

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: P522080

Luminaire Tested: **HLBQL4069BLE40AWH-3500K-UNIT**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522080
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-3500K-UNIT
Description: Surface Mount Downlight Fixture, Single Unit
Light Source: (16) 3500K CCT, 94 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

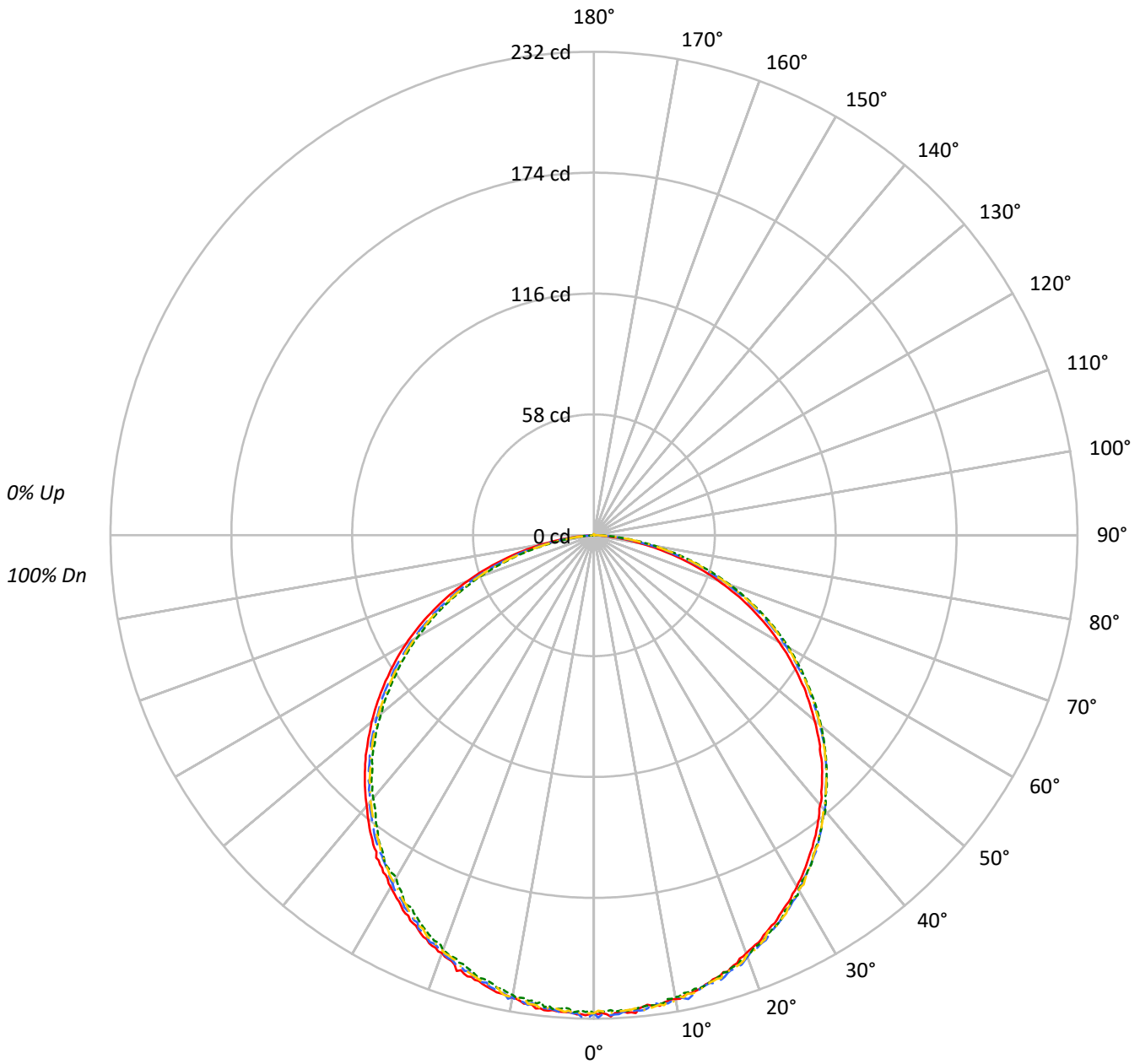
Lumens per Lamp: N/A
Luminaire Lumens: 660.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Circular (Dia: 0.33m x H: 0m)
CIE Type: Direct

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



TEST NUMBER: P522080
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Luminous Intensity Polar Plot



0% Up
100% Dn

— 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°	2634	2634	2634	2634
5°	2653	2630	2636	2631
10°	2635	2624	2627	2612
15°	2623	2629	2626	2600
20°	2609	2625	2606	2588
25°	2602	2619	2602	2555
30°	2581	2604	2584	2515
35°	2562	2592	2572	2519
40°	2532	2587	2544	2469
45°	2514	2564	2520	2442
50°	2469	2542	2487	2383
55°	2422	2510	2444	2316
60°	2361	2482	2391	2241
65°	2266	2421	2307	2125
70°	2125	2330	2172	1957
75°	1908	2200	1983	1690
80°	1554	1977	1680	1263
85°	975	1660	1173	593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.7	3.3
10°-20°	62.2	9.4
20°-30°	94.5	14.3
30°-40°	114.2	17.3
40°-50°	119.1	18.0
50°-60°	108.3	16.4
60°-70°	82.9	12.6
70°-80°	46.4	7.0
80°-90°	10.4	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°	178.4	27.0
0°-40°	292.6	44.3
0°-60°	520.0	78.8
0°-90°	659.8	100.0
90°-120°	0.0	0.0
90°-150°	0.1	0.0
90°-180°	0.0	0.0
0°-180°	660.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	229	229	229	229	229	
5°	230	228	229	228	230	22
15°	221	221	221	219	221	62
25°	205	207	205	202	205	95
35°	183	185	184	180	183	114
45°	155	158	155	150	155	119
55°	121	125	122	116	121	108
65°	83	89	85	78	83	82
75°	43	50	45	38	43	46
85°	7	13	9	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°	229.4	229.4	229.4	229.4	229.4	229.4	229.4	229.4	229.4	229.4	229.4
0.5°	229.8	230.1	231.5	229.4	228.7	228.6	228.2	229.7	229.9	228.8	231.0
1°	229.4	229.8	230.0	228.6	228.7	229.4	228.4	228.9	230.4	230.4	230.2
1.5°	229.9	230.6	230.6	229.3	228.5	229.5	229.6	229.4	229.9	229.6	231.2
2°	231.1	232.1	230.5	230.7	228.0	229.7	229.5	229.4	230.1	229.4	229.5
2.5°	229.5	231.2	230.2	230.3	228.7	229.3	228.9	229.9	229.5	229.4	229.7
3°	229.4	229.7	230.1	230.1	228.6	229.7	228.7	229.7	229.2	229.6	229.0
3.5°	228.9	228.9	229.2	229.2	228.0	228.6	228.7	229.5	229.2	230.2	229.2
4°	229.7	229.5	229.0	229.5	228.9	229.4	228.4	228.8	229.2	230.0	229.7
4.5°	229.6	228.7	229.7	229.3	228.2	228.9	228.4	228.5	229.1	228.8	228.8
5°	230.2	228.5	228.7	229.3	228.2	228.7	227.9	228.3	228.7	228.2	228.4
5.5°	228.0	227.7	229.2	228.6	227.7	228.7	228.9	228.7	229.2	229.1	228.2
6°	227.4	228.4	229.2	228.5	227.5	228.2	229.4	228.9	229.2	228.6	228.2
6.5°	226.7	228.4	228.5	228.7	227.2	228.7	227.4	227.3	228.5	226.3	228.4
7°	227.4	228.4	226.8	228.7	227.3	228.6	228.4	227.4	228.8	227.4	227.6
7.5°	227.5	227.7	226.4	227.4	227.6	226.6	227.9	227.4	227.3	226.6	226.3
8°	228.0	227.4	227.5	228.1	227.1	226.5	227.4	227.1	227.1	226.0	227.7
8.5°	226.7	226.4	227.2	227.8	227.0	225.6	228.0	226.4	227.3	226.7	226.8
9°	226.3	225.5	227.4	227.1	225.4	226.8	226.5	226.5	226.3	225.9	226.1
9.5°	225.8	226.0	226.6	226.5	225.5	227.1	227.2	225.5	225.5	225.8	226.6
10°	226.0	226.6	225.2	226.7	225.1	225.5	226.7	225.8	225.3	225.4	225.0
10.5°	226.3	225.6	225.3	226.8	225.1	226.3	225.1	225.0	225.1	224.4	226.2
11°	225.4	224.4	226.4	225.3	223.9	225.5	226.0	225.4	224.5	224.1	224.3
11.5°	224.5	224.6	227.2	224.8	223.9	225.4	224.5	224.4	224.4	224.8	223.6
12°	224.6	224.0	226.0	225.5	223.8	224.4	225.1	223.6	224.3	222.1	223.2
12.5°	224.1	224.1	225.0	224.4	222.9	224.4	224.7	223.1	223.6	222.6	222.8
13°	223.7	224.1	224.0	223.9	223.1	222.8	224.5	222.4	223.0	222.3	222.3
13.5°	223.1	224.2	222.8	223.5	223.1	222.3	223.2	222.6	222.5	221.4	220.8
14°	222.0	223.3	222.4	222.5	222.3	222.3	223.2	221.6	221.8	221.1	221.1
14.5°	221.7	221.6	221.9	221.9	221.6	222.3	221.7	221.3	220.9	220.6	220.6
15°	220.7	220.4	222.6	220.8	221.2	221.4	221.4	220.6	220.9	219.7	220.4
15.5°	220.4	219.7	221.8	220.9	220.6	220.7	220.9	219.6	219.9	219.3	218.9
16°	219.9	219.7	221.9	220.6	219.8	220.3	221.2	219.6	220.2	218.7	217.7
16.5°	218.6	219.0	220.9	220.2	218.9	219.6	219.1	219.2	219.4	218.0	218.1
17°	219.2	219.0	219.6	219.5	219.0	219.4	218.9	219.0	218.2	217.7	216.9
17.5°	217.9	219.3	218.8	218.4	218.0	218.6	218.9	217.1	219.2	217.1	217.5
18°	217.0	217.9	218.9	218.2	217.5	217.6	218.5	217.5	216.6	216.5	215.9
18.5°	216.5	216.2	218.3	217.2	217.6	217.2	217.7	216.5	215.5	215.5	214.7
19°	214.9	215.4	217.9	216.4	216.0	216.4	217.0	215.4	215.0	215.0	214.7
19.5°	214.4	215.4	216.6	215.8	215.9	215.5	216.2	215.0	214.5	214.3	213.8
20°	213.5	214.6	215.4	215.0	214.8	214.8	214.4	214.4	213.3	213.2	213.3
20.5°	212.7	212.3	214.1	214.3	214.1	214.1	214.7	213.3	213.3	212.8	212.1
21°	212.1	212.3	213.3	213.5	213.0	213.0	213.9	212.5	212.1	211.1	210.9
21.5°	211.2	212.8	213.2	212.8	212.0	212.7	212.8	211.7	211.8	210.5	210.4
22°	210.9	211.4	212.1	212.6	211.7	211.5	212.2	210.8	211.1	210.2	210.6



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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°	209.9	210.4	211.5	211.4	211.0	210.5	211.0	210.2	209.8	209.3	208.9
23°	208.4	210.3	211.1	211.3	210.1	210.4	210.6	210.1	209.4	208.1	208.2
23.5°	207.7	209.1	209.8	209.9	208.8	208.9	208.2	209.0	208.4	207.5	207.2
24°	206.7	208.0	208.9	209.2	208.2	208.2	207.4	207.8	207.2	206.3	206.8
24.5°	205.8	207.2	207.7	208.2	207.2	207.7	207.3	207.1	205.9	205.3	204.1
25°	205.4	206.0	206.9	207.2	206.7	206.7	207.0	205.4	205.4	204.3	204.0
25.5°	204.3	205.0	206.0	206.7	206.0	205.5	206.6	205.0	204.8	203.6	203.0
26°	203.0	204.1	205.1	206.0	205.0	205.0	205.1	203.8	203.1	202.8	202.1
26.5°	202.0	203.5	204.1	204.7	203.7	204.3	204.3	203.3	202.8	202.3	201.1
27°	200.9	202.2	203.3	203.3	202.1	203.2	203.5	201.9	201.9	200.6	200.4
27.5°	199.9	200.8	202.3	202.6	201.6	202.3	201.6	200.7	200.4	199.4	198.6
28°	199.3	200.4	201.1	201.5	200.6	200.9	200.9	199.9	199.1	198.4	197.5
28.5°	198.2	198.7	199.9	200.4	199.3	200.0	199.8	198.7	198.3	197.7	196.9
29°	196.7	197.5	199.2	199.2	198.6	199.1	198.6	198.2	197.2	196.3	195.8
29.5°	195.9	197.0	198.1	197.8	198.5	197.9	197.5	196.0	196.1	194.4	194.8
30°	194.7	195.9	197.0	197.2	196.4	196.7	196.7	195.5	194.9	193.6	193.1
30.5°	193.5	194.3	195.6	196.1	195.2	195.8	195.7	194.8	194.0	192.8	192.2
31°	192.6	193.4	194.5	194.4	193.7	194.9	195.5	193.5	192.3	191.7	190.9
31.5°	191.4	192.3	193.2	193.2	193.1	193.7	193.8	191.4	191.2	190.4	189.9
32°	190.1	190.8	192.1	192.3	192.3	192.2	192.3	191.0	190.8	189.2	188.0
32.5°	188.9	189.8	191.1	191.3	190.9	191.4	190.6	189.9	189.2	188.2	186.8
33°	187.7	188.5	189.9	190.3	190.2	190.5	190.2	188.9	188.4	186.7	185.7
33.5°	186.4	187.8	188.9	189.0	189.1	189.1	189.0	187.3	187.1	185.6	184.3
34°	185.0	186.5	187.7	188.1	187.7	187.3	187.5	186.2	186.8	184.5	183.6
34.5°	183.9	185.3	186.5	186.4	186.0	186.2	186.1	185.4	184.3	183.3	182.7
35°	182.8	183.8	185.5	185.4	184.9	185.2	184.9	184.3	183.5	182.1	181.3
35.5°	181.3	182.5	184.5	184.3	183.6	184.1	183.9	182.8	182.4	180.4	180.2
36°	180.1	181.1	183.0	183.1	182.6	182.9	183.3	181.6	180.8	179.4	178.8
36.5°	178.9	179.9	181.4	181.7	181.5	181.4	181.2	180.2	179.6	178.4	177.4
37°	177.4	178.5	180.2	180.3	179.9	180.2	179.8	179.0	178.4	177.3	175.8
37.5°	176.2	177.1	178.9	178.7	178.7	178.8	179.2	177.7	177.0	175.8	174.3
38°	174.5	175.8	177.5	177.6	177.5	177.5	177.4	176.3	175.5	174.4	173.0
38.5°	173.4	174.5	176.3	176.2	175.6	176.3	176.0	174.9	174.0	173.1	171.5
39°	171.9	173.2	174.8	175.0	174.7	174.9	174.5	173.6	172.6	170.9	170.4
39.5°	170.1	172.0	173.3	173.4	173.8	173.6	172.8	172.3	171.0	170.1	168.9
40°	168.9	170.6	172.2	172.1	172.6	172.1	171.9	170.9	169.7	168.7	167.0
40.5°	168.0	169.1	170.9	170.6	171.1	170.8	170.5	169.5	168.3	166.9	165.6
41°	166.6	167.5	169.2	169.4	169.6	169.4	168.9	168.0	167.0	165.2	164.1
41.5°	164.5	166.1	167.8	168.0	167.6	168.0	167.7	166.5	165.5	164.0	163.0
42°	163.4	164.6	166.3	166.6	166.5	166.8	166.2	165.0	164.0	162.6	161.0
42.5°	161.9	163.0	164.4	165.3	165.2	165.3	164.9	163.4	162.7	161.1	160.1
43°	160.5	161.9	163.3	163.7	163.8	163.7	163.4	162.1	161.2	159.7	158.6
43.5°	159.0	160.6	161.9	162.3	162.3	162.3	162.0	160.7	159.7	158.2	157.0
44°	157.7	159.0	160.4	160.9	160.8	160.9	160.5	159.2	158.2	156.5	155.4
44.5°	156.2	157.4	158.9	159.4	159.3	159.5	159.2	157.8	156.7	155.0	153.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	154.8	155.8	157.5	157.8	157.9	157.9	157.6	156.2	155.2	153.6	152.2
45.5°	153.0	154.3	156.2	156.4	156.3	156.4	156.1	154.6	153.6	152.0	150.8
46°	151.1	152.8	154.4	154.9	154.8	154.9	154.5	153.0	152.2	150.5	149.0
46.5°	149.4	151.4	152.8	153.3	153.3	153.3	152.9	151.5	150.5	148.9	147.7
47°	148.4	149.5	151.4	151.8	151.7	151.9	151.4	150.0	148.7	147.3	146.4
47.5°	146.6	148.0	149.8	150.3	150.2	150.6	149.7	148.2	147.1	145.5	144.5
48°	145.0	146.5	148.4	148.9	148.6	148.9	148.1	146.7	145.6	143.8	142.8
48.5°	143.2	145.1	146.5	147.1	147.2	147.1	146.5	145.1	143.9	142.1	141.1
49°	141.6	143.2	145.0	145.7	145.6	145.4	145.0	143.6	142.3	140.6	139.5
49.5°	140.0	141.4	143.1	144.1	143.9	143.8	143.4	142.0	140.6	139.1	137.8
50°	138.2	139.9	141.6	142.3	142.3	142.1	141.7	140.4	139.2	137.5	136.1
50.5°	136.5	138.2	139.7	140.3	140.6	140.4	140.0	138.6	137.5	135.8	134.3
51°	134.8	136.5	138.1	138.9	139.0	139.1	138.2	137.2	135.8	134.0	132.8
51.5°	133.1	134.8	136.5	137.2	137.4	137.5	136.4	135.6	134.2	132.3	131.4
52°	131.4	132.9	134.8	135.6	135.8	135.8	134.8	133.8	132.5	130.5	129.4
52.5°	129.7	131.5	133.1	133.9	134.2	134.0	133.2	131.8	130.7	128.8	127.9
53°	128.0	129.9	131.4	132.1	132.5	132.3	131.6	130.3	128.9	127.1	126.0
53.5°	126.4	127.9	129.5	130.2	130.6	130.6	129.9	128.6	127.2	125.5	124.3
54°	124.8	126.2	127.9	128.4	128.7	128.9	128.2	127.2	125.5	123.8	122.5
54.5°	122.7	124.5	126.3	126.8	127.2	127.4	126.5	125.3	123.8	122.1	120.6
55°	121.0	122.8	124.6	125.1	125.4	125.7	124.8	123.4	122.1	120.3	119.0
55.5°	119.3	121.1	122.9	123.2	123.7	124.0	123.1	121.7	120.1	118.5	117.3
56°	117.4	119.3	121.2	121.5	122.0	122.1	121.3	119.8	118.4	116.7	115.5
56.5°	115.5	117.5	119.2	119.9	120.4	120.4	119.5	118.3	116.7	115.0	113.6
57°	113.6	115.5	117.0	118.0	118.7	118.7	117.6	116.4	114.8	113.2	111.8
57.5°	111.9	113.6	115.4	116.1	116.9	116.9	115.8	114.8	113.1	111.5	110.0
58°	110.1	111.8	113.6	114.3	115.0	115.0	114.0	112.8	111.4	109.5	108.1
58.5°	108.4	110.2	111.9	112.6	113.3	113.1	112.2	110.9	109.6	107.6	106.2
59°	106.5	108.2	110.0	111.0	111.5	111.4	110.7	108.9	107.8	105.7	104.3
59.5°	104.5	106.4	108.2	108.9	109.9	109.6	108.9	107.2	106.0	103.8	102.4
60°	102.8	104.5	106.4	107.2	108.1	107.8	107.1	105.2	104.1	102.1	100.4
60.5°	100.7	102.8	104.5	105.4	106.2	106.0	105.3	103.6	102.3	100.2	98.7
61°	98.9	100.9	102.7	103.6	104.3	104.1	103.3	101.7	100.4	98.3	96.7
61.5°	97.1	99.0	100.6	101.6	102.4	102.3	101.4	100.1	98.4	96.4	94.8
62°	95.2	97.0	98.9	99.7	100.6	100.5	99.6	98.0	96.5	94.5	92.7
62.5°	93.1	95.1	97.0	97.9	98.8	98.7	97.8	96.2	94.6	92.6	90.8
63°	91.2	93.1	95.0	96.1	96.9	96.8	95.9	94.0	92.7	90.7	88.8
63.5°	89.3	91.2	93.1	94.0	94.9	94.9	94.0	92.3	90.8	88.7	87.0
64°	87.3	89.2	91.1	91.9	93.1	92.9	92.1	90.1	88.7	86.7	85.2
64.5°	85.4	87.4	89.1	90.2	91.1	91.0	90.2	88.4	86.8	84.8	83.1
65°	83.4	85.5	87.1	88.4	89.1	88.9	88.3	86.5	84.9	83.0	81.0
65.5°	81.5	83.6	85.3	86.5	87.2	87.1	86.3	84.5	82.9	81.0	79.0
66°	79.5	81.6	83.4	84.4	85.3	85.0	84.3	82.4	80.9	78.9	77.1
66.5°	77.6	79.4	81.4	82.4	83.3	83.2	82.3	80.5	78.9	76.9	75.1
67°	75.7	77.7	79.4	80.4	81.3	81.2	80.4	78.4	76.9	75.0	73.1



TEST NUMBER: P522080

CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	73.5	75.7	77.6	78.3	79.3	79.2	78.4	76.5	74.9	73.0	71.1
68°	71.4	73.5	75.7	76.6	77.4	77.3	76.3	74.5	72.8	70.9	69.1
68.5°	69.3	71.5	73.5	74.5	75.4	75.3	74.4	72.5	70.8	68.8	67.0
69°	67.3	69.4	71.4	72.3	73.3	73.3	72.3	70.5	68.8	66.8	65.0
69.5°	65.3	67.4	69.4	70.3	71.4	71.4	70.4	68.4	66.7	64.8	63.2
70°	63.3	65.3	67.4	68.4	69.4	69.3	68.4	66.5	64.7	62.9	61.1
70.5°	61.4	63.3	65.3	66.3	67.3	67.4	66.3	64.5	62.8	60.9	59.1
71°	59.4	61.3	63.3	64.3	65.3	65.3	64.3	62.6	60.8	58.8	57.0
71.5°	57.3	59.4	61.3	62.4	63.3	63.3	62.3	60.6	58.8	56.7	55.1
72°	55.2	57.3	59.2	60.4	61.4	61.4	60.4	58.6	56.7	54.8	53.1
72.5°	53.2	55.4	57.1	58.4	59.4	59.4	58.3	56.6	54.7	52.8	51.1
73°	51.1	53.3	55.0	56.3	57.5	57.3	56.2	54.5	52.6	50.9	49.0
73.5°	49.1	51.2	53.1	54.3	55.4	55.3	54.2	52.6	50.7	48.6	47.0
74°	47.2	49.1	51.2	52.2	53.5	53.3	52.2	50.5	48.7	46.7	45.0
74.5°	45.0	47.1	49.0	50.2	51.5	51.3	50.2	48.5	46.7	44.7	42.8
75°	43.0	45.1	47.0	48.2	49.6	49.4	48.2	46.6	44.7	42.6	40.9
75.5°	40.9	43.1	45.0	46.3	47.5	47.3	46.3	44.6	42.7	40.7	39.0
76°	39.1	41.0	42.9	44.2	45.5	45.3	44.3	42.6	40.7	38.8	37.0
76.5°	37.0	39.2	40.9	42.3	43.5	43.3	42.3	40.6	38.8	36.7	35.0
77°	34.9	37.1	39.0	40.3	41.5	41.3	40.3	38.7	36.9	34.9	33.1
77.5°	33.2	35.1	37.0	38.2	39.6	39.4	38.4	36.7	35.0	32.9	31.2
78°	31.1	33.2	35.0	36.3	37.6	37.4	36.5	34.8	33.0	31.0	29.3
78.5°	29.3	31.2	33.1	34.3	35.7	35.4	34.5	32.8	31.0	29.2	27.4
79°	27.4	29.4	31.1	32.3	33.7	33.5	32.6	30.9	29.1	27.2	25.5
79.5°	25.4	27.4	29.2	30.4	31.7	31.5	30.6	29.1	27.2	25.3	23.7
80°	23.5	25.5	27.4	28.4	29.9	29.7	28.8	27.2	25.4	23.5	21.8
80.5°	21.8	23.6	25.4	26.5	28.0	27.8	26.9	25.3	23.5	21.7	20.1
81°	19.9	21.8	23.5	24.7	26.2	26.0	25.0	23.5	21.8	19.9	18.4
81.5°	18.2	20.1	21.7	22.8	24.3	24.2	23.2	21.7	20.0	18.1	16.6
82°	16.5	18.3	19.9	21.0	22.6	22.3	21.4	20.0	18.2	16.5	15.0
82.5°	14.9	16.5	18.2	19.2	20.7	20.6	19.7	18.2	16.5	15.0	13.5
83°	13.3	15.0	16.5	17.5	18.9	18.9	17.9	16.6	15.0	13.3	12.0
83.5°	11.7	13.4	14.9	15.9	17.3	17.1	16.2	15.0	13.3	11.8	10.4
84°	10.2	11.8	13.3	14.3	15.6	15.5	14.8	13.5	11.8	10.3	8.9
84.5°	8.8	10.3	11.7	12.7	14.1	14.0	13.1	11.8	10.3	8.9	7.5
85°	7.4	8.9	10.2	11.1	12.6	12.5	11.6	10.4	8.9	7.4	6.2
85.5°	6.2	7.5	8.8	9.6	11.1	10.9	10.1	8.9	7.4	6.1	5.0
86°	5.0	6.2	7.4	8.3	9.6	9.4	8.7	7.5	6.2	4.9	3.8
86.5°	3.9	5.0	6.3	7.0	8.2	7.9	7.3	6.2	5.0	3.8	2.8
87°	2.9	3.9	5.0	5.7	6.8	6.7	6.0	5.0	3.8	2.8	1.9
87.5°	2.0	3.0	3.9	4.7	5.7	5.5	4.8	3.8	2.8	1.8	1.1
88°	1.3	2.1	2.9	3.5	4.4	4.3	3.7	2.8	1.9	1.1	0.5
88.5°	0.6	1.3	2.0	2.6	3.4	3.2	2.8	1.9	1.1	0.4	0.0
89°	0.2	0.7	1.3	1.8	2.3	2.2	1.7	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: P522080
 CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-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	0.6	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: P522080
 CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-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: P522080

CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-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	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
156.5°	0.1	0.4	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.3
157°	0.1	0.4	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2



TEST NUMBER: P522080

CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-UNIT

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P522080
CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-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: P522080

CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	229.4	229.4	229.4	229.4	229.4	229.4
0.5°	229.2	228.2	228.2	229.5	228.5	229.8
1°	229.1	228.8	228.4	229.3	229.1	229.4
1.5°	228.4	228.2	229.1	229.7	229.7	229.9
2°	229.0	228.7	228.3	229.1	230.0	231.1
2.5°	228.2	229.2	227.7	229.7	229.6	229.5
3°	228.7	227.6	228.1	228.4	229.3	229.4
3.5°	228.7	227.2	228.4	229.1	228.5	228.9
4°	228.2	227.8	227.2	228.5	227.7	229.7
4.5°	228.0	228.0	228.0	228.0	228.0	229.6
5°	228.3	228.3	228.7	227.2	228.1	230.2
5.5°	228.0	226.7	227.5	227.8	226.7	228.0
6°	226.3	227.7	227.7	228.8	226.8	227.4
6.5°	227.2	225.5	226.8	228.4	226.8	226.7
7°	227.5	226.5	226.3	227.2	227.8	227.4
7.5°	226.7	225.1	226.6	227.0	228.3	227.5
8°	226.7	225.7	226.3	227.1	226.7	228.0
8.5°	226.1	224.7	225.5	224.9	226.0	226.7
9°	225.3	224.7	225.6	225.3	224.1	226.3
9.5°	223.7	225.1	223.6	225.3	225.3	225.8
10°	224.9	224.0	223.3	225.0	224.6	226.0
10.5°	223.6	223.6	224.6	225.1	224.5	226.3
11°	223.6	222.9	223.3	224.7	224.5	225.4
11.5°	222.9	221.9	223.1	223.8	223.3	224.5
12°	222.1	222.4	223.0	222.1	222.1	224.6
12.5°	221.9	221.0	222.1	221.1	221.1	224.1
13°	221.7	220.3	221.4	221.1	221.1	223.7
13.5°	220.2	219.7	220.2	221.4	221.0	223.1
14°	220.4	219.4	219.7	220.9	220.6	222.0
14.5°	219.2	219.4	219.4	220.2	220.5	221.7
15°	218.9	218.7	218.4	219.4	220.2	220.7
15.5°	218.2	217.5	218.0	218.9	219.6	220.4
16°	218.2	216.7	217.0	218.2	217.7	219.9
16.5°	217.5	216.1	216.1	217.4	217.5	218.6
17°	216.2	215.2	215.8	216.8	217.1	219.2
17.5°	216.0	215.1	215.5	216.1	215.8	217.9
18°	215.0	213.8	214.8	214.6	215.3	217.0
18.5°	214.1	213.4	213.8	214.2	214.6	216.5
19°	214.5	213.2	213.2	213.3	214.1	214.9
19.5°	213.0	212.3	212.1	213.1	212.9	214.4
20°	212.1	211.8	211.8	212.3	212.8	213.5
20.5°	210.9	209.9	211.5	210.9	211.8	212.7
21°	209.9	209.3	209.9	210.7	211.2	212.1
21.5°	208.8	209.2	209.5	209.9	210.2	211.2
22°	208.9	208.1	207.8	209.2	208.9	210.9



TEST NUMBER: P522080

CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	208.0	207.2	206.8	208.7	208.0	209.9
23°	207.0	206.0	206.5	207.3	207.6	208.4
23.5°	205.9	205.3	205.8	205.8	206.7	207.7
24°	203.9	204.1	205.0	205.5	206.1	206.7
24.5°	202.8	203.0	204.0	204.4	204.4	205.8
25°	202.3	201.7	202.5	203.3	203.4	205.4
25.5°	202.7	201.0	201.4	202.1	202.6	204.3
26°	201.2	198.9	200.5	201.3	201.6	203.0
26.5°	200.2	198.9	199.2	200.2	201.1	202.0
27°	198.8	198.7	198.2	198.8	200.4	200.9
27.5°	197.7	197.6	197.1	197.9	198.9	199.9
28°	196.5	195.6	196.3	196.7	197.6	199.3
28.5°	195.5	194.1	195.2	195.7	196.7	198.2
29°	194.3	193.2	193.6	194.2	195.3	196.7
29.5°	193.2	191.6	192.6	193.1	193.8	195.9
30°	192.0	189.7	191.8	192.1	192.8	194.7
30.5°	190.9	189.1	190.2	191.2	191.6	193.5
31°	189.6	188.9	189.2	190.3	190.7	192.6
31.5°	188.1	188.0	187.8	188.9	189.2	191.4
32°	187.0	187.5	186.1	187.7	188.2	190.1
32.5°	185.7	186.7	185.0	186.5	187.0	188.9
33°	184.6	185.0	183.8	185.1	185.8	187.7
33.5°	183.6	183.3	182.7	184.2	184.5	186.4
34°	182.4	181.9	181.5	182.8	183.1	185.0
34.5°	181.3	180.7	180.3	181.3	181.9	183.9
35°	179.9	179.7	178.9	180.0	180.6	182.8
35.5°	178.7	178.4	177.7	178.7	179.2	181.3
36°	177.2	176.5	176.4	177.5	177.8	180.1
36.5°	176.0	174.8	175.2	176.3	176.4	178.9
37°	174.5	173.6	173.9	174.8	175.2	177.4
37.5°	173.3	172.1	172.7	173.6	173.8	176.2
38°	171.9	170.2	171.4	172.2	172.4	174.5
38.5°	170.4	168.4	169.9	170.8	171.2	173.4
39°	168.8	167.2	168.4	169.5	169.7	171.9
39.5°	167.5	165.9	167.1	167.9	168.6	170.1
40°	165.9	164.7	165.5	166.7	167.2	168.9
40.5°	164.4	163.5	163.8	165.0	165.8	168.0
41°	163.1	162.2	162.4	163.6	164.5	166.6
41.5°	161.8	160.5	160.8	162.3	162.9	164.5
42°	160.1	159.6	159.4	160.6	161.5	163.4
42.5°	158.8	158.0	157.8	159.4	160.1	161.9
43°	157.3	156.1	156.2	157.5	158.4	160.5
43.5°	155.9	154.5	154.7	156.2	157.0	159.0
44°	154.4	153.1	153.5	154.4	155.6	157.7
44.5°	152.8	152.1	151.6	152.8	154.0	156.2



TEST NUMBER: P522080

CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	151.3	150.4	150.0	151.6	152.6	154.8
45.5°	149.5	148.6	148.4	150.1	150.8	153.0
46°	148.0	147.0	147.0	148.3	149.4	151.1
46.5°	146.5	145.0	145.6	146.7	147.7	149.4
47°	144.6	143.6	143.9	145.1	146.1	148.4
47.5°	143.1	142.0	142.4	143.5	144.4	146.6
48°	141.4	140.6	140.6	141.8	142.8	145.0
48.5°	139.8	138.9	138.8	140.4	141.1	143.2
49°	138.1	137.0	137.2	138.7	139.4	141.6
49.5°	136.6	135.1	135.8	137.0	138.1	140.0
50°	134.8	133.4	133.9	135.5	136.3	138.2
50.5°	133.1	131.6	132.3	133.6	134.6	136.5
51°	131.3	130.3	130.8	131.9	132.9	134.8
51.5°	129.5	128.6	128.9	130.1	131.2	133.1
52°	127.8	126.7	127.0	128.3	129.5	131.4
52.5°	126.2	124.8	125.3	126.7	127.7	129.7
53°	124.5	122.8	123.7	124.9	126.0	128.0
53.5°	122.7	121.2	122.0	123.0	124.0	126.4
54°	121.0	119.6	120.0	121.1	122.0	124.8
54.5°	119.3	117.7	118.2	119.3	120.6	122.7
55°	117.5	115.7	116.3	117.6	118.7	121.0
55.5°	115.5	114.2	114.6	115.8	116.7	119.3
56°	113.8	112.4	112.8	114.0	115.0	117.4
56.5°	112.1	110.8	111.4	112.2	113.3	115.5
57°	110.3	108.9	109.2	110.4	111.8	113.6
57.5°	108.5	107.0	107.5	108.5	110.1	111.9
58°	106.7	105.2	105.5	106.7	108.2	110.1
58.5°	104.8	103.4	103.7	104.9	106.2	108.4
59°	103.0	101.5	101.6	103.0	104.3	106.5
59.5°	101.1	99.6	99.9	101.1	102.5	104.5
60°	99.2	97.6	97.9	99.2	100.5	102.8
60.5°	97.3	95.6	96.1	97.4	98.6	100.7
61°	95.4	93.7	94.1	95.3	96.8	98.9
61.5°	93.4	91.9	92.2	93.3	94.8	97.1
62°	91.6	89.9	90.4	91.4	92.8	95.2
62.5°	89.7	87.9	88.4	89.5	90.8	93.1
63°	87.7	86.1	86.5	87.7	88.9	91.2
63.5°	85.7	84.3	84.5	85.7	87.0	89.3
64°	83.8	82.2	82.4	83.7	85.0	87.3
64.5°	81.7	80.1	80.6	81.7	83.2	85.4
65°	79.8	78.2	78.6	79.8	81.2	83.4
65.5°	77.6	76.2	76.5	77.9	79.3	81.5
66°	75.7	74.3	74.6	75.7	77.2	79.5
66.5°	73.6	72.3	72.6	73.6	75.4	77.6
67°	71.6	70.2	70.6	71.8	73.3	75.7



TEST NUMBER: P522080

CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	69.6	68.2	68.6	69.6	71.2	73.5
68°	67.6	66.3	66.4	67.7	69.2	71.4
68.5°	65.5	64.1	64.5	65.6	67.1	69.3
69°	63.5	62.2	62.5	63.8	65.0	67.3
69.5°	61.6	60.3	60.4	61.8	63.1	65.3
70°	59.6	58.3	58.6	59.6	61.1	63.3
70.5°	57.6	56.2	56.4	57.6	59.0	61.4
71°	55.5	54.2	54.5	55.7	57.0	59.4
71.5°	53.6	52.1	52.3	53.5	54.9	57.3
72°	51.5	50.0	50.2	51.5	53.1	55.2
72.5°	49.5	48.2	48.3	49.4	51.0	53.2
73°	47.4	46.0	46.2	47.3	48.9	51.1
73.5°	45.4	44.0	44.2	45.3	47.1	49.1
74°	43.4	42.1	42.3	43.3	45.0	47.2
74.5°	41.4	40.1	40.1	41.3	42.8	45.0
75°	39.5	38.1	38.2	39.4	40.9	43.0
75.5°	37.5	36.2	36.3	37.3	38.9	40.9
76°	35.6	34.1	34.3	35.3	36.8	39.1
76.5°	33.6	32.2	32.3	33.4	34.8	37.0
77°	31.8	30.3	30.4	31.5	32.9	34.9
77.5°	29.9	28.2	28.5	29.5	31.0	33.2
78°	27.9	26.4	26.5	27.7	29.1	31.1
78.5°	26.0	24.5	24.7	25.7	27.2	29.3
79°	24.3	22.7	22.9	23.9	25.3	27.4
79.5°	22.4	20.9	21.1	22.1	23.5	25.4
80°	20.6	19.1	19.1	20.2	21.6	23.5
80.5°	18.9	17.2	17.4	18.5	19.8	21.8
81°	17.2	15.7	15.9	16.7	18.2	19.9
81.5°	15.5	14.1	14.3	15.2	16.4	18.2
82°	14.0	12.5	12.6	13.5	14.9	16.5
82.5°	12.4	10.9	11.1	12.0	13.3	14.9
83°	10.9	9.6	9.6	10.5	11.6	13.3
83.5°	9.4	8.2	8.3	9.0	10.1	11.7
84°	7.9	6.8	7.0	7.7	8.7	10.2
84.5°	6.7	5.6	5.7	6.4	7.4	8.8
85°	5.4	4.5	4.5	5.1	6.2	7.4
85.5°	4.3	3.5	3.5	4.0	4.9	6.2
86°	3.2	2.5	2.6	3.0	3.8	5.0
86.5°	2.2	1.6	1.8	2.2	2.8	3.9
87°	1.3	1.0	1.1	1.3	2.0	2.9
87.5°	0.6	0.4	0.4	0.7	1.3	2.0
88°	0.0	0.2	0.1	0.3	0.6	1.3
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: P522080
 CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-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: P522080
 CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-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: P522080
 CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-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: P522080

CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-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	0.4	0.4	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	0.4	0.5	0.1	0.1	0.1
178.5°	0.1	0.4	0.5	0.1	0.1	0.1
179°	0.1	0.4	0.5	0.1	0.1	0.1
179.5°	0.1	0.4	0.5	0.1	0.1	0.1



TEST NUMBER: P522080

CATALOG NUMBER: HLBQL4069BLE40AWH-3500K-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)