1	551.2
25°	620.1	609.4	559.4	475.4	439.1	434.1	446.0	521.8	528.6	530.5	546.9
27.5°	605.7	592.0	533.0	462.9	424.7	422.8	449.2	513.6	518.7	520.5	538.1
30°	588.1	567.5	503.6	449.7	409.7	409.0	449.7	503.6	502.4	507.3	524.9
32.5°	570.0	531.2	470.5	433.5	395.3	394.6	445.3	488.6	487.4	494.2	507.3
35°	553.1	503.0	425.3	414.7	377.1	377.7	434.7	471.0	471.7	477.9	486.1
37.5°	535.6	478.6	375.8	394.0	359.6	359.6	420.3	454.8	453.6	455.4	466.6
40°	514.9	440.4	331.9	367.1	343.2	341.4	402.7	437.2	432.8	432.3	447.9
42.5°	493.0	398.4	299.4	331.4	324.5	321.9	381.4	415.9	407.8	409.7	429.7
45°	469.1	387.1	274.3	280.0	305.0	303.2	358.3	391.5	385.8	390.9	411.5
47.5°	445.3	364.5	266.2	232.4	284.4	283.7	332.6	367.7	364.5	369.6	391.5
50°	412.8	339.5	265.6	199.2	261.2	263.7	302.0	344.6	344.6	348.9	372.1
52.5°	370.8	308.8	241.2	180.4	234.2	241.8	275.0	324.5	325.7	330.1	350.8
55°	332.6	276.8	223.6	166.0	202.3	218.6	248.6	303.8	306.3	310.6	329.5
57.5°	297.6	230.5	219.9	149.1	172.9	188.6	225.5	283.7	285.0	288.8	306.9
60°	259.9	166.6	201.7	130.9	147.2	159.1	204.2	259.9	264.3	266.8	282.5
62.5°	217.3	120.9	182.9	118.4	134.7	137.2	186.7	237.4	243.0	244.9	254.3
65°	154.8	101.4	155.3	107.8	121.5	122.2	167.8	214.3	219.2	222.4	229.3
67.5°	104.6	82.7	118.4	97.7	111.5	112.1	149.7	187.3	194.2	196.7	201.1
70°	72.7	55.1	87.7	87.0	100.2	101.4	130.3	162.9	169.1	171.0	173.5
72.5°	53.2	44.5	72.7	78.3	88.4	89.6	110.2	135.3	141.6	143.5	144.7
75°	40.7	47.0	58.8	68.3	75.2	75.7	90.2	110.2	114.6	115.9	116.5
77.5°	32.6	43.8	43.2	55.1	61.4	60.1	70.8	85.2	88.9	88.9	88.9
80°	24.5	34.5	32.6	39.5	45.1	43.8	50.7	60.8	62.0	63.2	62.7
82.5°	18.1	21.9	21.9	25.0	30.1	28.9	33.8	39.5	39.5	39.5	40.7
85°	11.3	12.5	10.0	13.2	16.9	16.3	18.8	21.3	21.9	21.9	20.6
87.5°	6.9	5.6	3.2	5.0	7.5	7.5	8.8	9.4	8.8	8.8	8.8
90°	2.4	1.7	0.9	1.7	2.4	2.6	4.1	6.1	7.1	6.4	4.8
92.5°	16.4	10.1	3.7	10.1	16.4	18.0	25.4	35.2	40.1	35.1	25.2
95°	32.3	20.6	9.0	20.6	32.3	35.2	62.5	98.8	117.0	104.4	79.2
97.5°	36.1	25.8	15.5	25.8	36.1	38.7	84.2	144.8	175.1	167.2	151.2
100°	39.2	29.9	20.5	29.9	39.2	41.6	92.0	159.3	193.0	193.5	194.7
102.5°	42.3	33.5	24.8	33.5	42.3	44.5	95.6	163.9	198.0	208.2	228.5
105°	46.9	39.6	32.2	39.6	46.9	48.8	98.4	164.4	197.4	220.2	265.7
107.5°	53.4	46.5	39.7	46.5	53.4	55.1	98.8	157.1	186.2	218.0	281.4
110°	57.1	50.9	44.7	50.9	57.1	58.7	98.1	150.7	176.9	212.4	283.3

TEST NUMBER: P933906

CATALOG NUMBER: SQ4-FA-025U-050D-B50-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	61.5	55.6	49.7	55.6	61.5	63.0	98.1	145.0	168.4	204.7	277.3
115°	68.0	62.6	57.2	62.6	68.0	69.4	99.0	138.5	158.2	193.2	263.1
117.5°	74.4	69.5	64.5	69.5	74.4	75.7	100.9	134.4	151.2	182.8	245.8
120°	78.2	73.5	68.8	73.5	78.2	79.3	102.3	133.0	148.3	177.2	234.9
122.5°	82.4	77.7	73.0	77.7	82.4	83.6	104.4	132.3	146.2	172.1	224.1
125°	88.1	83.8	79.5	83.8	88.1	89.2	107.4	131.7	143.8	165.9	210.1
127.5°	93.4	89.1	84.7	89.1	93.4	94.5	110.3	131.3	141.9	160.8	198.8
130°	96.9	92.2	87.5	92.2	96.9	98.1	112.5	131.6	141.1	158.0	191.8
132.5°	99.8	95.2	90.5	95.2	99.8	101.0	114.1	131.7	140.5	155.6	185.8
135°	103.3	99.0	94.8	99.0	103.3	104.3	116.0	131.6	139.4	152.0	177.3
137.5°	107.6	103.4	99.2	103.4	107.6	108.6	118.8	132.3	139.2	149.8	171.2
140°	110.6	106.7	102.8	106.7	110.6	111.5	120.5	132.5	138.5	147.8	166.3
142.5°	112.7	109.2	105.6	109.2	112.7	113.7	122.0	133.0	138.5	146.6	162.9
145°	116.2	113.0	109.9	113.0	116.2	116.9	123.8	133.0	137.6	144.2	157.5
147.5°	120.3	117.2	114.2	117.2	120.3	121.0	126.6	133.9	137.6	142.8	153.3
150°	122.5	119.7	117.0	119.7	122.5	123.2	128.0	134.4	137.6	142.0	150.8
152.5°	124.0	122.0	119.9	122.0	124.0	124.6	128.9	134.7	137.6	141.3	148.9
155°	127.3	125.7	124.2	125.7	127.3	127.7	130.9	135.3	137.6	140.6	146.6
157.5°	130.4	128.9	127.4	128.9	130.4	130.8	133.0	136.1	137.6	139.9	144.6
160°	131.9	130.7	129.5	130.7	131.9	132.2	133.9	136.4	137.6	139.5	143.6
162.5°	133.5	132.5	131.7	132.5	133.5	133.7	135.0	136.7	137.6	139.3	142.6
165°	135.6	134.8	134.0	134.8	135.6	135.8	136.4	137.2	137.6	138.8	141.2
167.5°	136.9	136.6	136.2	136.6	136.9	137.0	137.5	138.1	138.5	139.3	140.8
170°	138.3	138.0	137.6	138.0	138.3	138.4	138.4	138.5	138.5	139.3	140.8
172.5°	138.5	138.4	138.3	138.4	138.5	138.5	138.5	138.5	138.5	139.2	140.4
175°	139.4	139.4	139.4	139.4	139.4	139.4	139.1	138.7	138.5	138.9	139.7
177.5°	139.4	139.4	139.4	139.4	139.4	139.4	139.2	138.9	138.7	139.0	139.6
180°	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4

TEST NUMBER: P933906

CATALOG NUMBER: SQ4-FA-025U-050D-B50-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1	662.1
2.5°	638.9	637.1	639.5	632.7	639.5	637.1	638.9	643.3	639.5	642.0	644.6
5°	560.6	557.5	547.5	539.3	547.5	557.5	560.6	573.8	580.0	591.3	606.4
7.5°	501.1	498.6	496.1	491.1	496.1	498.6	501.1	504.8	511.2	521.2	532.5
10°	487.9	488.6	492.3	491.8	492.3	488.6	487.9	486.7	484.8	486.7	493.6
12.5°	521.8	527.4	548.1	546.9	548.1	527.4	521.8	496.7	479.8	476.7	477.9
15°	560.6	562.5	566.8	567.5	566.8	562.5	560.6	550.6	499.9	477.9	471.0
17.5°	564.4	565.0	568.2	568.2	568.2	565.0	564.4	560.0	543.1	513.6	474.8
20°	561.2	562.5	568.8	570.0	568.8	562.5	561.2	555.6	546.2	535.6	506.1
22.5°	560.0	562.5	567.5	566.8	567.5	562.5	560.0	551.2	543.1	535.6	523.7
25°	553.8	553.8	554.3	555.0	554.3	553.8	553.8	546.9	530.5	528.6	521.8
27.5°	540.6	541.8	545.5	545.0	545.5	541.8	540.6	538.1	520.5	518.7	513.6
30°	528.6	527.4	524.3	521.8	524.3	527.4	528.6	524.9	507.3	502.4	503.6
32.5°	508.7	505.5	502.4	500.5	502.4	505.5	508.7	507.3	494.2	487.4	488.6
35°	484.8	485.5	484.8	483.0	484.8	485.5	484.8	486.1	477.9	471.7	471.0
37.5°	467.9	469.1	468.5	466.1	468.5	469.1	467.9	466.6	455.4	453.6	454.8
40°	450.4	451.0	450.4	448.5	450.4	451.0	450.4	447.9	432.3	432.8	437.2
42.5°	433.5	432.8	430.9	429.7	430.9	432.8	433.5	429.7	409.7	407.8	415.9
45°	414.0	414.7	410.9	409.0	410.9	414.7	414.0	411.5	390.9	385.8	391.5
47.5°	394.6	394.6	391.5	389.6	391.5	394.6	394.6	391.5	369.6	364.5	367.7
50°	374.0	373.3	368.9	368.3	368.9	373.3	374.0	372.1	348.9	344.6	344.6
52.5°	350.2	350.2	350.8	352.0	350.8	350.2	350.2	350.8	330.1	325.7	324.5
55°	329.5	330.1	334.5	335.8	334.5	330.1	329.5	329.5	310.6	306.3	303.8
57.5°	308.2	308.2	311.3	311.3	311.3	308.2	308.2	306.9	288.8	285.0	283.7
60°	283.7	285.0	287.5	286.9	287.5	285.0	283.7	282.5	266.8	264.3	259.9
62.5°	258.1	259.4	259.9	258.7	259.9	259.4	258.1	254.3	244.9	243.0	237.4
65°	231.2	232.4	233.0	231.7	233.0	232.4	231.2	229.3	222.4	219.2	214.3
67.5°	203.6	203.0	202.3	204.8	202.3	203.0	203.6	201.1	196.7	194.2	187.3
70°	175.4	175.4	174.8	176.1	174.8	175.4	175.4	173.5	171.0	169.1	162.9
72.5°	145.3	144.7	147.2	145.3	147.2	144.7	145.3	144.7	143.5	141.6	135.3
75°	115.9	117.1	115.9	117.8	115.9	117.1	115.9	116.5	115.9	114.6	110.2
77.5°	88.4	89.6	88.4	88.4	88.4	89.6	88.4	88.9	88.9	88.9	85.2
80°	62.7	62.0	62.0	61.4	62.0	62.0	62.7	62.7	63.2	62.0	60.8
82.5°	40.1	39.5	39.5	40.7	39.5	39.5	40.1	40.7	39.5	39.5	39.5
85°	21.9	22.5	21.3	21.3	21.3	22.5	21.9	20.6	21.9	21.9	21.3
87.5°	8.1	7.5	7.5	7.5	7.5	7.5	8.1	8.8	8.8	8.8	9.4
90°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.8	6.4	7.1	6.1
92.5°	17.7	17.0	14.2	11.4	14.2	17.0	17.7	25.2	35.1	40.1	35.2
95°	60.3	58.2	49.7	41.1	49.7	58.2	60.3	79.2	104.4	117.0	98.8
97.5°	139.3	135.1	118.9	102.6	118.9	135.1	139.3	151.2	167.2	175.1	144.8
100°	195.6	190.7	171.4	152.0	171.4	190.7	195.6	194.7	193.5	193.0	159.3
102.5°	243.7	239.5	222.9	206.2	222.9	239.5	243.7	228.5	208.2	198.0	163.9
105°	299.8	297.6	288.7	279.7	288.7	297.6	299.8	265.7	220.2	197.4	164.4
107.5°	329.0	329.6	331.8	333.9	331.8	329.6	329.0	281.4	218.0	186.2	157.1
110°	336.5	338.9	348.1	357.4	348.1	338.9	336.5	283.3	212.4	176.9	150.7

TEST NUMBER: P933906

CATALOG NUMBER: SQ4-FA-025U-050D-B50-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	331.8	335.3	349.6	363.9	349.6	335.3	331.8	277.3	204.7	168.4	145.0
115°	315.5	320.5	340.3	360.2	340.3	320.5	315.5	263.1	193.2	158.2	138.5
117.5°	293.2	298.7	320.6	342.7	320.6	298.7	293.2	245.8	182.8	151.2	134.4
120°	278.1	283.5	304.9	326.2	304.9	283.5	278.1	234.9	177.2	148.3	133.0
122.5°	263.0	268.2	289.4	310.5	289.4	268.2	263.0	224.1	172.1	146.2	132.3
125°	243.1	248.0	267.4	286.8	267.4	248.0	243.1	210.1	165.9	143.8	131.7
127.5°	227.1	231.3	247.6	263.9	247.6	231.3	227.1	198.8	160.8	141.9	131.3
130°	217.1	220.8	235.9	251.1	235.9	220.8	217.1	191.8	158.0	141.1	131.6
132.5°	208.5	211.8	225.4	238.9	225.4	211.8	208.5	185.8	155.6	140.5	131.7
135°	196.2	199.1	210.9	222.6	210.9	199.1	196.2	177.3	152.0	139.4	131.6
137.5°	187.3	189.7	199.2	208.8	199.2	189.7	187.3	171.2	149.8	139.2	132.3
140°	180.1	182.3	191.2	200.2	191.2	182.3	180.1	166.3	147.8	138.5	132.5
142.5°	175.0	177.0	184.7	192.3	184.7	177.0	175.0	162.9	146.6	138.5	133.0
145°	167.5	169.0	174.8	180.5	174.8	169.0	167.5	157.5	144.2	137.6	133.0
147.5°	161.1	162.3	167.1	171.9	167.1	162.3	161.1	153.3	142.8	137.6	133.9
150°	157.5	158.4	162.3	166.3	162.3	158.4	157.5	150.8	142.0	137.6	134.4
152.5°	154.6	155.3	158.2	161.2	158.2	155.3	154.6	148.9	141.3	137.6	134.7
155°	151.1	151.6	153.5	155.5	153.5	151.6	151.1	146.6	140.6	137.6	135.3
157.5°	148.0	148.4	149.8	151.2	149.8	148.4	148.0	144.6	139.9	137.6	136.1
160°	146.5	146.7	147.6	148.3	147.6	146.7	146.5	143.6	139.5	137.6	136.4
162.5°	145.1	145.3	146.1	146.8	146.1	145.3	145.1	142.6	139.3	137.6	136.7
165°	143.0	143.2	144.0	144.8	144.0	143.2	143.0	141.2	138.8	137.6	137.2
167.5°	142.1	142.2	142.4	142.8	142.4	142.2	142.1	140.8	139.3	138.5	138.1
170°	142.1	142.1	142.1	142.1	142.1	142.1	142.1	140.8	139.3	138.5	138.5
172.5°	141.3	141.2	140.9	140.7	140.9	141.2	141.3	140.4	139.2	138.5	138.5
175°	140.3	140.3	140.3	140.3	140.3	140.3	140.3	139.7	138.9	138.5	138.7
177.5°	140.1	140.0	139.7	139.4	139.7	140.0	140.1	139.6	139.0	138.7	138.9
180°	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4

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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	662.1	662.1	662.1	662.1	662.1
2.5°	654.0	657.1	658.9	661.5	667.7
5°	628.9	640.8	644.6	654.0	665.2
7.5°	573.8	610.1	620.1	642.7	660.2
10°	520.5	556.9	574.4	627.6	654.0
12.5°	493.6	514.9	526.8	601.3	645.2
15°	476.7	491.8	500.5	566.3	635.1
17.5°	463.5	474.2	480.4	531.8	621.4
20°	455.4	460.4	466.1	506.8	605.7
22.5°	449.7	446.6	451.0	489.2	584.4
25°	446.0	434.1	439.1	475.4	559.4
27.5°	449.2	422.8	424.7	462.9	533.0
30°	449.7	409.0	409.7	449.7	503.6
32.5°	445.3	394.6	395.3	433.5	470.5
35°	434.7	377.7	377.1	414.7	425.3
37.5°	420.3	359.6	359.6	394.0	375.8
40°	402.7	341.4	343.2	367.1	331.9
42.5°	381.4	321.9	324.5	331.4	299.4
45°	358.3	303.2	305.0	280.0	274.3
47.5°	332.6	283.7	284.4	232.4	266.2
50°	302.0	263.7	261.2	199.2	265.6
52.5°	275.0	241.8	234.2	180.4	241.2
55°	248.6	218.6	202.3	166.0	223.6
57.5°	225.5	188.6	172.9	149.1	219.9
60°	204.2	159.1	147.2	130.9	201.7
62.5°	186.7	137.2	134.7	118.4	182.9
65°	167.8	122.2	121.5	107.8	155.3
67.5°	149.7	112.1	111.5	97.7	118.4
70°	130.3	101.4	100.2	87.0	87.7
72.5°	110.2	89.6	88.4	78.3	72.7
75°	90.2	75.7	75.2	68.3	58.8
77.5°	70.8	60.1	61.4	55.1	43.2
80°	50.7	43.8	45.1	39.5	32.6
82.5°	33.8	28.9	30.1	25.0	21.9
85°	18.8	16.3	16.9	13.2	10.0
87.5°	8.8	7.5	7.5	5.0	3.2
90°	4.1	2.6	2.4	1.7	0.9
92.5°	25.4	18.0	16.4	10.1	3.7
95°	62.5	35.2	32.3	20.6	9.0
97.5°	84.2	38.7	36.1	25.8	15.5
100°	92.0	41.6	39.2	29.9	20.5
102.5°	95.6	44.5	42.3	33.5	24.8
105°	98.4	48.8	46.9	39.6	32.2
107.5°	98.8	55.1	53.4	46.5	39.7
110°	98.1	58.7	57.1	50.9	44.7



TEST NUMBER: P933906

CATALOG NUMBER: SQ4-FA-025U-050D-B50-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	98.1	63.0	61.5	55.6	49.7
115°	99.0	69.4	68.0	62.6	57.2
117.5°	100.9	75.7	74.4	69.5	64.5
120°	102.3	79.3	78.2	73.5	68.8
122.5°	104.4	83.6	82.4	77.7	73.0
125°	107.4	89.2	88.1	83.8	79.5
127.5°	110.3	94.5	93.4	89.1	84.7
130°	112.5	98.1	96.9	92.2	87.5
132.5°	114.1	101.0	99.8	95.2	90.5
135°	116.0	104.3	103.3	99.0	94.8
137.5°	118.8	108.6	107.6	103.4	99.2
140°	120.5	111.5	110.6	106.7	102.8
142.5°	122.0	113.7	112.7	109.2	105.6
145°	123.8	116.9	116.2	113.0	109.9
147.5°	126.6	121.0	120.3	117.2	114.2
150°	128.0	123.2	122.5	119.7	117.0
152.5°	128.9	124.6	124.0	122.0	119.9
155°	130.9	127.7	127.3	125.7	124.2
157.5°	133.0	130.8	130.4	128.9	127.4
160°	133.9	132.2	131.9	130.7	129.5
162.5°	135.0	133.7	133.5	132.5	131.7
165°	136.4	135.8	135.6	134.8	134.0
167.5°	137.5	137.0	136.9	136.6	136.2
170°	138.4	138.4	138.3	138.0	137.6
172.5°	138.5	138.5	138.5	138.4	138.3
175°	139.1	139.4	139.4	139.4	139.4
177.5°	139.2	139.4	139.4	139.4	139.4
180°	139.4	139.4	139.4	139.4	139.4

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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	12.42	13.44	13.23	14.28	15.31	15.22	16.24	16.03	17.07	18.11
	3H	12.91	13.83	13.74	14.67	15.73	16.57	17.48	17.39	18.33	19.39
	4H	13.11	13.98	13.95	14.83	15.90	17.01	17.88	17.85	18.73	19.80
	6H	13.24	14.04	14.09	14.89	15.98	17.30	18.10	18.15	18.95	20.04
	8H	13.24	14.00	14.11	14.88	15.96	17.37	18.13	18.24	19.01	20.09
	12H	13.22	13.94	14.09	14.81	15.92	17.41	18.14	18.28	19.01	20.12
4H	2H	13.47	14.33	14.31	15.18	16.25	15.65	16.51	16.50	17.37	18.44
	3H	14.51	15.23	15.37	16.11	17.20	17.16	17.88	18.02	18.77	19.85
	4H	14.79	15.45	15.66	16.33	17.44	17.69	18.34	18.56	19.23	20.34
	6H	14.93	15.49	15.81	16.40	17.51	18.06	18.62	18.94	19.53	20.64
	8H	14.94	15.46	15.82	16.36	17.49	18.16	18.69	19.05	19.59	20.72
	12H	14.91	15.39	15.82	16.31	17.44	18.22	18.70	19.13	19.62	20.75
8H	4H	15.25	15.78	16.14	16.68	17.81	17.83	18.36	18.72	19.26	20.39
	6H	15.52	15.96	16.44	16.90	18.03	18.26	18.70	19.18	19.64	20.77
	8H	15.56	15.95	16.49	16.89	18.03	18.41	18.80	19.34	19.73	20.88
	12H	15.56	15.90	16.49	16.82	18.02	18.51	18.85	19.44	19.78	20.98
12H	4H	15.26	15.74	16.17	16.66	17.79	17.80	18.28	18.71	19.20	20.33
	6H	15.58	15.97	16.51	16.90	18.05	18.26	18.65	19.19	19.58	20.73
	8H	15.66	16.00	16.58	16.92	18.12	18.42	18.77	19.35	19.69	20.89