

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: P934258

Luminaire Tested: SQ4-FA-050U-050D-93050-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934258
REPORT IS A COMBINATION OF REPORTS P933690 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-050U-050D-93050-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

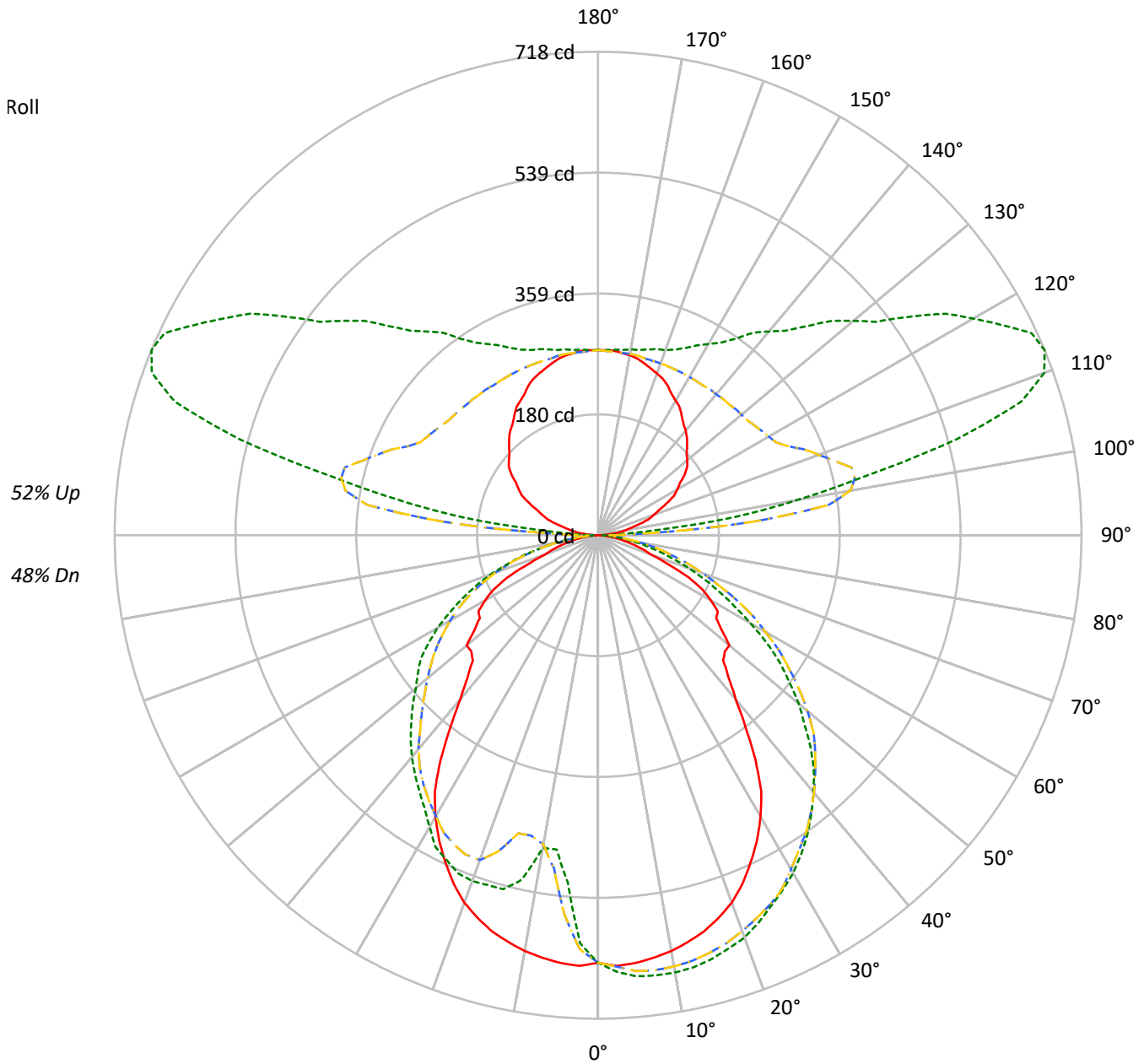
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3429.0 lumens
Efficiency: N/A
Efficacy: 120.7 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: General Diffuse

Input Watts (W): 28.4
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: P934258
CATALOG NUMBER: SQ4-FA-050U-050D-93050-1D-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	50	30	10	0
RCR																					
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46	41	41	41	41
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39	34	34	34	34
3	81	71	64	58	74	66	60	55	56	51	47	46	43	40	38	35	33	29	29	29	29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	33	31	28	25	25	25	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	21	21	21	21
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22	19	19	19	19
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19	17	17	17	17
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15	15	15	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16	13	13	13	13
10	47	34	27	22	43	32	26	21	28	22	19	23	19	16	20	16	14	12	12	12	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5890	5890	5890	5890
5°	5926	5945	5926	4675
10°	5881	5856	5881	4187
15°	5810	5729	5810	4784
20°	5682	5579	5682	4794
25°	5427	5359	5427	4692
30°	5099	5177	5099	4470
35°	4539	4947	4539	4225
40°	3775	4677	3775	4039
45°	3367	4360	3367	3826
50°	3569	3981	3569	3612
55°	3347	3574	3347	3489
60°	3440	3035	3440	3195
65°	3103	2509	3103	2803
70°	2135	1999	2135	2352
75°	1850	1478	1850	1770
80°	1460	978	1460	1063
85°	795	517	795	440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5170 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.3	1.7
10°-20°	162.7	4.7
20°-30°	251.4	7.3
30°-40°	300.2	8.8
40°-50°	301.9	8.8
50°-60°	262.7	7.7
60°-70°	186.3	5.4
70°-80°	98.5	2.9
80°-90°	25.6	0.7
90°-100°	134.0	3.9
100°-110°	352.4	10.3
110°-120°	365.4	10.7
120°-130°	293.1	8.5
130°-140°	230.0	6.7
140°-150°	176.5	5.1
150°-160°	127.1	3.7
160°-170°	77.8	2.3
170°-180°	26.3	0.8
0°-30°	471.4	13.7
0°-40°	771.6	22.5
0°-60°	1336.2	39.0
0°-90°	1646.6	48.0
90°-120°	851.7	24.8
90°-150°	1551.3	45.2
90°-180°	1782.0	52.0
0°-180°	3429.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	635	635	635	635	635	
5°	638	658	638	517	638	60
15°	609	652	609	544	609	171
25°	536	608	536	532	536	246
35°	408	542	408	463	408	252
45°	263	447	263	392	263	211
55°	214	330	214	322	214	197
65°	149	199	149	222	149	142
75°	56	94	56	113	56	59
85°	10	24	10	20	10	13
90°	2	7	2	7	2	2
95°	18	81	18	81	18	20
105°	64	552	64	552	64	67
115°	113	710	113	710	113	111
125°	157	566	157	566	157	139
135°	187	439	187	439	187	145
145°	217	356	217	356	217	136
155°	245	307	245	307	245	113
165°	264	286	264	286	264	75
175°	275	277	275	277	275	26
180°	275	275	275	275	275	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	640.1	640.1	643.6	644.9	644.9	643.1	641.3	643.1	648.5	650.3	649.6
5°	637.6	642.5	649.1	650.3	651.5	650.9	649.6	650.9	656.9	658.1	658.7
7.5°	632.9	641.8	650.3	652.1	653.8	652.1	651.5	652.7	658.7	659.8	659.8
10°	626.9	639.4	649.1	650.3	652.1	650.3	650.3	652.7	658.7	659.8	660.5
12.5°	618.5	635.9	644.9	646.1	648.5	647.8	647.3	649.6	655.7	656.9	656.9
15°	608.8	629.2	637.6	638.9	643.1	641.8	641.8	644.3	650.9	652.7	652.1
17.5°	595.7	620.9	630.5	632.3	635.3	634.7	635.3	637.6	643.6	644.9	645.5
20°	580.6	609.4	620.9	622.7	625.6	625.6	625.6	628.7	634.7	637.1	637.1
22.5°	560.2	597.4	609.4	610.7	614.3	614.3	615.4	619.6	625.0	625.6	625.6
25°	536.2	584.2	594.4	598.1	601.6	603.4	605.2	607.6	609.4	608.8	609.4
27.5°	511.0	567.4	580.6	583.0	587.9	589.7	592.1	592.6	593.2	595.0	593.9
30°	482.8	544.0	563.8	566.2	574.0	575.2	572.8	574.0	577.0	578.2	579.4
32.5°	451.0	509.2	546.4	551.8	559.0	555.5	554.8	556.6	561.5	561.5	562.6
35°	407.7	482.1	530.2	535.0	540.4	536.2	538.6	539.2	542.2	544.0	543.4
37.5°	360.3	458.8	513.4	517.0	521.2	515.8	519.4	521.2	523.6	522.4	522.4
40°	318.2	422.1	493.6	496.0	499.6	495.4	499.0	500.2	501.4	500.2	499.6
42.5°	287.0	381.9	472.5	475.6	473.2	476.1	477.4	479.8	477.9	475.6	475.6
45°	263.0	371.1	449.7	453.3	449.7	454.5	456.3	456.3	451.0	449.7	449.1
47.5°	255.2	349.4	426.9	426.9	425.1	431.1	434.1	429.9	424.6	422.7	422.7
50°	254.6	325.4	395.7	393.3	401.7	408.9	405.9	401.7	397.5	390.9	390.9
52.5°	231.2	296.0	355.4	364.5	377.6	381.9	377.1	372.9	365.6	362.7	360.3
55°	214.3	265.4	318.8	336.8	350.7	356.1	347.0	342.8	332.1	330.3	329.0
57.5°	210.8	221.0	285.2	308.0	324.8	324.3	318.8	311.0	302.0	300.2	299.7
60°	193.4	159.7	249.2	276.2	293.6	291.8	287.0	279.8	271.4	270.2	269.0
62.5°	175.3	115.9	208.3	239.0	263.6	263.0	258.8	248.0	242.0	239.0	236.5
65°	148.9	97.2	148.4	198.8	234.2	235.4	226.3	218.5	211.9	208.3	207.7
67.5°	113.5	79.2	100.3	165.7	205.9	204.8	193.4	189.7	181.3	179.5	175.9
70°	84.1	52.8	69.7	134.5	178.3	175.3	166.3	162.1	154.4	150.1	147.7
72.5°	69.7	42.6	51.0	104.5	150.1	146.5	138.7	133.9	127.3	123.7	121.3
75°	56.4	45.0	39.0	77.4	121.9	119.5	112.3	107.4	102.1	97.2	97.9
77.5°	41.5	42.0	31.2	57.0	96.7	93.1	88.9	82.9	80.5	75.7	75.7
80°	31.2	33.0	23.5	39.0	69.7	69.7	66.1	61.9	57.7	55.2	55.2
82.5°	21.0	21.0	17.4	24.6	47.5	45.7	43.2	42.0	39.7	38.4	38.4
85°	9.6	12.0	10.8	15.0	25.8	27.0	27.0	25.8	25.2	24.0	24.6
87.5°	3.0	5.4	6.6	8.4	13.3	13.8	14.4	14.4	14.4	15.0	15.0
90°	1.9	3.3	4.8	5.2	8.1	12.1	14.1	12.4	9.3	7.0	7.0
92.5°	7.3	19.9	32.5	35.6	50.0	69.3	79.0	69.2	49.7	35.1	33.7
95°	17.7	40.6	63.7	69.4	123.2	194.9	230.8	205.9	156.2	119.0	114.8
97.5°	30.6	50.9	71.1	76.2	165.9	285.6	345.4	329.7	298.3	274.8	266.7
100°	40.6	58.9	77.4	81.9	181.5	314.3	380.7	381.9	384.2	385.9	376.3
102.5°	49.1	66.3	83.4	87.7	188.6	323.3	390.6	410.7	450.7	480.7	472.5
105°	63.5	78.0	92.5	96.2	193.9	324.4	389.6	434.4	524.1	591.4	587.1
107.5°	78.3	91.8	105.3	108.7	194.9	310.0	367.4	430.0	555.2	649.0	650.1
110°	88.2	100.4	112.6	115.7	193.5	297.2	349.0	418.9	558.9	663.8	668.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	97.9	109.6	121.2	124.2	193.5	286.0	332.2	403.8	546.9	654.4	661.5
115°	112.7	123.5	134.2	136.9	195.3	273.1	312.0	381.0	518.9	622.4	632.2
117.5°	127.3	137.1	146.8	149.2	198.9	265.1	298.2	360.5	484.9	578.3	589.1
120°	135.8	145.0	154.2	156.5	201.9	262.4	292.7	349.5	463.3	548.6	559.2
122.5°	144.1	153.5	162.7	165.0	206.1	261.0	288.4	339.6	442.1	518.9	529.3
125°	156.9	165.3	173.7	175.8	211.8	259.8	283.8	327.3	414.4	479.6	489.2
127.5°	167.2	175.7	184.3	186.4	217.6	259.2	280.0	317.3	392.0	448.0	456.1
130°	172.7	181.9	191.1	193.4	221.8	259.6	278.4	311.7	378.3	428.1	435.6
132.5°	178.4	187.7	196.8	199.1	225.2	259.8	277.2	306.9	366.5	411.1	417.8
135°	186.9	195.3	203.7	205.7	228.8	259.6	275.0	299.8	349.7	387.1	392.9
137.5°	195.6	203.9	212.2	214.2	234.4	261.2	274.6	295.6	337.8	369.4	374.2
140°	202.8	210.4	218.1	220.0	237.7	261.4	273.2	291.5	328.0	355.3	359.6
142.5°	208.3	215.4	222.4	224.2	240.6	262.3	273.2	289.3	321.2	345.2	349.0
145°	216.8	222.9	229.1	230.6	244.2	262.4	271.5	284.5	310.7	330.3	333.1
147.5°	225.4	231.3	237.3	238.8	249.7	264.2	271.5	281.8	302.3	317.7	320.2
150°	230.8	236.2	241.6	243.0	252.5	265.1	271.5	280.1	297.5	310.6	312.6
152.5°	236.5	240.7	244.8	245.8	254.4	265.7	271.5	278.9	293.8	304.9	306.3
155°	245.0	248.1	251.1	251.9	258.4	267.1	271.5	277.4	289.2	298.0	299.0
157.5°	251.3	254.3	257.2	257.9	262.4	268.4	271.5	276.0	285.2	292.1	292.9
160°	255.6	257.8	260.2	260.7	264.3	269.0	271.5	275.4	283.3	289.2	289.5
162.5°	259.8	261.5	263.2	263.7	266.3	269.8	271.5	274.8	281.4	286.4	286.8
165°	264.5	266.0	267.6	268.0	269.1	270.7	271.5	273.8	278.5	282.1	282.5
167.5°	268.7	269.4	270.1	270.3	271.3	272.6	273.2	274.9	278.0	280.3	280.5
170°	271.5	272.2	272.9	273.1	273.2	273.2	273.2	274.9	278.0	280.3	280.3
172.5°	272.9	273.1	273.2	273.2	273.2	273.2	273.2	274.5	276.9	278.8	278.6
175°	275.0	275.0	275.0	275.0	274.4	273.6	273.2	274.1	275.7	276.8	276.8
177.5°	275.0	275.0	275.0	275.0	274.5	274.0	273.7	274.3	275.6	276.5	276.3
180°	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	650.9	649.1	650.9	649.6	650.3	648.5	643.1	641.3	643.1	644.9	644.9
5°	658.7	657.5	658.7	658.7	658.1	656.9	650.9	649.6	650.9	651.5	650.3
7.5°	661.1	659.3	661.1	659.8	659.8	658.7	652.7	651.5	652.1	653.8	652.1
10°	661.1	659.3	661.1	660.5	659.8	658.7	652.7	650.3	650.3	652.1	650.3
12.5°	658.1	656.9	658.1	656.9	656.9	655.7	649.6	647.3	647.8	648.5	646.1
15°	653.3	651.5	653.3	652.1	652.7	650.9	644.3	641.8	641.8	643.1	638.9
17.5°	646.1	643.6	646.1	645.5	644.9	643.6	637.6	635.3	634.7	635.3	632.3
20°	637.6	635.9	637.6	637.1	637.1	634.7	628.7	625.6	625.6	625.6	622.7
22.5°	624.5	622.7	624.5	625.6	625.6	625.0	619.6	615.4	614.3	614.3	610.7
25°	609.4	607.6	609.4	609.4	608.8	609.4	607.6	605.2	603.4	601.6	598.1
27.5°	595.0	593.9	595.0	593.9	595.0	593.2	592.6	592.1	589.7	587.9	583.0
30°	580.6	579.4	580.6	579.4	578.2	577.0	574.0	572.8	575.2	574.0	566.2
32.5°	562.6	561.5	562.6	562.6	561.5	561.5	556.6	554.8	555.5	559.0	551.8
35°	544.0	542.2	544.0	543.4	544.0	542.2	539.2	538.6	536.2	540.4	535.0
37.5°	522.4	520.6	522.4	522.4	522.4	523.6	521.2	519.4	515.8	521.2	517.0
40°	500.2	497.8	500.2	499.6	500.2	501.4	500.2	499.0	495.4	499.6	496.0
42.5°	475.0	474.3	475.0	475.6	475.6	477.9	479.8	477.4	476.1	473.2	475.6
45°	447.9	446.8	447.9	449.1	449.7	451.0	456.3	456.3	454.5	449.7	453.3
47.5°	419.1	416.1	419.1	422.7	422.7	424.6	429.9	434.1	431.1	425.1	426.9
50°	388.5	389.1	388.5	390.9	390.9	397.5	401.7	405.9	408.9	401.7	393.3
52.5°	358.5	357.9	358.5	360.3	362.7	365.6	372.9	377.1	381.9	377.6	364.5
55°	328.4	329.7	328.4	329.0	330.3	332.1	342.8	347.0	356.1	350.7	336.8
57.5°	298.4	296.6	298.4	299.7	300.2	302.0	311.0	318.8	324.3	324.8	308.0
60°	263.6	261.2	263.6	269.0	270.2	271.4	279.8	287.0	291.8	293.6	276.2
62.5°	233.0	228.8	233.0	236.5	239.0	242.0	248.0	258.8	263.0	263.6	239.0
65°	200.5	198.8	200.5	207.7	208.3	211.9	218.5	226.3	235.4	234.2	198.8
67.5°	171.1	171.1	171.1	175.9	179.5	181.3	189.7	193.4	204.8	205.9	165.7
70°	144.1	143.5	144.1	147.7	150.1	154.4	162.1	166.3	175.3	178.3	134.5
72.5°	118.3	117.6	118.3	121.3	123.7	127.3	133.9	138.7	146.5	150.1	104.5
75°	95.4	94.3	95.4	97.9	97.2	102.1	107.4	112.3	119.5	121.9	77.4
77.5°	73.2	73.2	73.2	75.7	75.7	80.5	82.9	88.9	93.1	96.7	57.0
80°	54.6	54.1	54.6	55.2	55.2	57.7	61.9	66.1	69.7	69.7	39.0
82.5°	38.4	37.2	38.4	38.4	38.4	39.7	42.0	43.2	45.7	47.5	24.6
85°	24.0	24.0	24.0	24.6	24.0	25.2	25.8	27.0	27.0	25.8	15.0
87.5°	15.6	15.0	15.6	15.0	15.0	14.4	14.4	14.4	13.8	13.3	8.4
90°	7.0	7.0	7.0	7.0	7.0	9.3	12.4	14.1	12.1	8.1	5.2
92.5°	28.1	22.5	28.1	33.7	35.1	49.7	69.2	79.0	69.3	50.0	35.6
95°	97.9	81.0	97.9	114.8	119.0	156.2	205.9	230.8	194.9	123.2	69.4
97.5°	234.6	202.4	234.6	266.7	274.8	298.3	329.7	345.4	285.6	165.9	76.2
100°	338.0	299.7	338.0	376.3	385.9	384.2	381.9	380.7	314.3	181.5	81.9
102.5°	439.7	406.9	439.7	472.5	480.7	450.7	410.7	390.6	323.3	188.6	87.7
105°	569.4	551.8	569.4	587.1	591.4	524.1	434.4	389.6	324.4	193.9	96.2
107.5°	654.3	658.6	654.3	650.1	649.0	555.2	430.0	367.4	310.0	194.9	108.7
110°	686.7	705.1	686.7	668.4	663.8	558.9	418.9	349.0	297.2	193.5	115.7



TEST NUMBER: P934258

CATALOG NUMBER: SQ4-FA-050U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	689.7	717.9	689.7	661.5	654.4	546.9	403.8	332.2	286.0	193.5	124.2
115°	671.3	710.4	671.3	632.2	622.4	518.9	381.0	312.0	273.1	195.3	136.9
117.5°	632.5	676.0	632.5	589.1	578.3	484.9	360.5	298.2	265.1	198.9	149.2
120°	601.3	643.5	601.3	559.2	548.6	463.3	349.5	292.7	262.4	201.9	156.5
122.5°	570.9	612.5	570.9	529.3	518.9	442.1	339.6	288.4	261.0	206.1	165.0
125°	527.4	565.7	527.4	489.2	479.6	414.4	327.3	283.8	259.8	211.8	175.8
127.5°	488.4	520.7	488.4	456.1	448.0	392.0	317.3	280.0	259.2	217.6	186.4
130°	465.5	495.3	465.5	435.6	428.1	378.3	311.7	278.4	259.6	221.8	193.4
132.5°	444.5	471.3	444.5	417.8	411.1	366.5	306.9	277.2	259.8	225.2	199.1
135°	416.0	439.0	416.0	392.9	387.1	349.7	299.8	275.0	259.6	228.8	205.7
137.5°	393.0	411.8	393.0	374.2	369.4	337.8	295.6	274.6	261.2	234.4	214.2
140°	377.3	394.9	377.3	359.6	355.3	328.0	291.5	273.2	261.4	237.7	220.0
142.5°	364.2	379.4	364.2	349.0	345.2	321.2	289.3	273.2	262.3	240.6	224.2
145°	344.7	356.2	344.7	333.1	330.3	310.7	284.5	271.5	262.4	244.2	230.6
147.5°	329.7	339.1	329.7	320.2	317.7	302.3	281.8	271.5	264.2	249.7	238.8
150°	320.3	328.0	320.3	312.6	310.6	297.5	280.1	271.5	265.1	252.5	243.0
152.5°	312.1	317.9	312.1	306.3	304.9	293.8	278.9	271.5	265.7	254.4	245.8
155°	302.9	306.7	302.9	299.0	298.0	289.2	277.4	271.5	267.1	258.4	251.9
157.5°	295.5	298.2	295.5	292.9	292.1	285.2	276.0	271.5	268.4	262.4	257.9
160°	291.2	292.7	291.2	289.5	289.2	283.3	275.4	271.5	269.0	264.3	260.7
162.5°	288.3	289.7	288.3	286.8	286.4	281.4	274.8	271.5	269.8	266.3	263.7
165°	284.1	285.7	284.1	282.5	282.1	278.5	273.8	271.5	270.7	269.1	268.0
167.5°	281.1	281.8	281.1	280.5	280.3	278.0	274.9	273.2	272.6	271.3	270.3
170°	280.3	280.3	280.3	280.3	280.3	278.0	274.9	273.2	273.2	273.2	273.1
172.5°	278.1	277.5	278.1	278.6	278.8	276.9	274.5	273.2	273.2	273.2	273.2
175°	276.8	276.8	276.8	276.8	276.8	275.7	274.1	273.2	273.6	274.4	275.0
177.5°	275.7	275.0	275.7	276.3	276.5	275.6	274.3	273.7	274.0	274.5	275.0
180°	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0



TEST NUMBER: P934258

CATALOG NUMBER: SQ4-FA-050U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	643.6	640.1	640.1	634.1	631.6	629.9	626.9	617.9	615.4	613.0	616.7
5°	649.1	642.5	637.6	626.9	617.9	614.3	602.8	581.2	566.8	556.0	550.0
7.5°	650.3	641.8	632.9	616.1	594.4	584.8	550.0	510.4	499.6	490.0	483.9
10°	649.1	639.4	626.9	601.6	550.6	533.8	499.0	473.2	466.5	464.8	466.5
12.5°	644.9	635.9	618.5	576.4	505.0	493.6	473.2	458.1	457.0	459.9	476.1
15°	637.6	629.2	608.8	542.8	479.8	471.4	457.0	451.5	458.1	479.2	527.8
17.5°	630.5	620.9	595.7	509.8	460.5	454.5	444.3	455.2	492.3	520.6	536.8
20°	620.9	609.4	580.6	485.8	446.8	441.3	436.6	485.2	513.4	523.6	532.6
22.5°	609.4	597.4	560.2	469.0	432.3	428.1	431.1	502.0	513.4	520.6	528.4
25°	594.4	584.2	536.2	455.7	420.9	416.1	427.5	500.2	506.7	508.5	524.2
27.5°	580.6	567.4	511.0	443.7	407.1	405.3	430.6	492.3	497.2	499.0	515.8
30°	563.8	544.0	482.8	431.1	392.7	392.1	431.1	482.8	481.6	486.3	503.2
32.5°	546.4	509.2	451.0	415.5	378.9	378.3	426.9	468.3	467.2	473.7	486.3
35°	530.2	482.1	407.7	397.5	361.4	362.1	416.7	451.5	452.1	458.1	465.9
37.5°	513.4	458.8	360.3	377.6	344.7	344.7	402.9	435.9	434.8	436.6	447.3
40°	493.6	422.1	318.2	351.9	329.0	327.2	386.1	419.1	414.9	414.4	429.3
42.5°	472.5	381.9	287.0	317.7	311.0	308.6	365.6	398.7	390.9	392.7	411.9
45°	449.7	371.1	263.0	268.4	292.4	290.6	343.4	375.3	369.9	374.7	394.5
47.5°	426.9	349.4	255.2	222.8	272.6	272.0	318.8	352.5	349.4	354.3	375.3
50°	395.7	325.4	254.6	191.0	250.4	252.7	289.5	330.3	330.3	334.5	356.7
52.5°	355.4	296.0	231.2	172.9	224.5	231.8	263.6	311.0	312.2	316.4	336.3
55°	318.8	265.4	214.3	159.1	193.9	209.6	238.3	291.2	293.6	297.8	315.9
57.5°	285.2	221.0	210.8	142.9	165.7	180.8	216.1	272.0	273.2	276.8	294.2
60°	249.2	159.7	193.4	125.5	141.1	152.5	195.7	249.2	253.4	255.8	270.8
62.5°	208.3	115.9	175.3	113.5	129.1	131.5	179.0	227.6	233.0	234.8	243.8
65°	148.4	97.2	148.9	103.3	116.5	117.1	160.9	205.4	210.1	213.2	219.8
67.5°	100.3	79.2	113.5	93.6	106.9	107.4	143.5	179.5	186.1	188.6	192.8
70°	69.7	52.8	84.1	83.4	96.1	97.2	124.9	156.1	162.1	163.9	166.3
72.5°	51.0	42.6	69.7	75.0	84.7	85.9	105.6	129.7	135.7	137.5	138.7
75°	39.0	45.0	56.4	65.4	72.1	72.6	86.5	105.6	109.9	111.1	111.6
77.5°	31.2	42.0	41.5	52.8	58.8	57.7	67.9	81.7	85.2	85.2	85.2
80°	23.5	33.0	31.2	37.9	43.2	42.0	48.6	58.3	59.4	60.6	60.1
82.5°	17.4	21.0	21.0	24.0	28.8	27.7	32.4	37.9	37.9	37.9	39.0
85°	10.8	12.0	9.6	12.6	16.2	15.6	18.0	20.4	21.0	21.0	19.8
87.5°	6.6	5.4	3.0	4.8	7.2	7.2	8.4	9.0	8.4	8.4	8.4
90°	4.8	3.3	1.9	3.3	4.8	5.2	8.1	12.1	14.1	12.4	9.3
92.5°	32.5	19.9	7.3	19.9	32.5	35.6	50.0	69.3	79.0	69.2	49.7
95°	63.7	40.6	17.7	40.6	63.7	69.4	123.2	194.9	230.8	205.9	156.2
97.5°	71.1	50.9	30.6	50.9	71.1	76.2	165.9	285.6	345.4	329.7	298.3
100°	77.4	58.9	40.6	58.9	77.4	81.9	181.5	314.3	380.7	381.9	384.2
102.5°	83.4	66.3	49.1	66.3	83.4	87.7	188.6	323.3	390.6	410.7	450.7
105°	92.5	78.0	63.5	78.0	92.5	96.2	193.9	324.4	389.6	434.4	524.1
107.5°	105.3	91.8	78.3	91.8	105.3	108.7	194.9	310.0	367.4	430.0	555.2
110°	112.6	100.4	88.2	100.4	112.6	115.7	193.5	297.2	349.0	418.9	558.9



TEST NUMBER: P934258

CATALOG NUMBER: SQ4-FA-050U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	121.2	109.6	97.9	109.6	121.2	124.2	193.5	286.0	332.2	403.8	546.9
115°	134.2	123.5	112.7	123.5	134.2	136.9	195.3	273.1	312.0	381.0	518.9
117.5°	146.8	137.1	127.3	137.1	146.8	149.2	198.9	265.1	298.2	360.5	484.9
120°	154.2	145.0	135.8	145.0	154.2	156.5	201.9	262.4	292.7	349.5	463.3
122.5°	162.7	153.5	144.1	153.5	162.7	165.0	206.1	261.0	288.4	339.6	442.1
125°	173.7	165.3	156.9	165.3	173.7	175.8	211.8	259.8	283.8	327.3	414.4
127.5°	184.3	175.7	167.2	175.7	184.3	186.4	217.6	259.2	280.0	317.3	392.0
130°	191.1	181.9	172.7	181.9	191.1	193.4	221.8	259.6	278.4	311.7	378.3
132.5°	196.8	187.7	178.4	187.7	196.8	199.1	225.2	259.8	277.2	306.9	366.5
135°	203.7	195.3	186.9	195.3	203.7	205.7	228.8	259.6	275.0	299.8	349.7
137.5°	212.2	203.9	195.6	203.9	212.2	214.2	234.4	261.2	274.6	295.6	337.8
140°	218.1	210.4	202.8	210.4	218.1	220.0	237.7	261.4	273.2	291.5	328.0
142.5°	222.4	215.4	208.3	215.4	222.4	224.2	240.6	262.3	273.2	289.3	321.2
145°	229.1	222.9	216.8	222.9	229.1	230.6	244.2	262.4	271.5	284.5	310.7
147.5°	237.3	231.3	225.4	231.3	237.3	238.8	249.7	264.2	271.5	281.8	302.3
150°	241.6	236.2	230.8	236.2	241.6	243.0	252.5	265.1	271.5	280.1	297.5
152.5°	244.8	240.7	236.5	240.7	244.8	245.8	254.4	265.7	271.5	278.9	293.8
155°	251.1	248.1	245.0	248.1	251.1	251.9	258.4	267.1	271.5	277.4	289.2
157.5°	257.2	254.3	251.3	254.3	257.2	257.9	262.4	268.4	271.5	276.0	285.2
160°	260.2	257.8	255.6	257.8	260.2	260.7	264.3	269.0	271.5	275.4	283.3
162.5°	263.2	261.5	259.8	261.5	263.2	263.7	266.3	269.8	271.5	274.8	281.4
165°	267.6	266.0	264.5	266.0	267.6	268.0	269.1	270.7	271.5	273.8	278.5
167.5°	270.1	269.4	268.7	269.4	270.1	270.3	271.3	272.6	273.2	274.9	278.0
170°	272.9	272.2	271.5	272.2	272.9	273.1	273.2	273.2	273.2	274.9	278.0
172.5°	273.2	273.1	272.9	273.1	273.2	273.2	273.2	273.2	273.2	274.5	276.9
175°	275.0	275.0	275.0	275.0	275.0	275.0	274.4	273.6	273.2	274.1	275.7
177.5°	275.0	275.0	275.0	275.0	275.0	275.0	274.5	274.0	273.7	274.3	275.6
180°	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0



TEST NUMBER: P934258

CATALOG NUMBER: SQ4-FA-050U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	612.5	610.7	613.0	606.5	613.0	610.7	612.5	616.7	613.0	615.4	617.9
5°	537.4	534.4	524.8	517.0	524.8	534.4	537.4	550.0	556.0	566.8	581.2
7.5°	480.3	477.9	475.6	470.8	475.6	477.9	480.3	483.9	490.0	499.6	510.4
10°	467.7	468.3	471.9	471.4	471.9	468.3	467.7	466.5	464.8	466.5	473.2
12.5°	500.2	505.6	525.4	524.2	525.4	505.6	500.2	476.1	459.9	457.0	458.1
15°	537.4	539.2	543.4	544.0	543.4	539.2	537.4	527.8	479.2	458.1	451.5
17.5°	541.0	541.6	544.6	544.6	544.6	541.6	541.0	536.8	520.6	492.3	455.2
20°	538.0	539.2	545.2	546.4	545.2	539.2	538.0	532.6	523.6	513.4	485.2
22.5°	536.8	539.2	544.0	543.4	544.0	539.2	536.8	528.4	520.6	513.4	502.0
25°	530.8	530.8	531.4	532.0	531.4	530.8	530.8	524.2	508.5	506.7	500.2
27.5°	518.2	519.4	523.0	522.4	523.0	519.4	518.2	515.8	499.0	497.2	492.3
30°	506.7	505.6	502.5	500.2	502.5	505.6	506.7	503.2	486.3	481.6	482.8
32.5°	487.6	484.5	481.6	479.8	481.6	484.5	487.6	486.3	473.7	467.2	468.3
35°	464.8	465.4	464.8	463.0	464.8	465.4	464.8	465.9	458.1	452.1	451.5
37.5°	448.6	449.7	449.1	446.8	449.1	449.7	448.6	447.3	436.6	434.8	435.9
40°	431.7	432.3	431.7	429.9	431.7	432.3	431.7	429.3	414.4	414.9	419.1
42.5°	415.5	414.9	413.1	411.9	413.1	414.9	415.5	411.9	392.7	390.9	398.7
45°	396.9	397.5	393.8	392.1	393.8	397.5	396.9	394.5	374.7	369.9	375.3
47.5°	378.3	378.3	375.3	373.4	375.3	378.3	378.3	375.3	354.3	349.4	352.5
50°	358.5	357.9	353.6	353.0	353.6	357.9	358.5	356.7	334.5	330.3	330.3
52.5°	335.7	335.7	336.3	337.4	336.3	335.7	335.7	336.3	316.4	312.2	311.0
55°	315.9	316.4	320.6	321.9	320.6	316.4	315.9	315.9	297.8	293.6	291.2
57.5°	295.5	295.5	298.4	298.4	298.4	295.5	295.5	294.2	276.8	273.2	272.0
60°	272.0	273.2	275.6	275.0	275.6	273.2	272.0	270.8	255.8	253.4	249.2
62.5°	247.4	248.6	249.2	248.0	249.2	248.6	247.4	243.8	234.8	233.0	227.6
65°	221.6	222.8	223.4	222.1	223.4	222.8	221.6	219.8	213.2	210.1	205.4
67.5°	195.2	194.6	193.9	196.3	193.9	194.6	195.2	192.8	188.6	186.1	179.5
70°	168.1	168.1	167.5	168.8	167.5	168.1	168.1	166.3	163.9	162.1	156.1
72.5°	139.3	138.7	141.1	139.3	141.1	138.7	139.3	138.7	137.5	135.7	129.7
75°	111.1	112.3	111.1	112.9	111.1	112.3	111.1	111.6	111.1	109.9	105.6
77.5°	84.7	85.9	84.7	84.7	84.7	85.9	84.7	85.2	85.2	85.2	81.7
80°	60.1	59.4	59.4	58.8	59.4	59.4	60.1	60.1	60.6	59.4	58.3
82.5°	38.4	37.9	37.9	39.0	37.9	37.9	38.4	39.0	37.9	37.9	37.9
85°	21.0	21.6	20.4	20.4	20.4	21.6	21.0	19.8	21.0	21.0	20.4
87.5°	7.8	7.2	7.2	7.2	7.2	7.2	7.8	8.4	8.4	8.4	9.0
90°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	9.3	12.4	14.1	12.1
92.5°	35.1	33.7	28.1	22.5	28.1	33.7	35.1	49.7	69.2	79.0	69.3
95°	119.0	114.8	97.9	81.0	97.9	114.8	119.0	156.2	205.9	230.8	194.9
97.5°	274.8	266.7	234.6	202.4	234.6	266.7	274.8	298.3	329.7	345.4	285.6
100°	385.9	376.3	338.0	299.7	338.0	376.3	385.9	384.2	381.9	380.7	314.3
102.5°	480.7	472.5	439.7	406.9	439.7	472.5	480.7	450.7	410.7	390.6	323.3
105°	591.4	587.1	569.4	551.8	569.4	587.1	591.4	524.1	434.4	389.6	324.4
107.5°	649.0	650.1	654.3	658.6	654.3	650.1	649.0	555.2	430.0	367.4	310.0
110°	663.8	668.4	686.7	705.1	686.7	668.4	663.8	558.9	418.9	349.0	297.2



TEST NUMBER: P934258

CATALOG NUMBER: SQ4-FA-050U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	654.4	661.5	689.7	717.9	689.7	661.5	654.4	546.9	403.8	332.2	286.0
115°	622.4	632.2	671.3	710.4	671.3	632.2	622.4	518.9	381.0	312.0	273.1
117.5°	578.3	589.1	632.5	676.0	632.5	589.1	578.3	484.9	360.5	298.2	265.1
120°	548.6	559.2	601.3	643.5	601.3	559.2	548.6	463.3	349.5	292.7	262.4
122.5°	518.9	529.3	570.9	612.5	570.9	529.3	518.9	442.1	339.6	288.4	261.0
125°	479.6	489.2	527.4	565.7	527.4	489.2	479.6	414.4	327.3	283.8	259.8
127.5°	448.0	456.1	488.4	520.7	488.4	456.1	448.0	392.0	317.3	280.0	259.2
130°	428.1	435.6	465.5	495.3	465.5	435.6	428.1	378.3	311.7	278.4	259.6
132.5°	411.1	417.8	444.5	471.3	444.5	417.8	411.1	366.5	306.9	277.2	259.8
135°	387.1	392.9	416.0	439.0	416.0	392.9	387.1	349.7	299.8	275.0	259.6
137.5°	369.4	374.2	393.0	411.8	393.0	374.2	369.4	337.8	295.6	274.6	261.2
140°	355.3	359.6	377.3	394.9	377.3	359.6	355.3	328.0	291.5	273.2	261.4
142.5°	345.2	349.0	364.2	379.4	364.2	349.0	345.2	321.2	289.3	273.2	262.3
145°	330.3	333.1	344.7	356.2	344.7	333.1	330.3	310.7	284.5	271.5	262.4
147.5°	317.7	320.2	329.7	339.1	329.7	320.2	317.7	302.3	281.8	271.5	264.2
150°	310.6	312.6	320.3	328.0	320.3	312.6	310.6	297.5	280.1	271.5	265.1
152.5°	304.9	306.3	312.1	317.9	312.1	306.3	304.9	293.8	278.9	271.5	265.7
155°	298.0	299.0	302.9	306.7	302.9	299.0	298.0	289.2	277.4	271.5	267.1
157.5°	292.1	292.9	295.5	298.2	295.5	292.9	292.1	285.2	276.0	271.5	268.4
160°	289.2	289.5	291.2	292.7	291.2	289.5	289.2	283.3	275.4	271.5	269.0
162.5°	286.4	286.8	288.3	289.7	288.3	286.8	286.4	281.4	274.8	271.5	269.8
165°	282.1	282.5	284.1	285.7	284.1	282.5	282.1	278.5	273.8	271.5	270.7
167.5°	280.3	280.5	281.1	281.8	281.1	280.5	280.3	278.0	274.9	273.2	272.6
170°	280.3	280.3	280.3	280.3	280.3	280.3	280.3	278.0	274.9	273.2	273.2
172.5°	278.8	278.6	278.1	277.5	278.1	278.6	278.8	276.9	274.5	273.2	273.2
175°	276.8	276.8	276.8	276.8	276.8	276.8	276.8	275.7	274.1	273.2	273.6
177.5°	276.5	276.3	275.7	275.0	275.7	276.3	276.5	275.6	274.3	273.7	274.0
180°	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0



TEST NUMBER: P934258

CATALOG NUMBER: SQ4-FA-050U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	634.7	634.7	634.7	634.7	634.7
2.5°	626.9	629.9	631.6	634.1	640.1
5°	602.8	614.3	617.9	626.9	637.6
7.5°	550.0	584.8	594.4	616.1	632.9
10°	499.0	533.8	550.6	601.6	626.9
12.5°	473.2	493.6	505.0	576.4	618.5
15°	457.0	471.4	479.8	542.8	608.8
17.5°	444.3	454.5	460.5	509.8	595.7
20°	436.6	441.3	446.8	485.8	580.6
22.5°	431.1	428.1	432.3	469.0	560.2
25°	427.5	416.1	420.9	455.7	536.2
27.5°	430.6	405.3	407.1	443.7	511.0
30°	431.1	392.1	392.7	431.1	482.8
32.5°	426.9	378.3	378.9	415.5	451.0
35°	416.7	362.1	361.4	397.5	407.7
37.5°	402.9	344.7	344.7	377.6	360.3
40°	386.1	327.2	329.0	351.9	318.2
42.5°	365.6	308.6	311.0	317.7	287.0
45°	343.4	290.6	292.4	268.4	263.0
47.5°	318.8	272.0	272.6	222.8	255.2
50°	289.5	252.7	250.4	191.0	254.6
52.5°	263.6	231.8	224.5	172.9	231.2
55°	238.3	209.6	193.9	159.1	214.3
57.5°	216.1	180.8	165.7	142.9	210.8
60°	195.7	152.5	141.1	125.5	193.4
62.5°	179.0	131.5	129.1	113.5	175.3
65°	160.9	117.1	116.5	103.3	148.9
67.5°	143.5	107.4	106.9	93.6	113.5
70°	124.9	97.2	96.1	83.4	84.1
72.5°	105.6	85.9	84.7	75.0	69.7
75°	86.5	72.6	72.1	65.4	56.4
77.5°	67.9	57.7	58.8	52.8	41.5
80°	48.6	42.0	43.2	37.9	31.2
82.5°	32.4	27.7	28.8	24.0	21.0
85°	18.0	15.6	16.2	12.6	9.6
87.5°	8.4	7.2	7.2	4.8	3.0
90°	8.1	5.2	4.8	3.3	1.9
92.5°	50.0	35.6	32.5	19.9	7.3
95°	123.2	69.4	63.7	40.6	17.7
97.5°	165.9	76.2	71.1	50.9	30.6
100°	181.5	81.9	77.4	58.9	40.6
102.5°	188.6	87.7	83.4	66.3	49.1
105°	193.9	96.2	92.5	78.0	63.5
107.5°	194.9	108.7	105.3	91.8	78.3
110°	193.5	115.7	112.6	100.4	88.2



TEST NUMBER: P934258

CATALOG NUMBER: SQ4-FA-050U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	193.5	124.2	121.2	109.6	97.9
115°	195.3	136.9	134.2	123.5	112.7
117.5°	198.9	149.2	146.8	137.1	127.3
120°	201.9	156.5	154.2	145.0	135.8
122.5°	206.1	165.0	162.7	153.5	144.1
125°	211.8	175.8	173.7	165.3	156.9
127.5°	217.6	186.4	184.3	175.7	167.2
130°	221.8	193.4	191.1	181.9	172.7
132.5°	225.2	199.1	196.8	187.7	178.4
135°	228.8	205.7	203.7	195.3	186.9
137.5°	234.4	214.2	212.2	203.9	195.6
140°	237.7	220.0	218.1	210.4	202.8
142.5°	240.6	224.2	222.4	215.4	208.3
145°	244.2	230.6	229.1	222.9	216.8
147.5°	249.7	238.8	237.3	231.3	225.4
150°	252.5	243.0	241.6	236.2	230.8
152.5°	254.4	245.8	244.8	240.7	236.5
155°	258.4	251.9	251.1	248.1	245.0
157.5°	262.4	257.9	257.2	254.3	251.3
160°	264.3	260.7	260.2	257.8	255.6
162.5°	266.3	263.7	263.2	261.5	259.8
165°	269.1	268.0	267.6	266.0	264.5
167.5°	271.3	270.3	270.1	269.4	268.7
170°	273.2	273.1	272.9	272.2	271.5
172.5°	273.2	273.2	273.2	273.1	272.9
175°	274.4	275.0	275.0	275.0	275.0
177.5°	274.5	275.0	275.0	275.0	275.0
180°	275.0	275.0	275.0	275.0	275.0



TEST NUMBER: P934258
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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	10.77	11.61	11.74	12.60	13.90	13.57	14.41	14.54	15.40	16.70
	3H	11.24	12.00	12.23	13.00	14.32	14.90	15.66	15.88	16.65	17.97
	4H	11.43	12.15	12.43	13.15	14.48	15.34	16.05	16.33	17.05	18.38
	6H	11.55	12.21	12.56	13.22	14.56	15.61	16.27	16.62	17.28	18.62
	8H	11.55	12.18	12.57	13.20	14.54	15.68	16.31	16.70	17.33	18.67
	12H	11.52	12.12	12.54	13.13	14.50	15.72	16.31	16.74	17.33	18.69
4H	2H	11.79	12.51	12.79	13.51	14.84	13.97	14.69	14.98	15.69	17.02
	3H	12.81	13.41	13.83	14.44	15.78	15.47	16.07	16.48	17.09	18.44
	4H	13.09	13.64	14.11	14.66	16.02	15.99	16.53	17.01	17.56	18.92
	6H	13.21	13.68	14.25	14.73	16.09	16.35	16.81	17.38	17.86	19.22
	8H	13.22	13.66	14.25	14.70	16.07	16.45	16.88	17.48	17.92	19.30
	12H	13.19	13.58	14.24	14.63	16.02	16.50	16.89	17.55	17.95	19.33
8H	4H	13.54	13.98	14.57	15.01	16.39	16.11	16.55	17.15	17.59	18.97
	6H	13.80	14.16	14.86	15.24	16.61	16.54	16.90	17.60	17.98	19.36
	8H	13.84	14.16	14.91	15.22	16.62	16.69	17.01	17.75	18.07	19.46
	12H	13.82	14.10	14.89	15.16	16.60	16.78	17.06	17.85	18.12	19.55
12H	4H	13.54	13.94	14.59	14.99	16.37	16.08	16.47	17.13	17.53	18.91
	6H	13.86	14.18	14.92	15.24	16.63	16.54	16.86	17.60	17.92	19.32
	8H	13.92	14.20	14.99	15.26	16.70	16.69	16.97	17.76	18.03	19.47