

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P522078

Luminaire Tested: **HLBQL4069BLE40AWH-2700K-UNIT**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522078
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A1914661A001)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HLBQL4069BLE40AWH-2700K-UNIT
Description: Surface Mount Downlight Fixture, Single Unit
Light Source: (16) 2700K CCT, 93 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

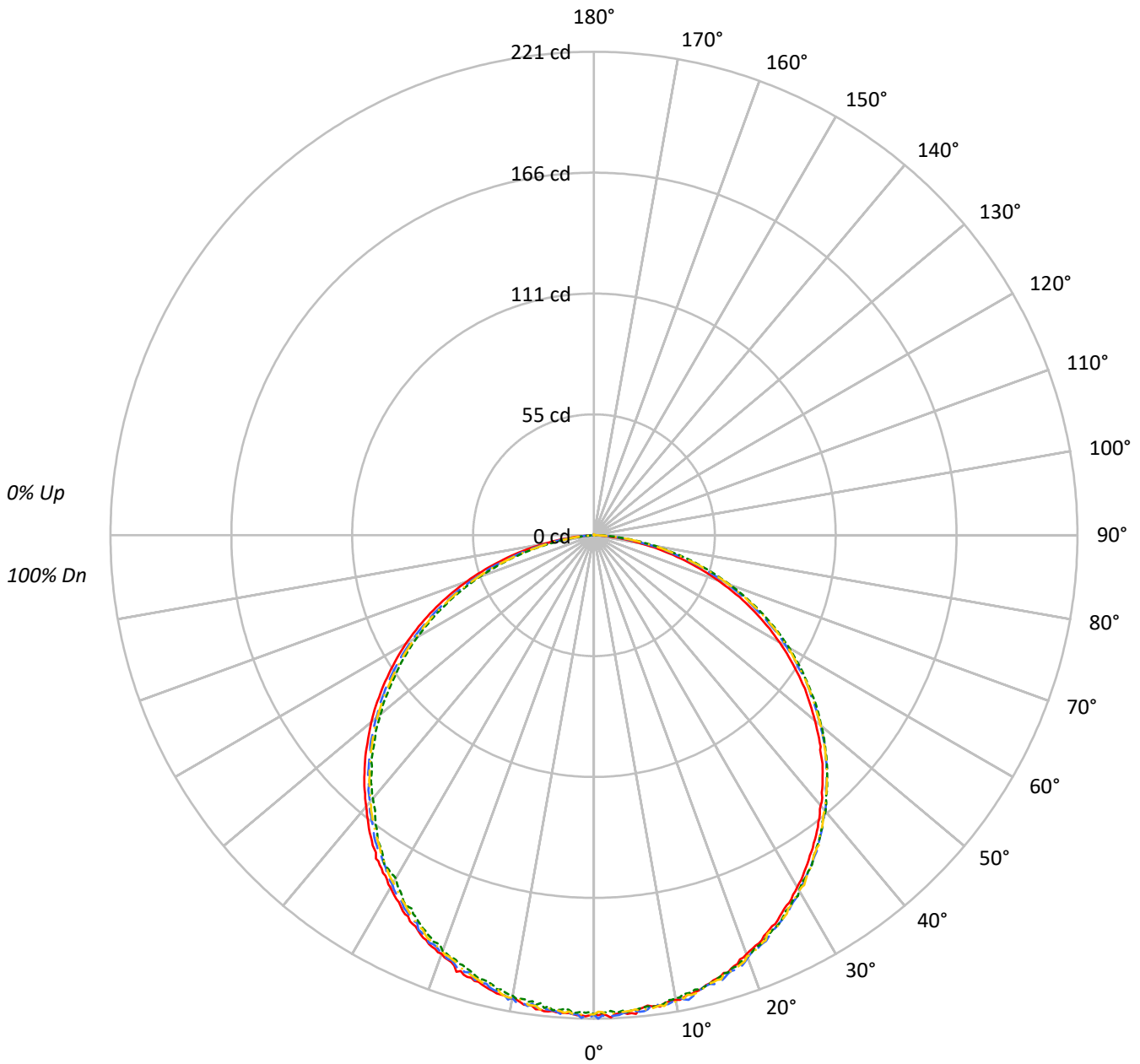
Lumens per Lamp: N/A
Luminaire Lumens: 630.0 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Circular (Dia: 0.33m x H: 0m)
CIE Type: Direct

Input Watts (W): 7.3
Input Voltage (V): 120
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: 25 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				
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	86	86	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	61	61	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	52	52	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	45	45	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	40	40	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	35	35	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	31	31	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	28	28	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	2515	2515	2515	2515
5°	2532	2512	2516	2512
10°	2515	2506	2507	2493
15°	2505	2511	2507	2481
20°	2490	2505	2488	2471
25°	2484	2500	2484	2439
30°	2463	2486	2466	2401
35°	2446	2474	2454	2404
40°	2416	2469	2427	2356
45°	2400	2447	2405	2330
50°	2356	2426	2372	2274
55°	2312	2396	2332	2210
60°	2255	2370	2283	2140
65°	2163	2309	2201	2027
70°	2031	2226	2071	1870
75°	1819	2098	1894	1615
80°	1481	1891	1600	1203
85°	935	1581	1120	566



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.7	3.3
10°-20°	59.4	9.4
20°-30°	90.2	14.3
30°-40°	109.0	17.3
40°-50°	113.7	18.0
50°-60°	103.4	16.4
60°-70°	79.2	12.6
70°-80°	44.2	7.0
80°-90°	10.0	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	170.3	27.0
0°-40°	279.3	44.3
0°-60°	496.4	78.8
0°-90°	629.8	100.0
90°-120°	0.0	0.0
90°-150°	0.1	0.0
90°-180°	0.0	0.0
0°-180°	630.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	219	219	219	219	219	
5°	220	218	218	218	220	21
15°	211	211	211	209	211	60
25°	196	197	196	192	196	90
35°	174	176	175	172	174	109
45°	148	151	148	144	148	114
55°	116	120	116	110	116	103
65°	80	85	81	75	80	79
75°	41	47	43	36	41	43
85°	7	12	8	4	7	9
90°	0	1	0	0	0	0
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0
0.5°	219.4	219.6	221.0	219.0	218.3	218.2	217.8	219.3	219.5	218.4	220.5
1°	219.0	219.4	219.6	218.2	218.3	218.9	218.0	218.5	219.9	220.0	219.7
1.5°	219.5	220.2	220.2	218.9	218.1	219.1	219.1	218.9	219.5	219.1	220.7
2°	220.6	221.6	220.0	220.2	217.6	219.2	219.1	218.9	219.6	218.9	219.1
2.5°	219.1	220.7	219.8	219.8	218.3	218.9	218.5	219.5	219.1	218.9	219.2
3°	218.9	219.3	219.6	219.6	218.2	219.2	218.3	219.3	218.7	219.1	218.6
3.5°	218.5	218.5	218.8	218.8	217.7	218.2	218.3	219.1	218.8	219.8	218.7
4°	219.3	219.1	218.6	219.1	218.5	219.0	218.1	218.4	218.7	219.6	219.3
4.5°	219.1	218.3	219.3	218.9	217.9	218.5	218.0	218.1	218.7	218.4	218.4
5°	219.7	218.1	218.3	218.9	217.9	218.3	217.5	217.9	218.3	217.9	218.0
5.5°	217.6	217.4	218.8	218.2	217.3	218.3	218.5	218.3	218.7	218.7	217.9
6°	217.0	218.0	218.8	218.1	217.1	217.9	218.9	218.5	218.8	218.2	217.8
6.5°	216.4	218.1	218.1	218.3	216.8	218.3	217.0	217.0	218.1	216.0	218.1
7°	217.0	218.0	216.5	218.3	217.0	218.2	218.0	217.0	218.4	217.0	217.3
7.5°	217.1	217.4	216.1	217.0	217.3	216.3	217.5	217.0	217.0	216.3	216.0
8°	217.6	217.0	217.2	217.7	216.8	216.2	217.0	216.8	216.8	215.7	217.3
8.5°	216.4	216.1	216.8	217.5	216.7	215.4	217.6	216.1	217.0	216.4	216.5
9°	216.0	215.3	217.0	216.8	215.2	216.5	216.2	216.2	216.0	215.6	215.8
9.5°	215.6	215.7	216.3	216.2	215.3	216.8	216.8	215.2	215.2	215.6	216.3
10°	215.7	216.3	215.0	216.4	214.9	215.3	216.4	215.6	215.0	215.2	214.7
10.5°	216.0	215.4	215.1	216.5	214.9	216.0	214.9	214.7	214.9	214.2	215.9
11°	215.2	214.2	216.1	215.1	213.7	215.2	215.7	215.2	214.3	213.9	214.1
11.5°	214.3	214.4	216.8	214.5	213.7	215.2	214.3	214.2	214.2	214.6	213.5
12°	214.4	213.8	215.7	215.3	213.7	214.2	214.9	213.4	214.1	212.0	213.1
12.5°	213.9	213.9	214.8	214.2	212.8	214.2	214.5	213.0	213.4	212.4	212.7
13°	213.5	213.9	213.8	213.7	213.0	212.7	214.3	212.3	212.9	212.2	212.2
13.5°	212.9	214.0	212.7	213.3	213.0	212.2	213.1	212.4	212.4	211.4	210.8
14°	211.9	213.2	212.3	212.4	212.2	212.2	213.1	211.5	211.7	211.0	211.0
14.5°	211.6	211.5	211.8	211.8	211.6	212.2	211.6	211.2	210.8	210.6	210.6
15°	210.7	210.4	212.5	210.8	211.2	211.4	211.4	210.6	210.9	209.7	210.4
15.5°	210.3	209.7	211.7	210.8	210.6	210.7	210.9	209.6	209.9	209.3	208.9
16°	209.9	209.7	211.8	210.6	209.8	210.3	211.2	209.6	210.1	208.7	207.8
16.5°	208.7	209.1	210.8	210.1	208.9	209.6	209.1	209.2	209.5	208.0	208.2
17°	209.2	209.1	209.6	209.5	209.1	209.5	209.0	209.1	208.3	207.8	207.0
17.5°	208.0	209.3	208.9	208.5	208.0	208.7	209.0	207.2	209.2	207.2	207.6
18°	207.1	208.0	208.9	208.2	207.6	207.7	208.6	207.6	206.8	206.6	206.1
18.5°	206.7	206.4	208.4	207.3	207.7	207.4	207.8	206.6	205.7	205.7	204.9
19°	205.1	205.6	208.0	206.6	206.1	206.6	207.2	205.6	205.2	205.3	204.9
19.5°	204.7	205.6	206.8	205.9	206.1	205.7	206.4	205.2	204.8	204.6	204.1
20°	203.8	204.9	205.6	205.3	205.0	205.1	204.7	204.7	203.6	203.5	203.6
20.5°	203.0	202.6	204.4	204.6	204.3	204.3	204.9	203.6	203.6	203.1	202.4
21°	202.4	202.6	203.6	203.8	203.3	203.3	204.2	202.8	202.5	201.5	201.3
21.5°	201.6	203.1	203.5	203.1	202.4	203.0	203.1	202.1	202.2	200.9	200.8
22°	201.3	201.7	202.4	203.0	202.1	201.9	202.6	201.2	201.5	200.7	201.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	200.4	200.8	201.9	201.8	201.4	200.9	201.4	200.7	200.3	199.8	199.4
23°	199.0	200.7	201.5	201.7	200.5	200.9	201.1	200.5	199.9	198.6	198.7
23.5°	198.2	199.6	200.3	200.4	199.3	199.4	198.7	199.5	198.9	198.1	197.8
24°	197.3	198.5	199.4	199.7	198.7	198.7	198.0	198.4	197.8	196.9	197.4
24.5°	196.4	197.8	198.2	198.8	197.8	198.3	197.9	197.7	196.5	195.9	194.8
25°	196.1	196.7	197.5	197.8	197.3	197.3	197.6	196.1	196.1	195.0	194.7
25.5°	195.0	195.7	196.6	197.3	196.7	196.2	197.2	195.7	195.5	194.4	193.8
26°	193.8	194.8	195.8	196.7	195.7	195.7	195.8	194.6	193.8	193.6	192.9
26.5°	192.8	194.2	194.8	195.4	194.4	195.0	195.0	194.1	193.6	193.2	192.0
27°	191.7	193.0	194.0	194.1	192.9	194.0	194.2	192.7	192.7	191.5	191.3
27.5°	190.8	191.7	193.1	193.4	192.4	193.1	192.4	191.6	191.3	190.4	189.6
28°	190.2	191.3	191.9	192.3	191.5	191.7	191.7	190.8	190.0	189.4	188.5
28.5°	189.2	189.6	190.8	191.3	190.2	190.9	190.7	189.6	189.3	188.7	187.9
29°	187.8	188.5	190.1	190.2	189.6	190.0	189.6	189.2	188.2	187.4	186.9
29.5°	187.0	188.1	189.1	188.8	189.5	188.9	188.5	187.1	187.2	185.6	185.9
30°	185.8	187.0	188.0	188.3	187.5	187.8	187.7	186.6	186.0	184.8	184.3
30.5°	184.7	185.5	186.7	187.2	186.3	186.9	186.8	186.0	185.2	184.0	183.5
31°	183.9	184.6	185.6	185.6	184.9	186.0	186.6	184.7	183.6	183.0	182.3
31.5°	182.7	183.6	184.4	184.4	184.3	184.9	185.0	182.7	182.5	181.8	181.3
32°	181.4	182.1	183.4	183.6	183.5	183.5	183.6	182.3	182.1	180.6	179.4
32.5°	180.3	181.2	182.5	182.6	182.2	182.7	181.9	181.2	180.6	179.7	178.3
33°	179.1	179.9	181.2	181.6	181.6	181.8	181.6	180.4	179.8	178.2	177.2
33.5°	177.9	179.3	180.3	180.4	180.5	180.5	180.4	178.8	178.6	177.2	176.0
34°	176.6	178.0	179.1	179.5	179.1	178.8	178.9	177.7	178.3	176.1	175.2
34.5°	175.5	176.8	178.0	177.9	177.5	177.8	177.6	177.0	176.0	175.0	174.4
35°	174.5	175.5	177.1	177.0	176.5	176.8	176.5	175.9	175.1	173.9	173.0
35.5°	173.0	174.2	176.1	175.9	175.3	175.7	175.5	174.5	174.1	172.2	172.0
36°	171.9	172.8	174.7	174.7	174.3	174.6	175.0	173.3	172.6	171.2	170.7
36.5°	170.7	171.7	173.2	173.5	173.2	173.2	173.0	172.0	171.4	170.3	169.3
37°	169.3	170.4	172.0	172.1	171.8	172.0	171.6	170.9	170.3	169.3	167.8
37.5°	168.2	169.0	170.8	170.6	170.5	170.7	171.0	169.6	168.9	167.8	166.3
38°	166.6	167.8	169.5	169.5	169.5	169.5	169.3	168.3	167.5	166.5	165.1
38.5°	165.5	166.6	168.3	168.2	167.6	168.3	168.0	167.0	166.1	165.2	163.7
39°	164.0	165.3	166.9	167.1	166.7	167.0	166.5	165.7	164.8	163.1	162.6
39.5°	162.3	164.2	165.5	165.5	165.9	165.7	165.0	164.4	163.2	162.4	161.2
40°	161.2	162.8	164.4	164.2	164.7	164.2	164.1	163.1	161.9	161.1	159.4
40.5°	160.3	161.4	163.2	162.8	163.4	163.0	162.8	161.8	160.7	159.3	158.1
41°	159.0	159.9	161.5	161.7	161.9	161.7	161.3	160.3	159.4	157.7	156.7
41.5°	157.1	158.6	160.2	160.4	160.0	160.4	160.0	158.9	157.9	156.5	155.6
42°	156.0	157.1	158.8	159.0	158.9	159.2	158.7	157.5	156.6	155.2	153.7
42.5°	154.6	155.6	156.9	157.7	157.7	157.7	157.4	156.0	155.3	153.7	152.8
43°	153.2	154.5	155.8	156.3	156.3	156.3	156.0	154.8	153.9	152.5	151.4
43.5°	151.8	153.3	154.5	154.9	154.9	154.9	154.6	153.4	152.5	151.0	149.9
44°	150.5	151.8	153.1	153.5	153.5	153.5	153.2	152.0	151.0	149.4	148.3
44.5°	149.1	150.2	151.7	152.2	152.1	152.3	151.9	150.6	149.6	148.0	146.7



TEST NUMBER: P522078
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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	147.8	148.7	150.3	150.6	150.7	150.8	150.4	149.1	148.1	146.6	145.3
45.5°	146.0	147.3	149.1	149.3	149.2	149.3	149.0	147.6	146.6	145.1	143.9
46°	144.3	145.9	147.4	147.9	147.8	147.9	147.5	146.0	145.3	143.7	142.2
46.5°	142.6	144.5	145.9	146.4	146.4	146.4	146.0	144.6	143.7	142.2	141.0
47°	141.7	142.7	144.5	144.9	144.8	144.9	144.5	143.2	142.0	140.6	139.7
47.5°	139.9	141.3	143.0	143.5	143.4	143.7	142.9	141.5	140.4	138.9	138.0
48°	138.4	139.9	141.7	142.1	141.8	142.1	141.4	140.0	139.0	137.3	136.3
48.5°	136.7	138.5	139.9	140.4	140.5	140.4	139.9	138.5	137.4	135.6	134.7
49°	135.1	136.7	138.4	139.1	139.0	138.8	138.4	137.0	135.8	134.3	133.2
49.5°	133.6	135.0	136.6	137.6	137.4	137.2	136.9	135.5	134.3	132.8	131.5
50°	131.9	133.6	135.1	135.8	135.8	135.7	135.3	134.0	132.8	131.2	129.9
50.5°	130.3	131.9	133.3	133.9	134.2	134.0	133.6	132.3	131.2	129.6	128.2
51°	128.6	130.3	131.8	132.6	132.7	132.8	131.9	130.9	129.6	127.9	126.8
51.5°	127.0	128.6	130.3	131.0	131.1	131.3	130.2	129.4	128.1	126.3	125.4
52°	125.4	126.9	128.7	129.4	129.6	129.6	128.6	127.8	126.5	124.6	123.6
52.5°	123.8	125.5	127.0	127.8	128.1	128.0	127.1	125.9	124.8	122.9	122.1
53°	122.2	124.0	125.5	126.1	126.5	126.3	125.6	124.4	123.0	121.3	120.2
53.5°	120.6	122.1	123.6	124.3	124.7	124.6	124.0	122.7	121.4	119.8	118.7
54°	119.2	120.4	122.1	122.5	122.8	123.1	122.3	121.4	119.8	118.2	116.9
54.5°	117.1	118.8	120.6	121.0	121.4	121.6	120.8	119.6	118.2	116.6	115.1
55°	115.5	117.3	119.0	119.4	119.7	120.0	119.2	117.8	116.5	114.8	113.6
55.5°	113.9	115.6	117.3	117.6	118.1	118.3	117.5	116.2	114.7	113.1	112.0
56°	112.0	113.9	115.7	116.0	116.4	116.6	115.8	114.3	113.1	111.4	110.3
56.5°	110.2	112.1	113.8	114.4	115.0	115.0	114.1	112.9	111.4	109.8	108.4
57°	108.5	110.3	111.7	112.7	113.3	113.3	112.2	111.1	109.6	108.1	106.8
57.5°	106.8	108.5	110.1	110.8	111.6	111.6	110.6	109.5	107.9	106.4	105.0
58°	105.1	106.8	108.5	109.1	109.8	109.7	108.8	107.6	106.3	104.5	103.2
58.5°	103.4	105.2	106.8	107.4	108.1	108.0	107.1	105.9	104.6	102.7	101.4
59°	101.6	103.3	105.0	106.0	106.4	106.3	105.7	104.0	102.9	100.9	99.5
59.5°	99.8	101.6	103.2	104.0	104.9	104.7	104.0	102.4	101.1	99.1	97.8
60°	98.2	99.7	101.6	102.4	103.2	102.9	102.2	100.4	99.4	97.4	95.8
60.5°	96.1	98.2	99.8	100.6	101.3	101.2	100.5	98.9	97.6	95.7	94.2
61°	94.4	96.3	98.0	98.8	99.5	99.4	98.6	97.1	95.8	93.8	92.3
61.5°	92.7	94.5	96.1	97.0	97.8	97.7	96.8	95.5	94.0	92.0	90.5
62°	90.9	92.6	94.4	95.2	96.1	95.9	95.1	93.6	92.1	90.2	88.5
62.5°	88.9	90.8	92.6	93.5	94.3	94.2	93.4	91.8	90.3	88.4	86.7
63°	87.1	88.9	90.7	91.7	92.5	92.4	91.5	89.8	88.5	86.6	84.8
63.5°	85.2	87.1	88.8	89.7	90.6	90.6	89.8	88.1	86.7	84.6	83.0
64°	83.3	85.1	87.0	87.7	88.8	88.7	87.9	86.0	84.7	82.7	81.3
64.5°	81.5	83.4	85.0	86.1	86.9	86.9	86.1	84.4	82.9	81.0	79.3
65°	79.6	81.6	83.1	84.4	85.0	84.9	84.3	82.5	81.0	79.2	77.3
65.5°	77.8	79.8	81.4	82.6	83.2	83.1	82.4	80.6	79.1	77.3	75.4
66°	75.9	77.9	79.6	80.6	81.4	81.1	80.5	78.7	77.2	75.3	73.6
66.5°	74.1	75.8	77.7	78.7	79.5	79.4	78.6	76.8	75.3	73.4	71.7
67°	72.3	74.1	75.8	76.7	77.6	77.5	76.7	74.9	73.4	71.6	69.7



TEST NUMBER: P522078
 CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	70.1	72.2	74.1	74.7	75.7	75.6	74.9	73.0	71.5	69.7	67.8
68°	68.1	70.2	72.3	73.1	73.9	73.8	72.8	71.1	69.5	67.7	65.9
68.5°	66.1	68.2	70.1	71.1	72.0	71.9	71.0	69.2	67.6	65.7	64.0
69°	64.2	66.3	68.2	69.0	70.0	70.0	69.1	67.3	65.7	63.8	62.1
69.5°	62.3	64.3	66.2	67.1	68.2	68.1	67.2	65.3	63.7	61.8	60.3
70°	60.5	62.4	64.3	65.3	66.3	66.1	65.3	63.5	61.7	60.1	58.3
70.5°	58.6	60.5	62.4	63.3	64.2	64.3	63.3	61.6	60.0	58.1	56.4
71°	56.7	58.5	60.5	61.3	62.3	62.3	61.4	59.8	58.0	56.1	54.4
71.5°	54.7	56.7	58.5	59.6	60.4	60.4	59.5	57.8	56.1	54.2	52.6
72°	52.7	54.7	56.5	57.7	58.6	58.6	57.6	55.9	54.1	52.3	50.7
72.5°	50.8	52.9	54.5	55.7	56.7	56.7	55.7	54.0	52.2	50.4	48.8
73°	48.8	50.8	52.5	53.8	54.9	54.7	53.6	52.1	50.2	48.5	46.8
73.5°	46.8	48.9	50.7	51.9	52.9	52.7	51.7	50.2	48.4	46.4	44.9
74°	45.0	46.8	48.9	49.8	51.0	50.9	49.8	48.2	46.4	44.6	42.9
74.5°	43.0	45.0	46.8	47.9	49.2	49.0	47.9	46.3	44.5	42.7	40.9
75°	41.0	43.1	44.9	46.0	47.3	47.1	46.0	44.5	42.7	40.7	39.0
75.5°	39.1	41.1	42.9	44.2	45.4	45.2	44.2	42.6	40.8	38.9	37.2
76°	37.3	39.1	41.0	42.2	43.5	43.2	42.3	40.6	38.9	37.0	35.3
76.5°	35.3	37.4	39.0	40.4	41.5	41.4	40.3	38.7	37.0	35.1	33.4
77°	33.3	35.4	37.2	38.5	39.6	39.4	38.5	37.0	35.2	33.3	31.5
77.5°	31.7	33.5	35.3	36.5	37.8	37.6	36.7	35.1	33.4	31.4	29.8
78°	29.7	31.7	33.4	34.7	35.9	35.7	34.8	33.2	31.5	29.6	28.0
78.5°	28.0	29.8	31.5	32.8	34.1	33.8	32.9	31.3	29.6	27.8	26.2
79°	26.1	28.0	29.7	30.9	32.2	32.0	31.1	29.5	27.8	25.9	24.4
79.5°	24.2	26.1	27.9	29.0	30.3	30.1	29.2	27.8	26.0	24.2	22.6
80°	22.4	24.4	26.2	27.1	28.6	28.4	27.5	25.9	24.2	22.5	20.9
80.5°	20.8	22.5	24.2	25.3	26.7	26.5	25.7	24.2	22.5	20.7	19.2
81°	19.0	20.8	22.4	23.6	25.0	24.8	23.9	22.5	20.8	19.0	17.5
81.5°	17.3	19.2	20.7	21.8	23.2	23.1	22.1	20.7	19.1	17.3	15.8
82°	15.7	17.5	19.0	20.0	21.5	21.3	20.4	19.1	17.4	15.7	14.4
82.5°	14.2	15.8	17.4	18.3	19.8	19.6	18.8	17.4	15.8	14.3	12.9
83°	12.7	14.4	15.7	16.7	18.1	18.0	17.1	15.8	14.4	12.7	11.4
83.5°	11.2	12.8	14.2	15.2	16.5	16.3	15.5	14.3	12.7	11.2	9.9
84°	9.7	11.2	12.7	13.7	14.9	14.8	14.1	12.9	11.3	9.8	8.5
84.5°	8.4	9.8	11.2	12.1	13.5	13.4	12.5	11.3	9.8	8.5	7.2
85°	7.1	8.5	9.7	10.6	12.0	11.9	11.0	9.9	8.5	7.1	6.0
85.5°	6.0	7.2	8.4	9.2	10.6	10.4	9.7	8.5	7.1	5.8	4.7
86°	4.7	6.0	7.0	7.9	9.1	9.0	8.3	7.2	5.9	4.7	3.7
86.5°	3.7	4.8	6.0	6.6	7.8	7.6	7.0	5.9	4.7	3.7	2.7
87°	2.8	3.7	4.7	5.5	6.5	6.4	5.7	4.7	3.7	2.6	1.8
87.5°	1.9	2.8	3.7	4.5	5.4	5.3	4.6	3.7	2.7	1.8	1.1
88°	1.2	2.0	2.8	3.4	4.2	4.1	3.5	2.7	1.8	1.1	0.5
88.5°	0.6	1.3	1.9	2.4	3.2	3.0	2.6	1.8	1.0	0.4	0.0
89°	0.2	0.7	1.2	1.8	2.2	2.1	1.6	1.2	0.4	0.0	0.0
89.5°	0.0	0.3	0.6	1.1	1.4	1.3	0.9	0.5	0.0	0.0	0.0



TEST NUMBER: P522078
 CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.2	0.5	0.7	0.6	0.3	0.0	0.0	0.0	0.0
90.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P522078
 CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121.5°	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123.5°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125.5°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126.5°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128.5°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129.5°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130.5°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131.5°	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P522078

CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
135.5°	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139.5°	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
141°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0
141.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0
143.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
144°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
144.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
145°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
145.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
146°	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1
146.5°	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1
147°	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1
147.5°	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
148°	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
148.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
149°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
149.5°	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1
150°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
150.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
151°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
151.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
152°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
152.5°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
153°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
153.5°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
154°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
154.5°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
155°	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
155.5°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
156°	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
156.5°	0.1	0.3	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.3
157°	0.1	0.3	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2



TEST NUMBER: P522078
 CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
157.5°	0.1	0.3	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.2
158°	0.1	0.3	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.3
158.5°	0.1	0.3	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.3
159°	0.1	0.3	0.1	0.1	0.0	0.3	0.2	0.1	0.1	0.1	0.3
159.5°	0.1	0.3	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.3
160°	0.1	0.3	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.3
160.5°	0.1	0.3	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.3
161°	0.1	0.3	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.3
161.5°	0.1	0.3	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.3
162°	0.1	0.3	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.3
162.5°	0.1	0.3	0.1	0.1	0.0	0.2	0.3	0.1	0.1	0.1	0.3
163°	0.1	0.3	0.1	0.1	0.0	0.2	0.3	0.1	0.1	0.1	0.3
163.5°	0.1	0.4	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.3
164°	0.1	0.4	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.3
164.5°	0.1	0.3	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.5
165°	0.1	0.4	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.5
165.5°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
166°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
166.5°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
167°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
167.5°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
168°	0.1	0.1	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
168.5°	0.1	0.1	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
169°	0.1	0.3	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
169.5°	0.1	0.3	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.4	0.4
170°	0.1	0.3	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.4	0.4
170.5°	0.1	0.7	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.5	0.4
171°	0.1	0.7	0.1	0.1	0.0	0.3	0.4	0.1	0.1	0.4	0.4
171.5°	0.1	0.6	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.2	0.4
172°	0.1	0.6	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.5	0.4
172.5°	0.1	0.6	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.2	0.4
173°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.2	0.4
173.5°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
174°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
174.5°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
175°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
175.5°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
176°	0.1	0.5	0.1	0.1	0.0	0.3	0.3	0.1	0.1	0.1	0.4
176.5°	0.1	0.5	0.1	0.1	0.0	0.3	0.4	0.1	0.1	0.1	0.4
177°	0.1	0.5	0.1	0.1	0.0	0.3	0.4	0.1	0.1	0.1	0.4
177.5°	0.1	0.5	0.1	0.1	0.0	0.3	0.4	0.1	0.1	0.1	0.4
178°	0.1	0.5	0.1	0.1	0.0	0.3	0.4	0.1	0.1	0.1	0.4
178.5°	0.1	0.5	0.1	0.1	0.0	0.3	0.5	0.1	0.1	0.1	0.4
179°	0.1	0.4	0.1	0.1	0.0	0.3	0.5	0.1	0.1	0.1	0.4
179.5°	0.1	0.4	0.1	0.1	0.0	0.3	0.5	0.1	0.1	0.1	0.4



TEST NUMBER: P522078

CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P522078

CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	219.0	219.0	219.0	219.0	219.0	219.0
0.5°	218.7	217.9	217.9	219.1	218.1	219.4
1°	218.7	218.4	218.0	218.9	218.7	219.0
1.5°	218.0	217.9	218.7	219.2	219.2	219.5
2°	218.6	218.3	217.9	218.7	219.6	220.6
2.5°	217.9	218.7	217.4	219.2	219.1	219.1
3°	218.3	217.3	217.7	218.0	218.9	218.9
3.5°	218.3	216.9	218.1	218.7	218.1	218.5
4°	217.9	217.5	216.9	218.1	217.3	219.3
4.5°	217.6	217.6	217.6	217.7	217.7	219.1
5°	217.9	217.9	218.3	216.9	217.7	219.7
5.5°	217.6	216.4	217.2	217.5	216.4	217.6
6°	216.0	217.3	217.3	218.4	216.5	217.0
6.5°	216.9	215.3	216.5	218.1	216.5	216.4
7°	217.2	216.2	216.0	216.8	217.5	217.0
7.5°	216.4	214.9	216.3	216.7	217.9	217.1
8°	216.4	215.4	216.0	216.8	216.4	217.6
8.5°	215.8	214.5	215.2	214.7	215.8	216.4
9°	215.1	214.5	215.4	215.1	213.9	216.0
9.5°	213.5	214.9	213.5	215.1	215.1	215.6
10°	214.7	213.8	213.1	214.7	214.4	215.7
10.5°	213.4	213.5	214.4	214.9	214.3	216.0
11°	213.5	212.8	213.2	214.5	214.3	215.2
11.5°	212.8	211.8	213.0	213.7	213.1	214.3
12°	212.0	212.3	212.9	212.0	212.0	214.4
12.5°	211.8	211.0	212.0	211.0	211.1	213.9
13°	211.6	210.3	211.4	211.0	211.0	213.5
13.5°	210.2	209.7	210.1	211.4	211.0	212.9
14°	210.3	209.4	209.7	210.8	210.6	211.9
14.5°	209.2	209.5	209.5	210.1	210.5	211.6
15°	209.0	208.7	208.5	209.5	210.1	210.7
15.5°	208.3	207.6	208.1	208.9	209.6	210.3
16°	208.2	206.8	207.2	208.3	207.8	209.9
16.5°	207.6	206.3	206.3	207.5	207.6	208.7
17°	206.4	205.4	206.0	207.0	207.2	209.2
17.5°	206.2	205.3	205.7	206.3	206.0	208.0
18°	205.3	204.1	205.0	204.9	205.5	207.1
18.5°	204.3	203.7	204.1	204.5	204.9	206.7
19°	204.7	203.5	203.5	203.6	204.3	205.1
19.5°	203.3	202.6	202.4	203.4	203.2	204.7
20°	202.4	202.2	202.2	202.6	203.2	203.8
20.5°	201.3	200.4	201.9	201.3	202.2	203.0
21°	200.3	199.8	200.4	201.1	201.6	202.4
21.5°	199.3	199.7	200.0	200.3	200.7	201.6
22°	199.4	198.6	198.4	199.7	199.4	201.3



TEST NUMBER: P522078

CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	198.5	197.8	197.4	199.2	198.5	200.4
23°	197.6	196.7	197.1	197.9	198.2	199.0
23.5°	196.5	196.0	196.5	196.4	197.3	198.2
24°	194.6	194.8	195.7	196.2	196.7	197.3
24.5°	193.6	193.8	194.7	195.1	195.1	196.4
25°	193.1	192.5	193.3	194.1	194.2	196.1
25.5°	193.5	191.9	192.2	192.9	193.4	195.0
26°	192.1	189.9	191.4	192.1	192.5	193.8
26.5°	191.1	189.9	190.2	191.1	192.0	192.8
27°	189.8	189.6	189.2	189.8	191.3	191.7
27.5°	188.8	188.6	188.1	188.9	189.9	190.8
28°	187.5	186.7	187.4	187.8	188.6	190.2
28.5°	186.7	185.3	186.3	186.8	187.7	189.2
29°	185.5	184.4	184.8	185.4	186.4	187.8
29.5°	184.4	182.9	183.8	184.3	185.0	187.0
30°	183.3	181.1	183.1	183.4	184.1	185.8
30.5°	182.3	180.5	181.6	182.5	182.9	184.7
31°	181.0	180.4	180.6	181.6	182.0	183.9
31.5°	179.5	179.4	179.3	180.3	180.6	182.7
32°	178.5	178.9	177.6	179.1	179.6	181.4
32.5°	177.2	178.3	176.6	178.0	178.5	180.3
33°	176.2	176.6	175.5	176.7	177.3	179.1
33.5°	175.2	175.0	174.4	175.8	176.2	177.9
34°	174.1	173.6	173.2	174.5	174.8	176.6
34.5°	173.0	172.5	172.1	173.0	173.7	175.5
35°	171.7	171.5	170.8	171.8	172.4	174.5
35.5°	170.5	170.3	169.6	170.6	171.0	173.0
36°	169.2	168.4	168.4	169.4	169.7	171.9
36.5°	168.0	166.9	167.2	168.3	168.4	170.7
37°	166.6	165.7	166.0	166.9	167.2	169.3
37.5°	165.4	164.2	164.9	165.7	165.9	168.2
38°	164.1	162.5	163.6	164.4	164.6	166.6
38.5°	162.7	160.7	162.2	163.0	163.4	165.5
39°	161.1	159.6	160.8	161.8	162.0	164.0
39.5°	159.9	158.4	159.5	160.2	160.9	162.3
40°	158.4	157.2	157.9	159.1	159.6	161.2
40.5°	156.9	156.1	156.4	157.5	158.2	160.3
41°	155.6	154.8	155.0	156.1	157.0	159.0
41.5°	154.4	153.2	153.5	154.9	155.5	157.1
42°	152.9	152.3	152.1	153.3	154.2	156.0
42.5°	151.6	150.8	150.6	152.1	152.8	154.6
43°	150.2	149.0	149.1	150.3	151.2	153.2
43.5°	148.8	147.5	147.7	149.1	149.9	151.8
44°	147.4	146.2	146.5	147.4	148.5	150.5
44.5°	145.9	145.2	144.7	145.9	147.0	149.1



TEST NUMBER: P522078

CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	144.4	143.5	143.2	144.7	145.6	147.8
45.5°	142.7	141.8	141.7	143.3	143.9	146.0
46°	141.3	140.3	140.3	141.6	142.6	144.3
46.5°	139.8	138.4	139.0	140.0	141.0	142.6
47°	138.0	137.0	137.4	138.5	139.5	141.7
47.5°	136.6	135.5	135.9	137.0	137.8	139.9
48°	135.0	134.2	134.3	135.4	136.3	138.4
48.5°	133.4	132.6	132.5	134.0	134.7	136.7
49°	131.8	130.8	130.9	132.4	133.1	135.1
49.5°	130.4	129.0	129.6	130.8	131.8	133.6
50°	128.7	127.3	127.8	129.3	130.1	131.9
50.5°	127.1	125.7	126.3	127.5	128.5	130.3
51°	125.3	124.4	124.8	125.9	126.9	128.6
51.5°	123.6	122.7	123.0	124.2	125.2	127.0
52°	122.0	121.0	121.3	122.5	123.6	125.4
52.5°	120.4	119.1	119.6	120.9	121.9	123.8
53°	118.8	117.3	118.1	119.2	120.2	122.2
53.5°	117.1	115.7	116.4	117.4	118.4	120.6
54°	115.5	114.1	114.6	115.6	116.4	119.2
54.5°	113.9	112.3	112.9	113.9	115.2	117.1
55°	112.1	110.4	111.0	112.2	113.3	115.5
55.5°	110.3	109.0	109.4	110.6	111.4	113.9
56°	108.7	107.3	107.7	108.8	109.8	112.0
56.5°	107.0	105.7	106.3	107.1	108.1	110.2
57°	105.3	103.9	104.3	105.3	106.7	108.5
57.5°	103.6	102.1	102.6	103.6	105.1	106.8
58°	101.8	100.4	100.7	101.8	103.2	105.1
58.5°	100.1	98.7	99.0	100.1	101.4	103.4
59°	98.3	96.9	97.0	98.3	99.5	101.6
59.5°	96.5	95.1	95.3	96.5	97.8	99.8
60°	94.7	93.2	93.4	94.7	95.9	98.2
60.5°	92.9	91.3	91.7	93.0	94.1	96.1
61°	91.1	89.4	89.8	90.9	92.4	94.4
61.5°	89.2	87.7	88.0	89.1	90.4	92.7
62°	87.4	85.8	86.3	87.3	88.6	90.9
62.5°	85.6	83.9	84.4	85.4	86.7	88.9
63°	83.7	82.2	82.5	83.7	84.9	87.1
63.5°	81.9	80.4	80.6	81.8	83.1	85.2
64°	80.0	78.5	78.7	79.9	81.2	83.3
64.5°	78.0	76.4	76.9	78.0	79.4	81.5
65°	76.2	74.6	75.0	76.2	77.5	79.6
65.5°	74.1	72.7	73.0	74.3	75.7	77.8
66°	72.2	71.0	71.2	72.3	73.7	75.9
66.5°	70.3	69.0	69.3	70.3	72.0	74.1
67°	68.4	67.0	67.4	68.6	69.9	72.3



TEST NUMBER: P522078

CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	66.4	65.1	65.5	66.5	68.0	70.1
68°	64.5	63.3	63.4	64.6	66.1	68.1
68.5°	62.6	61.2	61.6	62.6	64.0	66.1
69°	60.7	59.4	59.6	60.9	62.1	64.2
69.5°	58.8	57.5	57.7	59.0	60.3	62.3
70°	56.9	55.7	55.9	56.9	58.4	60.5
70.5°	55.0	53.6	53.8	55.0	56.3	58.6
71°	53.0	51.7	52.0	53.1	54.4	56.7
71.5°	51.2	49.8	49.9	51.0	52.4	54.7
72°	49.2	47.7	47.9	49.2	50.7	52.7
72.5°	47.3	46.0	46.1	47.1	48.7	50.8
73°	45.3	43.9	44.1	45.2	46.7	48.8
73.5°	43.3	42.0	42.2	43.3	45.0	46.8
74°	41.4	40.2	40.3	41.4	42.9	45.0
74.5°	39.5	38.3	38.3	39.4	40.9	43.0
75°	37.7	36.4	36.5	37.6	39.0	41.0
75.5°	35.8	34.5	34.7	35.6	37.1	39.1
76°	34.0	32.6	32.7	33.7	35.1	37.3
76.5°	32.1	30.7	30.8	31.9	33.2	35.3
77°	30.3	28.9	29.0	30.1	31.4	33.3
77.5°	28.5	26.9	27.2	28.2	29.6	31.7
78°	26.7	25.2	25.3	26.4	27.8	29.7
78.5°	24.8	23.4	23.6	24.6	26.0	28.0
79°	23.2	21.7	21.9	22.8	24.2	26.1
79.5°	21.4	19.9	20.1	21.1	22.4	24.2
80°	19.6	18.2	18.3	19.3	20.6	22.4
80.5°	18.0	16.5	16.7	17.7	18.9	20.8
81°	16.4	15.0	15.2	16.0	17.3	19.0
81.5°	14.8	13.5	13.6	14.5	15.6	17.3
82°	13.3	11.9	12.1	12.9	14.2	15.7
82.5°	11.8	10.4	10.6	11.4	12.7	14.2
83°	10.4	9.1	9.2	10.0	11.1	12.7
83.5°	8.9	7.8	7.9	8.6	9.7	11.2
84°	7.6	6.5	6.6	7.3	8.3	9.7
84.5°	6.4	5.3	5.4	6.1	7.0	8.4
85°	5.1	4.3	4.3	4.9	6.0	7.1
85.5°	4.1	3.3	3.3	3.8	4.7	6.0
86°	3.0	2.4	2.5	2.9	3.7	4.7
86.5°	2.1	1.6	1.7	2.1	2.7	3.7
87°	1.2	0.9	1.0	1.3	1.9	2.8
87.5°	0.5	0.4	0.4	0.7	1.2	1.9
88°	0.0	0.2	0.1	0.3	0.6	1.2
88.5°	0.0	0.0	0.0	0.0	0.3	0.6
89°	0.0	0.0	0.0	0.0	0.0	0.2
89.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P522078
 CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0
90.5°	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0
91.5°	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0
93.5°	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0
94.5°	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0
95.5°	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0
96.5°	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0
98.5°	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0
99.5°	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0
100.5°	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0
101.5°	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0
103.5°	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0
104.5°	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0
105.5°	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0
106.5°	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0
108.5°	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0
109.5°	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0
110.5°	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0
111.5°	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P522078

CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0
113.5°	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0
114.5°	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.1	0.0
115.5°	0.0	0.0	0.0	0.0	0.1	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0
116.5°	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.1	0.0	0.0	0.1	0.1
117.5°	0.0	0.1	0.0	0.0	0.0	0.1
118°	0.0	0.1	0.0	0.0	0.0	0.0
118.5°	0.0	0.0	0.1	0.0	0.1	0.0
119°	0.0	0.1	0.1	0.0	0.1	0.1
119.5°	0.0	0.1	0.1	0.1	0.1	0.1
120°	0.0	0.1	0.1	0.1	0.1	0.1
120.5°	0.0	0.1	0.1	0.1	0.1	0.1
121°	0.0	0.1	0.1	0.1	0.1	0.1
121.5°	0.0	0.1	0.1	0.0	0.1	0.1
122°	0.0	0.1	0.1	0.1	0.1	0.1
122.5°	0.0	0.1	0.0	0.1	0.1	0.1
123°	0.0	0.1	0.0	0.1	0.1	0.1
123.5°	0.0	0.1	0.1	0.1	0.1	0.1
124°	0.0	0.1	0.0	0.1	0.1	0.1
124.5°	0.0	0.1	0.1	0.1	0.1	0.1
125°	0.0	0.1	0.1	0.1	0.1	0.1
125.5°	0.0	0.1	0.1	0.1	0.1	0.1
126°	0.0	0.1	0.0	0.1	0.1	0.1
126.5°	0.0	0.1	0.1	0.1	0.1	0.1
127°	0.0	0.1	0.1	0.1	0.1	0.1
127.5°	0.0	0.1	0.1	0.1	0.1	0.2
128°	0.0	0.1	0.1	0.1	0.1	0.1
128.5°	0.0	0.1	0.1	0.1	0.1	0.1
129°	0.0	0.1	0.1	0.1	0.1	0.1
129.5°	0.0	0.1	0.1	0.1	0.1	0.1
130°	0.0	0.1	0.1	0.1	0.1	0.1
130.5°	0.0	0.1	0.1	0.1	0.1	0.1
131°	0.0	0.1	0.1	0.1	0.1	0.1
131.5°	0.0	0.1	0.1	0.2	0.1	0.2
132°	0.0	0.1	0.1	0.1	0.1	0.1
132.5°	0.0	0.1	0.1	0.1	0.1	0.1
133°	0.0	0.1	0.1	0.1	0.1	0.1
133.5°	0.0	0.1	0.1	0.1	0.1	0.1
134°	0.0	0.1	0.2	0.1	0.1	0.1
134.5°	0.0	0.1	0.2	0.1	0.1	0.1



TEST NUMBER: P522078
 CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.0	0.1	0.1	0.2	0.1	0.1
135.5°	0.0	0.1	0.1	0.2	0.1	0.1
136°	0.0	0.1	0.1	0.1	0.1	0.1
136.5°	0.0	0.1	0.1	0.1	0.1	0.1
137°	0.0	0.1	0.1	0.1	0.1	0.1
137.5°	0.0	0.1	0.1	0.1	0.1	0.1
138°	0.0	0.1	0.1	0.1	0.1	0.1
138.5°	0.0	0.1	0.1	0.1	0.1	0.1
139°	0.0	0.1	0.1	0.1	0.1	0.1
139.5°	0.0	0.1	0.1	0.1	0.1	0.1
140°	0.0	0.1	0.1	0.1	0.1	0.1
140.5°	0.0	0.1	0.1	0.1	0.1	0.1
141°	0.0	0.1	0.1	0.1	0.1	0.1
141.5°	0.0	0.1	0.1	0.1	0.1	0.1
142°	0.0	0.1	0.1	0.1	0.1	0.0
142.5°	0.0	0.1	0.1	0.1	0.1	0.0
143°	0.0	0.1	0.1	0.1	0.1	0.1
143.5°	0.0	0.1	0.1	0.1	0.1	0.1
144°	0.0	0.1	0.1	0.1	0.1	0.1
144.5°	0.0	0.1	0.1	0.1	0.1	0.1
145°	0.0	0.1	0.1	0.1	0.1	0.1
145.5°	0.0	0.1	0.1	0.1	0.1	0.1
146°	0.0	0.1	0.1	0.1	0.1	0.1
146.5°	0.0	0.1	0.1	0.1	0.1	0.1
147°	0.1	0.1	0.1	0.1	0.1	0.1
147.5°	0.0	0.1	0.1	0.1	0.1	0.1
148°	0.0	0.1	0.1	0.1	0.1	0.1
148.5°	0.1	0.1	0.1	0.1	0.1	0.1
149°	0.1	0.1	0.1	0.1	0.1	0.1
149.5°	0.1	0.1	0.1	0.1	0.1	0.1
150°	0.1	0.1	0.1	0.1	0.1	0.1
150.5°	0.1	0.1	0.1	0.1	0.1	0.1
151°	0.1	0.1	0.1	0.1	0.1	0.1
151.5°	0.1	0.1	0.1	0.1	0.1	0.1
152°	0.1	0.1	0.1	0.1	0.1	0.1
152.5°	0.1	0.1	0.1	0.1	0.1	0.1
153°	0.1	0.1	0.1	0.1	0.1	0.1
153.5°	0.2	0.1	0.1	0.1	0.1	0.1
154°	0.2	0.1	0.1	0.1	0.1	0.1
154.5°	0.1	0.1	0.1	0.1	0.1	0.1
155°	0.1	0.1	0.1	0.1	0.1	0.1
155.5°	0.1	0.1	0.1	0.1	0.1	0.1
156°	0.1	0.1	0.1	0.1	0.1	0.1
156.5°	0.1	0.1	0.1	0.1	0.1	0.1
157°	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P522078
 CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
157.5°	0.1	0.1	0.1	0.1	0.1	0.1
158°	0.1	0.1	0.1	0.1	0.1	0.1
158.5°	0.1	0.1	0.1	0.1	0.1	0.1
159°	0.1	0.1	0.1	0.1	0.1	0.1
159.5°	0.1	0.1	0.1	0.1	0.1	0.1
160°	0.1	0.1	0.1	0.1	0.1	0.1
160.5°	0.1	0.1	0.1	0.1	0.1	0.1
161°	0.1	0.1	0.1	0.1	0.1	0.1
161.5°	0.1	0.1	0.1	0.1	0.1	0.1
162°	0.1	0.1	0.1	0.1	0.1	0.1
162.5°	0.1	0.1	0.1	0.1	0.1	0.1
163°	0.1	0.1	0.1	0.1	0.1	0.1
163.5°	0.1	0.1	0.1	0.1	0.1	0.1
164°	0.1	0.1	0.1	0.1	0.1	0.1
164.5°	0.1	0.1	0.1	0.1	0.1	0.1
165°	0.1	0.1	0.1	0.1	0.1	0.1
165.5°	0.1	0.1	0.1	0.1	0.1	0.1
166°	0.1	0.1	0.1	0.1	0.1	0.1
166.5°	0.1	0.1	0.1	0.1	0.1	0.1
167°	0.1	0.1	0.1	0.1	0.1	0.1
167.5°	0.1	0.1	0.1	0.1	0.1	0.1
168°	0.1	0.1	0.1	0.1	0.1	0.1
168.5°	0.1	0.1	0.1	0.1	0.1	0.1
169°	0.1	0.1	0.1	0.1	0.1	0.1
169.5°	0.1	0.1	0.1	0.1	0.1	0.1
170°	0.1	0.1	0.1	0.1	0.1	0.1
170.5°	0.1	0.1	0.1	0.1	0.1	0.1
171°	0.1	0.1	0.1	0.1	0.1	0.1
171.5°	0.1	0.1	0.1	0.1	0.1	0.1
172°	0.1	0.1	0.1	0.1	0.1	0.1
172.5°	0.1	0.1	0.1	0.1	0.1	0.1
173°	0.1	0.1	0.1	0.1	0.1	0.1
173.5°	0.1	0.1	0.1	0.1	0.1	0.1
174°	0.1	0.1	0.2	0.1	0.1	0.1
174.5°	0.1	0.2	0.2	0.1	0.1	0.1
175°	0.1	0.2	0.2	0.1	0.1	0.1
175.5°	0.1	0.2	0.2	0.1	0.1	0.1
176°	0.1	0.3	0.2	0.1	0.1	0.1
176.5°	0.1	0.3	0.3	0.1	0.1	0.1
177°	0.1	0.4	0.4	0.1	0.1	0.1
177.5°	0.1	0.4	0.5	0.1	0.1	0.1
178°	0.1	0.3	0.5	0.1	0.1	0.1
178.5°	0.1	0.3	0.5	0.1	0.1	0.1
179°	0.1	0.3	0.5	0.1	0.1	0.1
179.5°	0.1	0.3	0.5	0.1	0.1	0.1



TEST NUMBER: P522078

CATALOG NUMBER: HLBQL4069BLE40AWH-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	0.1	0.1	0.1	0.1	0.1	0.1

(END OF REPORT)