

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: P522082

Luminaire Tested: **HLBQL4069BLE40AWH-5000K-UNIT**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522082
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-5000K-UNIT
Description: Surface Mount Downlight Fixture, Single Unit
Light Source: (16) 5000K CCT, 93 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

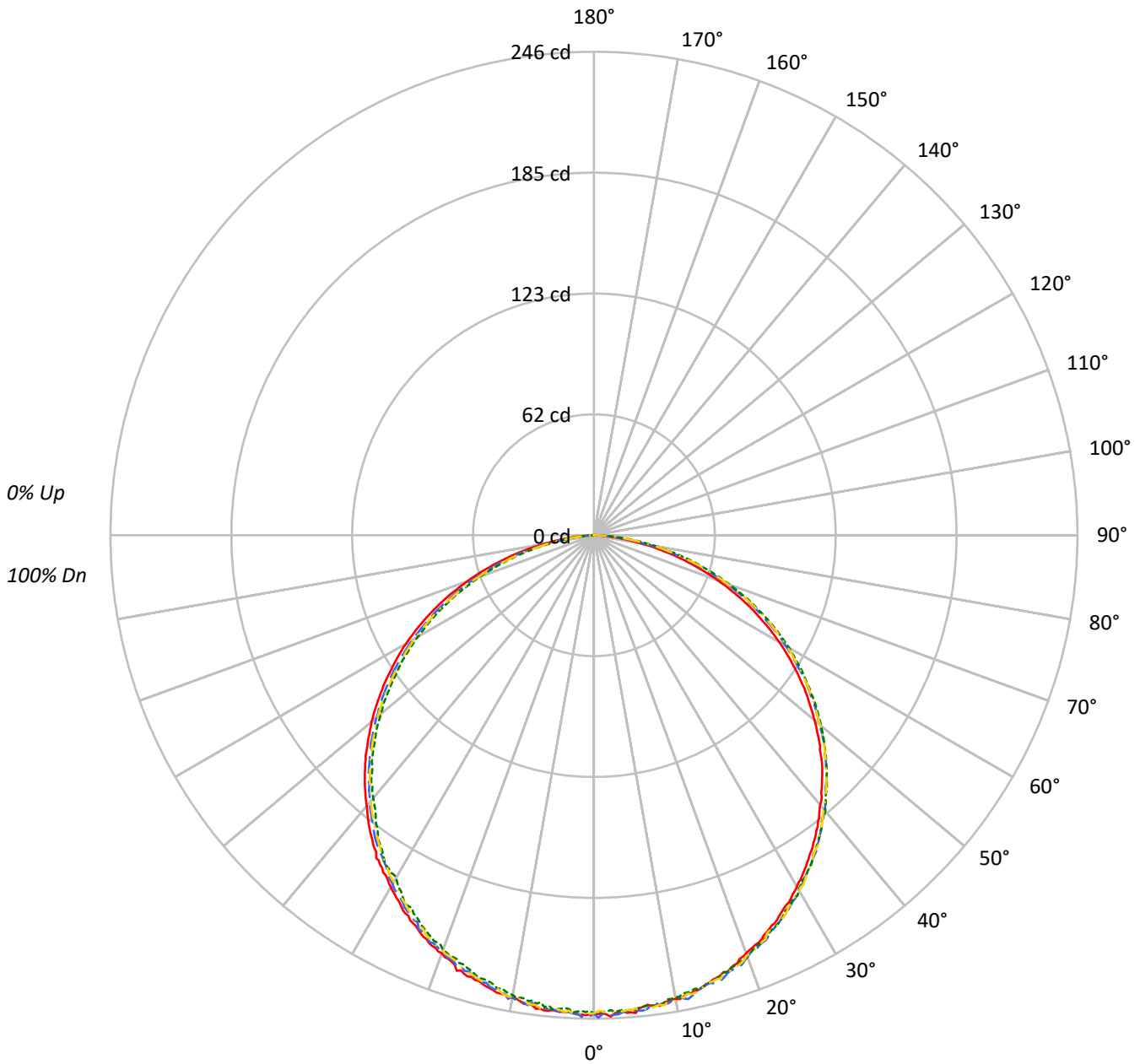
Lumens per Lamp: N/A
Luminaire Lumens: 700.1 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Circular (Dia: 0.33m x H: 0m)
CIE Type: Direct

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: P522082
CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-UNIT

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - · 90°-270° - · - · 135°-315°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	2794	2794	2794	2794
5°	2813	2790	2796	2790
10°	2795	2784	2785	2770
15°	2783	2789	2785	2757
20°	2766	2783	2765	2744
25°	2759	2777	2759	2710
30°	2738	2762	2741	2668
35°	2718	2749	2728	2670
40°	2684	2743	2696	2619
45°	2666	2718	2673	2590
50°	2619	2696	2637	2528
55°	2568	2662	2592	2456
60°	2505	2632	2535	2377
65°	2404	2567	2445	2252
70°	2256	2471	2303	2075
75°	2023	2334	2103	1792
80°	1646	2096	1779	1336
85°	1041	1752	1238	619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.0	3.3
10°-20°	66.0	9.4
20°-30°	100.2	14.3
30°-40°	121.1	17.3
40°-50°	126.3	18.0
50°-60°	114.9	16.4
60°-70°	88.0	12.6
70°-80°	49.2	7.0
80°-90°	11.1	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°	0.1	0.0
140°-150°	0.1	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	189.2	27.0
0°-40°	310.3	44.3
0°-60°	551.5	78.8
0°-90°	699.7	100.0
90°-120°	0.0	0.0
90°-150°	0.2	0.0
90°-180°	0.0	0.0
0°-180°	700.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	243	243	243	243	243	
5°	244	242	243	242	244	23
15°	234	235	234	232	234	66
25°	218	219	218	214	218	100
35°	194	196	195	190	194	121
45°	164	167	165	160	164	126
55°	128	133	130	123	128	115
65°	88	94	90	83	88	87
75°	46	53	47	40	46	48
85°	8	13	9	5	8	10
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°	243.3	243.3	243.3	243.3	243.3	243.3	243.3	243.3	243.3	243.3	243.3
0.5°	243.7	244.0	245.5	243.3	242.6	242.4	242.0	243.6	243.9	242.7	245.0
1°	243.3	243.7	243.9	242.4	242.6	243.3	242.2	242.7	244.3	244.4	244.1
1.5°	243.9	244.6	244.6	243.2	242.4	243.4	243.5	243.3	243.9	243.5	245.2
2°	245.1	246.2	244.5	244.7	241.8	243.6	243.4	243.3	244.0	243.3	243.4
2.5°	243.4	245.2	244.2	244.3	242.6	243.2	242.8	243.9	243.4	243.3	243.6
3°	243.3	243.6	244.0	244.0	242.4	243.6	242.5	243.6	243.0	243.5	242.9
3.5°	242.8	242.7	243.1	243.1	241.8	242.4	242.6	243.4	243.1	244.2	243.0
4°	243.6	243.4	242.9	243.4	242.7	243.3	242.3	242.7	243.0	243.9	243.6
4.5°	243.5	242.6	243.6	243.2	242.1	242.8	242.2	242.4	243.0	242.7	242.7
5°	244.1	242.4	242.5	243.2	242.1	242.5	241.7	242.1	242.6	242.1	242.2
5.5°	241.8	241.5	243.1	242.4	241.5	242.5	242.8	242.5	243.0	243.0	242.1
6°	241.2	242.2	243.1	242.4	241.2	242.1	243.3	242.7	243.1	242.4	242.0
6.5°	240.5	242.3	242.4	242.6	240.9	242.5	241.2	241.1	242.4	240.0	242.3
7°	241.2	242.2	240.6	242.5	241.1	242.4	242.2	241.2	242.7	241.2	241.4
7.5°	241.2	241.5	240.1	241.2	241.4	240.3	241.7	241.2	241.1	240.3	240.0
8°	241.8	241.2	241.3	241.9	240.9	240.2	241.2	240.9	240.9	239.7	241.5
8.5°	240.4	240.1	240.9	241.6	240.8	239.3	241.8	240.1	241.1	240.5	240.6
9°	240.0	239.2	241.2	240.9	239.1	240.6	240.3	240.3	240.0	239.6	239.8
9.5°	239.5	239.7	240.3	240.3	239.2	240.9	240.9	239.1	239.1	239.5	240.3
10°	239.7	240.3	238.8	240.4	238.8	239.2	240.4	239.5	238.9	239.1	238.6
10.5°	240.0	239.3	239.0	240.6	238.8	240.0	238.8	238.6	238.8	238.0	239.9
11°	239.1	238.0	240.1	239.0	237.5	239.1	239.7	239.1	238.2	237.7	237.9
11.5°	238.2	238.2	240.9	238.4	237.5	239.1	238.1	238.0	238.0	238.5	237.2
12°	238.2	237.6	239.7	239.2	237.4	238.0	238.8	237.1	237.9	235.5	236.7
12.5°	237.6	237.7	238.7	238.0	236.4	238.0	238.3	236.7	237.1	236.1	236.4
13°	237.3	237.6	237.6	237.5	236.7	236.4	238.2	235.9	236.5	235.8	235.8
13.5°	236.6	237.8	236.4	237.0	236.7	235.8	236.7	236.1	236.0	234.8	234.2
14°	235.4	236.9	235.9	236.0	235.8	235.8	236.7	235.0	235.2	234.5	234.5
14.5°	235.1	235.0	235.3	235.3	235.1	235.8	235.1	234.7	234.2	233.9	234.0
15°	234.1	233.8	236.1	234.2	234.6	234.8	234.8	233.9	234.3	233.0	233.8
15.5°	233.7	233.0	235.2	234.2	233.9	234.1	234.3	232.9	233.2	232.6	232.1
16°	233.2	233.0	235.4	234.0	233.1	233.6	234.6	232.9	233.5	231.9	230.9
16.5°	231.8	232.3	234.2	233.5	232.1	232.9	232.4	232.4	232.7	231.2	231.3
17°	232.4	232.3	232.9	232.8	232.3	232.7	232.2	232.3	231.5	230.9	230.0
17.5°	231.1	232.6	232.1	231.6	231.2	231.8	232.2	230.3	232.4	230.3	230.7
18°	230.1	231.1	232.1	231.4	230.6	230.8	231.8	230.7	229.7	229.6	229.0
18.5°	229.7	229.4	231.5	230.3	230.8	230.4	230.9	229.6	228.6	228.6	227.7
19°	227.9	228.5	231.1	229.5	229.1	229.5	230.2	228.5	228.0	228.1	227.7
19.5°	227.4	228.5	229.7	228.8	229.0	228.5	229.3	228.0	227.6	227.3	226.7
20°	226.4	227.6	228.5	228.1	227.8	227.9	227.4	227.4	226.3	226.1	226.3
20.5°	225.6	225.1	227.1	227.3	227.0	227.0	227.7	226.2	226.2	225.7	224.9
21°	224.9	225.1	226.2	226.4	225.9	225.9	226.9	225.4	225.0	223.9	223.6
21.5°	224.0	225.7	226.1	225.7	224.8	225.6	225.7	224.5	224.6	223.3	223.1
22°	223.6	224.2	224.9	225.5	224.5	224.3	225.1	223.6	223.9	223.0	223.3



TEST NUMBER: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	222.7	223.1	224.3	224.2	223.8	223.3	223.8	223.0	222.5	222.0	221.6
23°	221.1	223.0	223.9	224.1	222.8	223.2	223.4	222.8	222.1	220.7	220.8
23.5°	220.3	221.8	222.5	222.7	221.5	221.6	220.8	221.7	221.0	220.1	219.7
24°	219.3	220.6	221.5	221.9	220.8	220.8	220.0	220.4	219.8	218.8	219.4
24.5°	218.2	219.8	220.3	220.9	219.8	220.3	219.9	219.7	218.4	217.7	216.4
25°	217.8	218.5	219.4	219.7	219.2	219.2	219.5	217.8	217.8	216.7	216.3
25.5°	216.7	217.5	218.4	219.2	218.5	218.0	219.1	217.4	217.2	216.0	215.3
26°	215.3	216.4	217.5	218.5	217.5	217.4	217.5	216.2	215.4	215.1	214.4
26.5°	214.2	215.8	216.4	217.1	216.0	216.7	216.7	215.7	215.1	214.6	213.3
27°	213.0	214.5	215.6	215.7	214.4	215.5	215.8	214.2	214.2	212.8	212.5
27.5°	212.0	213.0	214.5	214.8	213.8	214.5	213.8	212.9	212.6	211.5	210.6
28°	211.4	212.5	213.3	213.7	212.7	213.0	213.0	212.0	211.2	210.4	209.4
28.5°	210.2	210.7	212.0	212.5	211.4	212.1	211.9	210.7	210.3	209.6	208.8
29°	208.7	209.5	211.2	211.3	210.6	211.2	210.6	210.2	209.1	208.2	207.6
29.5°	207.8	209.0	210.1	209.8	210.6	209.9	209.5	207.9	208.0	206.2	206.6
30°	206.5	207.8	208.9	209.2	208.3	208.7	208.6	207.3	206.7	205.4	204.8
30.5°	205.2	206.1	207.5	208.0	207.0	207.6	207.5	206.6	205.7	204.5	203.9
31°	204.3	205.1	206.3	206.2	205.4	206.7	207.3	205.2	204.0	203.3	202.5
31.5°	203.0	204.0	204.9	204.9	204.8	205.4	205.5	203.0	202.8	202.0	201.4
32°	201.6	202.4	203.8	204.0	203.9	203.9	204.0	202.6	202.4	200.7	199.3
32.5°	200.3	201.3	202.7	202.9	202.4	203.0	202.1	201.4	200.6	199.6	198.1
33°	199.0	199.9	201.4	201.8	201.7	202.0	201.7	200.4	199.8	198.0	196.9
33.5°	197.7	199.2	200.3	200.5	200.5	200.5	200.5	198.7	198.4	196.9	195.5
34°	196.2	197.8	199.0	199.5	199.0	198.7	198.8	197.5	198.1	195.7	194.7
34.5°	195.1	196.5	197.8	197.7	197.2	197.5	197.4	196.6	195.5	194.5	193.8
35°	193.9	195.0	196.8	196.6	196.1	196.4	196.1	195.4	194.6	193.2	192.3
35.5°	192.3	193.5	195.7	195.4	194.8	195.2	195.1	193.9	193.5	191.4	191.1
36°	191.0	192.0	194.1	194.2	193.7	194.0	194.5	192.6	191.7	190.2	189.6
36.5°	189.7	190.8	192.4	192.7	192.5	192.4	192.2	191.1	190.5	189.2	188.1
37°	188.1	189.3	191.1	191.2	190.8	191.1	190.7	189.9	189.2	188.1	186.5
37.5°	186.9	187.8	189.8	189.6	189.5	189.6	190.0	188.4	187.7	186.4	184.8
38°	185.1	186.5	188.3	188.4	188.3	188.3	188.1	187.0	186.1	185.0	183.5
38.5°	183.9	185.1	187.0	186.9	186.3	187.0	186.7	185.5	184.6	183.5	181.9
39°	182.3	183.7	185.4	185.7	185.3	185.5	185.0	184.1	183.1	181.2	180.7
39.5°	180.4	182.4	183.8	183.9	184.3	184.1	183.3	182.7	181.4	180.5	179.1
40°	179.1	180.9	182.6	182.5	183.0	182.5	182.3	181.2	179.9	179.0	177.1
40.5°	178.1	179.3	181.3	180.9	181.5	181.1	180.8	179.8	178.5	177.0	175.6
41°	176.7	177.7	179.4	179.6	179.9	179.7	179.2	178.1	177.1	175.2	174.1
41.5°	174.5	176.2	178.0	178.2	177.8	178.2	177.8	176.5	175.5	173.9	172.9
42°	173.3	174.6	176.4	176.7	176.5	176.9	176.3	175.0	174.0	172.5	170.8
42.5°	171.7	172.9	174.4	175.3	175.2	175.3	174.9	173.3	172.6	170.8	169.8
43°	170.2	171.7	173.2	173.6	173.7	173.6	173.3	172.0	171.0	169.4	168.2
43.5°	168.7	170.3	171.7	172.1	172.1	172.1	171.8	170.5	169.4	167.8	166.5
44°	167.2	168.7	170.2	170.6	170.5	170.6	170.2	168.9	167.8	166.0	164.8
44.5°	165.7	166.9	168.5	169.1	169.0	169.2	168.8	167.4	166.2	164.4	163.0



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 CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	164.2	165.3	167.0	167.4	167.4	167.5	167.1	165.7	164.6	162.9	161.4
45.5°	162.3	163.7	165.6	165.9	165.8	165.9	165.6	164.0	162.9	161.2	159.9
46°	160.3	162.1	163.8	164.3	164.2	164.3	163.8	162.3	161.4	159.6	158.0
46.5°	158.4	160.5	162.1	162.6	162.6	162.6	162.2	160.7	159.6	158.0	156.6
47°	157.4	158.6	160.5	161.0	160.9	161.1	160.5	159.1	157.7	156.2	155.3
47.5°	155.5	157.0	158.9	159.4	159.3	159.7	158.8	157.2	156.0	154.4	153.3
48°	153.8	155.4	157.4	157.9	157.6	157.9	157.1	155.6	154.4	152.6	151.5
48.5°	151.9	153.9	155.4	156.0	156.1	156.0	155.4	153.9	152.6	150.7	149.7
49°	150.1	151.9	153.8	154.5	154.4	154.2	153.8	152.3	150.9	149.2	148.0
49.5°	148.5	150.0	151.7	152.9	152.6	152.5	152.1	150.6	149.2	147.5	146.2
50°	146.6	148.4	150.1	150.9	150.9	150.7	150.3	148.9	147.6	145.8	144.4
50.5°	144.7	146.5	148.1	148.8	149.1	148.9	148.5	147.0	145.8	144.0	142.4
51°	142.9	144.7	146.5	147.3	147.4	147.5	146.5	145.5	144.1	142.1	140.9
51.5°	141.1	142.9	144.7	145.6	145.7	145.9	144.7	143.8	142.3	140.3	139.3
52°	139.3	141.0	143.0	143.8	144.1	144.0	142.9	141.9	140.5	138.4	137.3
52.5°	137.5	139.5	141.1	142.0	142.3	142.2	141.3	139.8	138.6	136.6	135.7
53°	135.8	137.7	139.4	140.1	140.5	140.3	139.5	138.2	136.7	134.8	133.6
53.5°	134.0	135.7	137.4	138.1	138.6	138.5	137.7	136.4	134.9	133.1	131.9
54°	132.4	133.8	135.6	136.2	136.5	136.8	135.9	134.9	133.1	131.3	129.9
54.5°	130.1	132.0	134.0	134.5	134.9	135.1	134.2	132.9	131.3	129.5	127.9
55°	128.3	130.3	132.2	132.7	133.0	133.3	132.4	130.9	129.5	127.6	126.2
55.5°	126.5	128.4	130.4	130.7	131.2	131.5	130.5	129.1	127.4	125.7	124.4
56°	124.5	126.5	128.6	128.9	129.4	129.5	128.6	127.1	125.6	123.8	122.5
56.5°	122.5	124.6	126.5	127.1	127.7	127.7	126.8	125.5	123.7	122.0	120.4
57°	120.5	122.5	124.1	125.2	125.9	125.8	124.7	123.4	121.8	120.1	118.6
57.5°	118.7	120.5	122.4	123.1	124.0	124.0	122.8	121.7	119.9	118.3	116.7
58°	116.7	118.6	120.5	121.3	122.0	121.9	120.9	119.6	118.1	116.1	114.6
58.5°	114.9	116.9	118.7	119.4	120.1	120.0	119.0	117.6	116.2	114.1	112.7
59°	112.9	114.8	116.7	117.7	118.3	118.1	117.4	115.5	114.3	112.1	110.6
59.5°	110.9	112.8	114.7	115.5	116.5	116.3	115.5	113.7	112.4	110.1	108.6
60°	109.1	110.8	112.8	113.7	114.6	114.3	113.6	111.6	110.4	108.2	106.4
60.5°	106.8	109.1	110.9	111.8	112.6	112.5	111.6	109.9	108.5	106.3	104.7
61°	104.9	107.0	108.9	109.8	110.6	110.4	109.6	107.9	106.4	104.3	102.5
61.5°	103.0	105.0	106.7	107.8	108.6	108.5	107.6	106.1	104.4	102.2	100.6
62°	100.9	102.9	104.9	105.8	106.7	106.6	105.7	104.0	102.4	100.2	98.3
62.5°	98.8	100.9	102.9	103.9	104.8	104.6	103.7	102.0	100.3	98.2	96.3
63°	96.7	98.8	100.8	101.9	102.8	102.7	101.7	99.7	98.3	96.2	94.2
63.5°	94.7	96.7	98.7	99.7	100.6	100.6	99.7	97.9	96.3	94.0	92.2
64°	92.6	94.6	96.7	97.5	98.7	98.5	97.7	95.6	94.1	91.9	90.3
64.5°	90.6	92.7	94.5	95.7	96.6	96.5	95.7	93.7	92.1	90.0	88.2
65°	88.5	90.6	92.4	93.7	94.5	94.3	93.7	91.7	90.0	88.0	85.9
65.5°	86.4	88.7	90.5	91.8	92.4	92.4	91.5	89.6	87.9	85.9	83.8
66°	84.3	86.6	88.5	89.5	90.4	90.1	89.4	87.4	85.8	83.6	81.8
66.5°	82.3	84.3	86.4	87.4	88.3	88.2	87.3	85.4	83.6	81.5	79.7
67°	80.3	82.4	84.3	85.2	86.2	86.1	85.2	83.2	81.5	79.5	77.5



TEST NUMBER: P522082
 CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	77.9	80.3	82.3	83.0	84.1	84.0	83.2	81.2	79.4	77.4	75.4
68°	75.7	78.0	80.3	81.2	82.1	82.0	80.9	79.0	77.3	75.2	73.3
68.5°	73.5	75.8	77.9	79.0	80.0	79.9	78.9	76.9	75.1	73.0	71.1
69°	71.4	73.6	75.7	76.7	77.8	77.8	76.7	74.8	73.0	70.9	69.0
69.5°	69.2	71.5	73.6	74.5	75.7	75.7	74.6	72.6	70.8	68.7	67.0
70°	67.2	69.3	71.5	72.5	73.6	73.5	72.5	70.6	68.6	66.7	64.8
70.5°	65.1	67.2	69.3	70.3	71.4	71.5	70.3	68.5	66.6	64.5	62.7
71°	63.0	65.0	67.2	68.2	69.2	69.2	68.2	66.4	64.5	62.4	60.5
71.5°	60.8	63.0	65.0	66.2	67.1	67.1	66.1	64.2	62.4	60.2	58.4
72°	58.5	60.8	62.8	64.1	65.1	65.1	64.0	62.1	60.1	58.1	56.3
72.5°	56.4	58.7	60.6	61.9	63.0	63.0	61.8	60.0	58.0	56.0	54.2
73°	54.2	56.5	58.4	59.7	61.0	60.8	59.6	57.8	55.7	53.9	52.0
73.5°	52.1	54.3	56.3	57.6	58.7	58.6	57.5	55.8	53.8	51.5	49.9
74°	50.0	52.1	54.3	55.4	56.7	56.6	55.4	53.6	51.6	49.6	47.7
74.5°	47.8	49.9	52.0	53.3	54.6	54.5	53.3	51.5	49.5	47.4	45.4
75°	45.6	47.8	49.9	51.2	52.6	52.4	51.2	49.4	47.4	45.2	43.3
75.5°	43.4	45.7	47.7	49.1	50.4	50.2	49.1	47.3	45.3	43.2	41.4
76°	41.4	43.5	45.5	46.9	48.3	48.0	47.0	45.1	43.2	41.1	39.3
76.5°	39.3	41.5	43.3	44.9	46.1	46.0	44.8	43.0	41.1	39.0	37.2
77°	37.0	39.3	41.4	42.7	44.0	43.8	42.7	41.1	39.1	37.0	35.1
77.5°	35.2	37.2	39.3	40.5	42.0	41.7	40.8	39.0	37.1	34.9	33.1
78°	33.0	35.2	37.2	38.5	39.9	39.6	38.7	36.9	35.0	32.9	31.1
78.5°	31.1	33.1	35.1	36.4	37.8	37.5	36.6	34.8	32.9	30.9	29.1
79°	29.0	31.1	32.9	34.3	35.7	35.5	34.5	32.8	30.8	28.8	27.1
79.5°	26.9	29.0	31.0	32.2	33.6	33.4	32.5	30.8	28.9	26.9	25.1
80°	24.9	27.1	29.1	30.2	31.7	31.5	30.5	28.8	26.9	25.0	23.2
80.5°	23.1	25.0	26.9	28.1	29.7	29.5	28.5	26.9	25.0	23.0	21.4
81°	21.1	23.1	24.9	26.2	27.8	27.6	26.6	25.0	23.1	21.1	19.5
81.5°	19.3	21.3	23.0	24.2	25.8	25.7	24.6	23.0	21.2	19.2	17.6
82°	17.5	19.4	21.1	22.3	23.9	23.6	22.7	21.2	19.3	17.5	15.9
82.5°	15.8	17.5	19.3	20.4	22.0	21.8	20.9	19.3	17.5	15.9	14.3
83°	14.1	15.9	17.5	18.6	20.1	20.0	19.0	17.6	15.9	14.1	12.7
83.5°	12.4	14.2	15.8	16.9	18.4	18.1	17.2	15.9	14.1	12.5	11.0
84°	10.8	12.5	14.1	15.2	16.5	16.4	15.6	14.3	12.6	10.9	9.5
84.5°	9.3	10.9	12.4	13.5	15.0	14.9	13.9	12.6	10.9	9.4	8.0
85°	7.9	9.5	10.8	11.8	13.3	13.2	12.3	11.0	9.4	7.9	6.6
85.5°	6.6	8.0	9.3	10.2	11.7	11.6	10.8	9.4	7.9	6.5	5.3
86°	5.3	6.6	7.8	8.8	10.2	10.0	9.2	8.0	6.5	5.2	4.1
86.5°	4.1	5.3	6.7	7.4	8.7	8.4	7.7	6.5	5.3	4.1	3.0
87°	3.1	4.1	5.3	6.1	7.2	7.1	6.3	5.3	4.1	2.9	2.0
87.5°	2.1	3.2	4.1	5.0	6.0	5.9	5.1	4.1	3.0	2.0	1.2
88°	1.4	2.3	3.1	3.8	4.7	4.6	3.9	3.0	2.0	1.2	0.5
88.5°	0.7	1.4	2.1	2.7	3.6	3.4	2.9	2.0	1.1	0.5	0.0
89°	0.2	0.8	1.4	2.0	2.5	2.3	1.8	1.3	0.5	0.0	0.0
89.5°	0.0	0.3	0.7	1.2	1.5	1.4	1.0	0.5	0.0	0.0	0.0



TEST NUMBER: P522082
 CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-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	0.8	0.7	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: P522082
 CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-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°	0.2	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°	0.2	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°	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128.5°	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129.5°	0.1	0.2	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	0.2	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	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.2	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.2	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.2	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: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-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	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0
135.5°	0.1	0.2	0.1	0.2	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	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138.5°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139.5°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140.5°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0
141°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0
141.5°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0
143.5°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0
144°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1
144.5°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1
145°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.2	0.1	0.1
145.5°	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1
146°	0.1	0.2	0.1	0.2	0.0	0.0	0.1	0.0	0.1	0.1	0.1
146.5°	0.1	0.2	0.1	0.2	0.0	0.1	0.1	0.0	0.2	0.1	0.1
147°	0.1	0.2	0.1	0.2	0.0	0.1	0.1	0.0	0.2	0.1	0.1
147.5°	0.1	0.2	0.1	0.2	0.0	0.1	0.1	0.1	0.2	0.1	0.1
148°	0.1	0.2	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.2	0.1
148.5°	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1
149°	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1
149.5°	0.1	0.2	0.1	0.2	0.0	0.1	0.1	0.1	0.2	0.2	0.1
150°	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.0	0.1
150.5°	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1
151°	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1
151.5°	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2
152°	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2
152.5°	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.2
153°	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2
153.5°	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2
154°	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2
154.5°	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
155°	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2
155.5°	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2
156°	0.1	0.4	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2
156.5°	0.1	0.4	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.3
157°	0.1	0.4	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2



TEST NUMBER: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-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	0.2	0.0	0.2	0.2	0.2	0.2	0.1	0.2
158°	0.1	0.4	0.1	0.2	0.0	0.2	0.2	0.2	0.2	0.1	0.3
158.5°	0.1	0.4	0.1	0.2	0.0	0.2	0.2	0.2	0.2	0.1	0.3
159°	0.1	0.4	0.1	0.2	0.0	0.3	0.2	0.2	0.2	0.1	0.4
159.5°	0.1	0.4	0.1	0.2	0.0	0.2	0.2	0.2	0.2	0.1	0.4
160°	0.1	0.4	0.1	0.2	0.0	0.2	0.2	0.2	0.2	0.1	0.4
160.5°	0.1	0.4	0.1	0.2	0.0	0.2	0.2	0.2	0.2	0.1	0.4
161°	0.1	0.4	0.1	0.2	0.0	0.2	0.2	0.2	0.2	0.1	0.4
161.5°	0.1	0.4	0.1	0.2	0.0	0.2	0.2	0.2	0.2	0.1	0.4
162°	0.1	0.4	0.1	0.2	0.0	0.3	0.3	0.2	0.2	0.1	0.4
162.5°	0.1	0.4	0.1	0.2	0.0	0.2	0.3	0.2	0.2	0.1	0.4
163°	0.1	0.4	0.1	0.2	0.0	0.2	0.3	0.2	0.2	0.1	0.4
163.5°	0.1	0.5	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.4
164°	0.1	0.5	0.1	0.2	0.0	0.4	0.3	0.2	0.2	0.1	0.4
164.5°	0.1	0.3	0.1	0.2	0.0	0.3	0.3	0.2	0.2	0.1	0.5
165°	0.1	0.5	0.1	0.2	0.0	0.3	0.4	0.2	0.2	0.1	0.5
165.5°	0.1	0.5	0.1	0.2	0.0	0.3	0.4	0.2	0.2	0.1	0.5
166°	0.1	0.5	0.1	0.2	0.0	0.3	0.4	0.2	0.2	0.1	0.5
166.5°	0.1	0.5	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.5
167°	0.1	0.5	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.5
167.5°	0.1	0.5	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.5
168°	0.1	0.2	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.2	0.5
168.5°	0.1	0.2	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.5
169°	0.1	0.3	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.2	0.5
169.5°	0.1	0.3	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.5	0.5
170°	0.1	0.3	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.5	0.5
170.5°	0.1	0.8	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.5	0.5
171°	0.1	0.8	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.5	0.5
171.5°	0.1	0.7	0.2	0.2	0.0	0.4	0.4	0.2	0.2	0.2	0.5
172°	0.1	0.7	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.5	0.5
172.5°	0.1	0.7	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.2	0.5
173°	0.1	0.6	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.2	0.5
173.5°	0.1	0.6	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.2	0.5
174°	0.1	0.6	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.2	0.5
174.5°	0.1	0.6	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.5
175°	0.1	0.6	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.5
175.5°	0.1	0.6	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.5
176°	0.1	0.6	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.5
176.5°	0.1	0.5	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.1	0.5
177°	0.1	0.5	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.1	0.5
177.5°	0.1	0.5	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.1	0.5
178°	0.1	0.5	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.1	0.5
178.5°	0.1	0.5	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.1	0.5
179°	0.1	0.5	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.1	0.5
179.5°	0.1	0.5	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.1	0.5



TEST NUMBER: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-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: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	243.3	243.3	243.3	243.3	243.3	243.3
0.5°	243.0	242.1	242.1	243.4	242.4	243.7
1°	243.0	242.7	242.2	243.2	243.0	243.3
1.5°	242.2	242.1	243.0	243.6	243.6	243.9
2°	242.9	242.5	242.1	243.0	243.9	245.1
2.5°	242.1	243.0	241.5	243.6	243.5	243.4
3°	242.6	241.4	241.9	242.2	243.2	243.3
3.5°	242.5	241.0	242.3	243.0	242.4	242.8
4°	242.1	241.6	241.0	242.4	241.5	243.6
4.5°	241.8	241.8	241.8	241.8	241.8	243.5
5°	242.1	242.1	242.5	241.0	241.9	244.1
5.5°	241.8	240.4	241.3	241.6	240.5	241.8
6°	240.0	241.5	241.5	242.7	240.6	241.2
6.5°	241.0	239.2	240.6	242.3	240.6	240.5
7°	241.3	240.2	240.0	240.9	241.6	241.2
7.5°	240.4	238.8	240.3	240.8	242.1	241.2
8°	240.5	239.4	240.0	240.9	240.4	241.8
8.5°	239.8	238.3	239.1	238.5	239.7	240.4
9°	239.0	238.3	239.3	239.0	237.6	240.0
9.5°	237.3	238.8	237.2	239.0	239.0	239.5
10°	238.5	237.6	236.8	238.6	238.2	239.7
10.5°	237.1	237.2	238.2	238.8	238.2	240.0
11°	237.2	236.4	236.9	238.3	238.2	239.1
11.5°	236.4	235.3	236.7	237.4	236.8	238.2
12°	235.6	235.9	236.5	235.6	235.6	238.2
12.5°	235.3	234.4	235.6	234.5	234.5	237.6
13°	235.1	233.6	234.8	234.5	234.5	237.3
13.5°	233.6	233.0	233.5	234.8	234.4	236.6
14°	233.7	232.7	233.0	234.2	233.9	235.4
14.5°	232.4	232.7	232.7	233.5	233.9	235.1
15°	232.2	231.9	231.6	232.7	233.5	234.1
15.5°	231.5	230.7	231.2	232.1	232.9	233.7
16°	231.4	229.8	230.2	231.5	230.9	233.2
16.5°	230.7	229.2	229.2	230.6	230.6	231.8
17°	229.3	228.2	228.9	230.0	230.3	232.4
17.5°	229.1	228.2	228.5	229.2	228.9	231.1
18°	228.1	226.7	227.8	227.6	228.4	230.1
18.5°	227.0	226.3	226.7	227.2	227.6	229.7
19°	227.5	226.1	226.1	226.3	227.0	227.9
19.5°	225.9	225.1	224.9	226.0	225.8	227.4
20°	224.9	224.6	224.6	225.1	225.7	226.4
20.5°	223.7	222.7	224.3	223.7	224.6	225.6
21°	222.6	222.0	222.7	223.5	224.0	224.9
21.5°	221.5	221.9	222.2	222.6	223.0	224.0
22°	221.5	220.7	220.4	221.9	221.6	223.6



TEST NUMBER: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	220.6	219.7	219.4	221.3	220.6	222.7
23°	219.5	218.5	219.0	219.9	220.2	221.1
23.5°	218.4	217.8	218.3	218.2	219.2	220.3
24°	216.3	216.5	217.5	218.0	218.6	219.3
24.5°	215.1	215.3	216.3	216.8	216.8	218.2
25°	214.5	213.9	214.8	215.7	215.7	217.8
25.5°	215.0	213.2	213.6	214.4	214.8	216.7
26°	213.4	211.0	212.7	213.5	213.9	215.3
26.5°	212.4	211.0	211.3	212.4	213.3	214.2
27°	210.9	210.7	210.2	210.9	212.5	213.0
27.5°	209.7	209.6	209.0	209.9	211.0	212.0
28°	208.4	207.5	208.2	208.7	209.6	211.4
28.5°	207.4	205.9	207.0	207.5	208.6	210.2
29°	206.1	204.9	205.3	206.0	207.2	208.7
29.5°	204.9	203.2	204.2	204.8	205.6	207.8
30°	203.6	201.2	203.4	203.8	204.5	206.5
30.5°	202.5	200.5	201.7	202.8	203.2	205.2
31°	201.1	200.4	200.7	201.8	202.3	204.3
31.5°	199.5	199.3	199.2	200.3	200.6	203.0
32°	198.3	198.8	197.4	199.0	199.6	201.6
32.5°	196.9	198.1	196.2	197.8	198.3	200.3
33°	195.8	196.2	195.0	196.3	197.0	199.0
33.5°	194.7	194.5	193.8	195.4	195.7	197.7
34°	193.5	192.9	192.5	193.9	194.2	196.2
34.5°	192.3	191.7	191.2	192.3	192.9	195.1
35°	190.8	190.5	189.8	190.9	191.6	193.9
35.5°	189.5	189.3	188.4	189.6	190.0	192.3
36°	188.0	187.2	187.1	188.2	188.6	191.0
36.5°	186.6	185.4	185.8	187.0	187.1	189.7
37°	185.1	184.1	184.4	185.4	185.8	188.1
37.5°	183.8	182.5	183.2	184.1	184.3	186.9
38°	182.3	180.5	181.7	182.6	182.9	185.1
38.5°	180.8	178.6	180.2	181.1	181.6	183.9
39°	179.0	177.3	178.7	179.8	180.0	182.3
39.5°	177.7	175.9	177.2	178.1	178.8	180.4
40°	175.9	174.7	175.5	176.8	177.3	179.1
40.5°	174.4	173.4	173.8	175.0	175.8	178.1
41°	172.9	172.0	172.3	173.5	174.4	176.7
41.5°	171.6	170.2	170.5	172.1	172.8	174.5
42°	169.9	169.3	169.0	170.3	171.3	173.3
42.5°	168.4	167.6	167.4	169.0	169.8	171.7
43°	166.8	165.6	165.6	167.0	168.0	170.2
43.5°	165.3	163.8	164.1	165.7	166.5	168.7
44°	163.8	162.4	162.8	163.8	165.0	167.2
44.5°	162.1	161.3	160.8	162.1	163.3	165.7



TEST NUMBER: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	160.5	159.5	159.1	160.8	161.8	164.2
45.5°	158.6	157.6	157.4	159.2	159.9	162.3
46°	157.0	155.9	155.9	157.3	158.4	160.3
46.5°	155.3	153.8	154.4	155.6	156.7	158.4
47°	153.4	152.3	152.6	153.9	155.0	157.4
47.5°	151.8	150.6	151.0	152.2	153.2	155.5
48°	150.0	149.1	149.2	150.4	151.5	153.8
48.5°	148.3	147.3	147.2	148.9	149.6	151.9
49°	146.5	145.3	145.5	147.1	147.9	150.1
49.5°	144.9	143.3	144.0	145.3	146.5	148.5
50°	143.0	141.5	142.0	143.7	144.6	146.6
50.5°	141.2	139.6	140.3	141.7	142.8	144.7
51°	139.2	138.2	138.7	139.9	141.0	142.9
51.5°	137.4	136.4	136.7	138.0	139.2	141.1
52°	135.6	134.4	134.7	136.1	137.4	139.3
52.5°	133.8	132.3	132.8	134.3	135.5	137.5
53°	132.0	130.3	131.2	132.5	133.6	135.8
53.5°	130.1	128.6	129.4	130.4	131.6	134.0
54°	128.3	126.8	127.3	128.5	129.4	132.4
54.5°	126.5	124.8	125.4	126.5	128.0	130.1
55°	124.6	122.7	123.4	124.7	125.8	128.3
55.5°	122.5	121.1	121.6	122.8	123.8	126.5
56°	120.7	119.2	119.7	120.9	122.0	124.5
56.5°	118.9	117.5	118.1	119.0	120.1	122.5
57°	117.0	115.5	115.8	117.0	118.6	120.5
57.5°	115.1	113.4	114.0	115.1	116.7	118.7
58°	113.1	111.6	111.9	113.1	114.7	116.7
58.5°	111.2	109.7	110.0	111.3	112.7	114.9
59°	109.2	107.6	107.8	109.2	110.6	112.9
59.5°	107.3	105.6	105.9	107.2	108.7	110.9
60°	105.2	103.5	103.8	105.2	106.6	109.1
60.5°	103.2	101.4	101.9	103.3	104.6	106.8
61°	101.2	99.4	99.8	101.0	102.7	104.9
61.5°	99.1	97.5	97.8	99.0	100.5	103.0
62°	97.1	95.4	95.9	97.0	98.4	100.9
62.5°	95.2	93.3	93.8	94.9	96.3	98.8
63°	93.0	91.3	91.7	93.0	94.3	96.7
63.5°	90.9	89.4	89.6	90.9	92.3	94.7
64°	88.8	87.2	87.4	88.8	90.2	92.6
64.5°	86.7	84.9	85.5	86.7	88.2	90.6
65°	84.6	82.9	83.3	84.6	86.1	88.5
65.5°	82.3	80.8	81.2	82.6	84.1	86.4
66°	80.3	78.8	79.1	80.3	81.9	84.3
66.5°	78.1	76.7	77.0	78.1	80.0	82.3
67°	76.0	74.5	74.9	76.2	77.7	80.3



TEST NUMBER: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	73.8	72.4	72.7	73.9	75.5	77.9
68°	71.7	70.3	70.4	71.8	73.4	75.7
68.5°	69.5	68.0	68.5	69.6	71.2	73.5
69°	67.4	66.0	66.3	67.6	69.0	71.4
69.5°	65.3	63.9	64.1	65.5	66.9	69.2
70°	63.2	61.8	62.1	63.2	64.8	67.2
70.5°	61.1	59.6	59.8	61.1	62.6	65.1
71°	58.9	57.5	57.8	59.1	60.5	63.0
71.5°	56.9	55.3	55.4	56.7	58.2	60.8
72°	54.6	53.0	53.3	54.6	56.3	58.5
72.5°	52.5	51.1	51.2	52.4	54.1	56.4
73°	50.3	48.7	49.0	50.2	51.9	54.2
73.5°	48.1	46.6	46.9	48.1	49.9	52.1
74°	46.0	44.7	44.8	46.0	47.7	50.0
74.5°	43.9	42.5	42.5	43.8	45.4	47.8
75°	41.9	40.4	40.5	41.8	43.3	45.6
75.5°	39.8	38.4	38.5	39.6	41.2	43.4
76°	37.8	36.2	36.3	37.5	39.0	41.4
76.5°	35.7	34.2	34.2	35.4	36.9	39.3
77°	33.7	32.1	32.2	33.4	34.9	37.0
77.5°	31.7	29.9	30.2	31.3	32.9	35.2
78°	29.6	28.0	28.1	29.3	30.8	33.0
78.5°	27.6	26.0	26.2	27.3	28.9	31.1
79°	25.7	24.1	24.3	25.4	26.9	29.0
79.5°	23.8	22.1	22.3	23.4	24.9	26.9
80°	21.8	20.2	20.3	21.4	22.9	24.9
80.5°	20.0	18.3	18.5	19.6	21.0	23.1
81°	18.2	16.6	16.9	17.8	19.3	21.1
81.5°	16.5	15.0	15.1	16.1	17.4	19.3
82°	14.8	13.2	13.4	14.4	15.8	17.5
82.5°	13.2	11.6	11.8	12.7	14.1	15.8
83°	11.6	10.2	10.2	11.1	12.3	14.1
83.5°	9.9	8.7	8.8	9.6	10.8	12.4
84°	8.4	7.2	7.4	8.1	9.3	10.8
84.5°	7.1	5.9	6.0	6.8	7.8	9.3
85°	5.7	4.7	4.7	5.4	6.6	7.9
85.5°	4.5	3.7	3.7	4.2	5.2	6.6
86°	3.4	2.6	2.8	3.2	4.1	5.3
86.5°	2.3	1.7	1.9	2.3	3.0	4.1
87°	1.4	1.1	1.1	1.4	2.1	3.1
87.5°	0.6	0.5	0.5	0.8	1.4	2.1
88°	0.0	0.2	0.2	0.3	0.7	1.4
88.5°	0.0	0.0	0.0	0.0	0.3	0.7
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: P522082
 CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-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: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-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	0.2
123.5°	0.0	0.1	0.1	0.1	0.1	0.1
124°	0.0	0.1	0.0	0.1	0.2	0.2
124.5°	0.0	0.1	0.1	0.1	0.2	0.1
125°	0.0	0.1	0.1	0.1	0.1	0.1
125.5°	0.0	0.2	0.2	0.1	0.1	0.1
126°	0.0	0.2	0.0	0.1	0.1	0.1
126.5°	0.0	0.2	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	0.2	0.1	0.2	0.1	0.2
128°	0.0	0.1	0.1	0.2	0.1	0.2
128.5°	0.0	0.1	0.1	0.1	0.1	0.2
129°	0.0	0.1	0.2	0.1	0.1	0.2
129.5°	0.0	0.1	0.2	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	0.2	0.2
132°	0.0	0.1	0.1	0.1	0.2	0.2
132.5°	0.0	0.1	0.1	0.1	0.2	0.2
133°	0.0	0.1	0.1	0.1	0.2	0.2
133.5°	0.0	0.1	0.1	0.1	0.2	0.1
134°	0.0	0.1	0.2	0.1	0.2	0.1
134.5°	0.0	0.1	0.2	0.1	0.2	0.1



TEST NUMBER: P522082
 CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-UNIT

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-UNIT

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P522082

CATALOG NUMBER: HLBQL4069BLE40AWH-5000K-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)