

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: P522086

Luminaire Tested: **HLBQL6099BLE40AWH-4000K-UNIT**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522086
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: HLBQL6099BLE40AWH-4000K-UNIT
Description: Surface Mount Downlight Fixture, Single Unit
Light Source: (16) 4000K CCT, 95 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

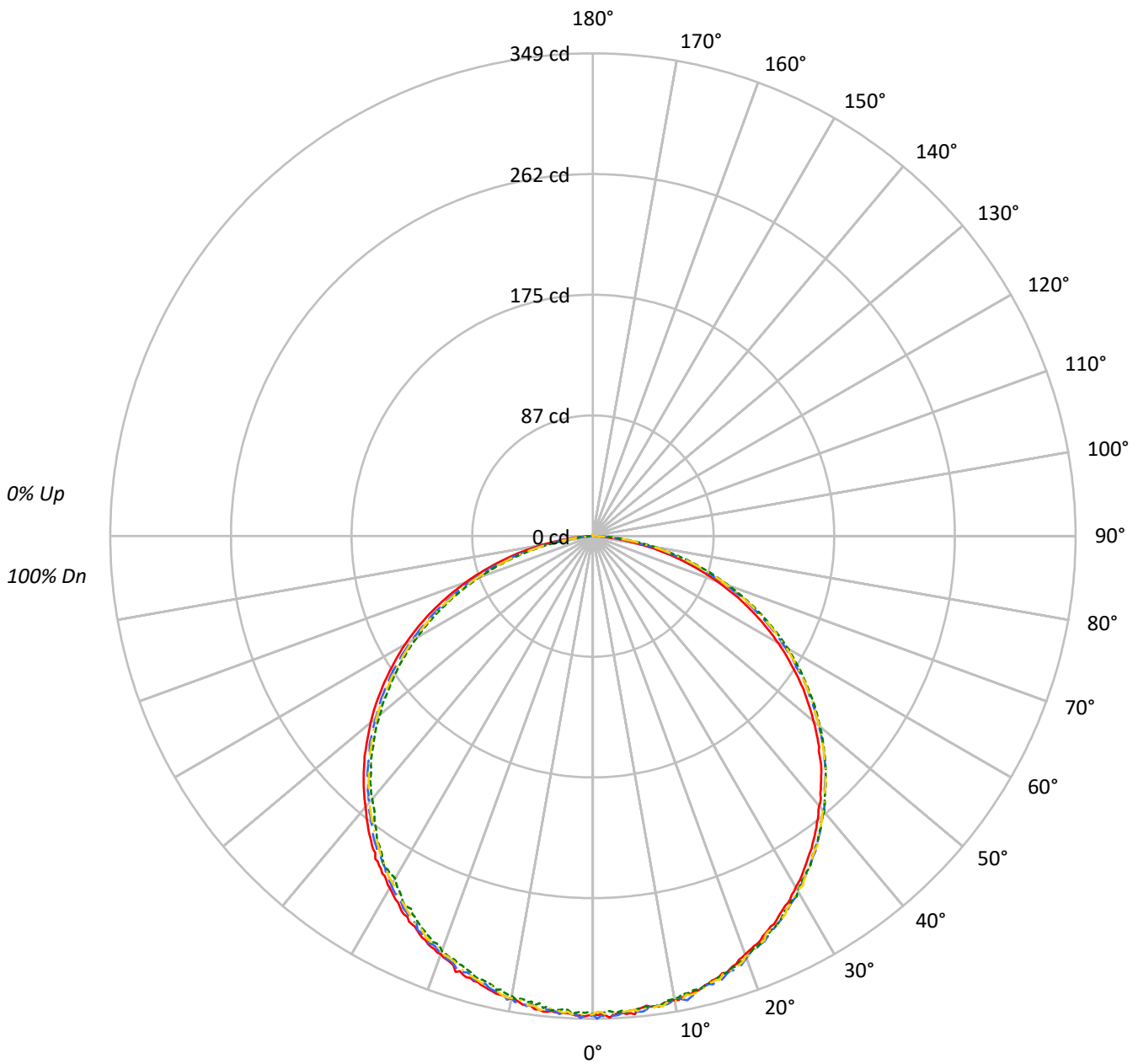
Lumens per Lamp: N/A
Luminaire Lumens: 995.0 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Circular (Dia: 0.5m x H: 0m)
CIE Type: Direct

Input Watts (W): 11.6
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: P522086
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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					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84					84			
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58					58			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	1762	1762	1762	1762
5°	1774	1759	1763	1760
10°	1762	1755	1756	1746
15°	1754	1758	1756	1738
20°	1744	1755	1743	1731
25°	1740	1751	1740	1709
30°	1726	1741	1728	1682
35°	1714	1733	1720	1684
40°	1693	1729	1701	1651
45°	1681	1714	1685	1633
50°	1651	1700	1662	1593
55°	1620	1678	1634	1549
60°	1579	1660	1599	1498
65°	1515	1618	1543	1420
70°	1422	1559	1452	1309
75°	1275	1470	1326	1129
80°	1038	1323	1123	845
85°	654	1104	783	392



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.7	3.3
10°-20°	93.8	9.4
20°-30°	142.4	14.3
30°-40°	172.2	17.3
40°-50°	179.6	18.0
50°-60°	163.3	16.4
60°-70°	125.0	12.6
70°-80°	69.9	7.0
80°-90°	15.7	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°	268.9	27.0
0°-40°	441.1	44.3
0°-60°	784.0	78.8
0°-90°	994.6	100.0
90°-120°	0.0	0.0
90°-150°	0.2	0.0
90°-180°	0.0	0.0
0°-180°	995.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	346	346	346	346	346	
5°	347	344	345	344	347	33
15°	333	334	333	330	333	94
25°	310	312	310	304	310	142
35°	276	279	277	271	276	172
45°	233	238	234	227	233	180
55°	182	189	184	174	182	163
65°	126	134	128	118	126	124
75°	65	75	67	57	65	69
85°	11	19	13	7	11	14
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°	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9
0.5°	346.4	346.9	349.0	345.9	344.8	344.6	344.0	346.3	346.6	344.9	348.3
1°	345.9	346.4	346.8	344.6	344.8	345.8	344.3	345.0	347.3	347.4	347.0
1.5°	346.6	347.7	347.7	345.7	344.5	346.0	346.1	345.8	346.6	346.1	348.6
2°	348.4	350.0	347.5	347.8	343.7	346.2	346.0	345.8	346.9	345.8	346.0
2.5°	346.0	348.6	347.1	347.2	344.8	345.7	345.2	346.6	346.0	345.8	346.2
3°	345.8	346.3	346.9	346.9	344.6	346.2	344.7	346.3	345.5	346.1	345.3
3.5°	345.2	345.0	345.6	345.6	343.8	344.6	344.8	346.0	345.6	347.1	345.5
4°	346.3	346.0	345.3	346.0	345.0	345.9	344.4	344.9	345.5	346.8	346.3
4.5°	346.1	344.8	346.3	345.7	344.1	345.2	344.3	344.5	345.4	344.9	344.9
5°	347.0	344.5	344.7	345.7	344.1	344.7	343.5	344.2	344.8	344.1	344.3
5.5°	343.7	343.3	345.6	344.6	343.2	344.7	345.2	344.7	345.5	345.4	344.1
6°	342.8	344.3	345.6	344.5	342.9	344.1	345.8	345.0	345.6	344.6	344.0
6.5°	341.8	344.4	344.5	344.8	342.5	344.7	342.8	342.7	344.5	341.1	344.4
7°	342.8	344.3	341.9	344.7	342.7	344.6	344.3	342.8	344.9	342.8	343.1
7.5°	342.9	343.3	341.3	342.8	343.1	341.6	343.5	342.8	342.7	341.6	341.1
8°	343.7	342.8	343.0	343.9	342.4	341.4	342.8	342.4	342.4	340.7	343.2
8.5°	341.7	341.3	342.5	343.4	342.3	340.1	343.7	341.3	342.7	341.8	341.9
9°	341.2	340.0	342.8	342.4	339.8	341.9	341.5	341.5	341.1	340.6	340.9
9.5°	340.4	340.7	341.6	341.5	340.0	342.4	342.5	339.9	339.9	340.4	341.6
10°	340.7	341.6	339.5	341.7	339.4	340.0	341.7	340.4	339.6	339.8	339.2
10.5°	341.1	340.1	339.7	341.9	339.4	341.1	339.4	339.2	339.4	338.3	341.0
11°	339.8	338.3	341.3	339.7	337.6	339.9	340.7	339.8	338.5	337.9	338.2
11.5°	338.5	338.6	342.5	338.8	337.6	339.8	338.4	338.3	338.3	339.0	337.1
12°	338.6	337.7	340.7	340.0	337.5	338.3	339.4	337.0	338.1	334.8	336.5
12.5°	337.8	337.9	339.3	338.3	336.1	338.3	338.7	336.4	337.0	335.5	336.0
13°	337.2	337.8	337.7	337.6	336.4	336.0	338.5	335.3	336.2	335.2	335.1
13.5°	336.3	338.0	336.0	336.9	336.4	335.1	336.5	335.5	335.4	333.8	332.9
14°	334.7	336.7	335.3	335.4	335.1	335.2	336.5	334.0	334.4	333.3	333.3
14.5°	334.2	334.0	334.5	334.5	334.1	335.1	334.2	333.6	333.0	332.5	332.6
15°	332.7	332.3	335.6	332.9	333.5	333.8	333.8	332.5	333.1	331.3	332.3
15.5°	332.2	331.1	334.4	333.0	332.5	332.7	333.1	331.0	331.5	330.6	330.0
16°	331.5	331.1	334.6	332.6	331.4	332.1	333.5	331.0	331.9	329.6	328.3
16.5°	329.5	330.2	333.0	331.9	330.0	331.0	330.3	330.4	330.8	328.6	328.8
17°	330.4	330.2	331.0	330.9	330.2	330.8	330.1	330.2	329.0	328.2	327.0
17.5°	328.5	330.6	329.9	329.2	328.6	329.5	330.1	327.3	330.4	327.3	327.9
18°	327.1	328.5	330.0	328.9	327.8	328.0	329.4	327.9	326.5	326.3	325.5
18.5°	326.4	326.0	329.1	327.4	328.0	327.5	328.3	326.3	324.9	324.9	323.7
19°	324.0	324.7	328.5	326.2	325.6	326.2	327.2	324.7	324.1	324.2	323.7
19.5°	323.2	324.7	326.5	325.3	325.5	324.8	325.9	324.1	323.4	323.1	322.3
20°	321.8	323.6	324.7	324.2	323.8	323.9	323.2	323.2	321.6	321.4	321.6
20.5°	320.7	320.0	322.8	323.1	322.7	322.7	323.7	321.5	321.5	320.8	319.7
21°	319.7	320.0	321.5	321.8	321.1	321.1	322.5	320.3	319.8	318.3	317.9
21.5°	318.4	320.8	321.4	320.8	319.6	320.7	320.8	319.2	319.3	317.4	317.1
22°	317.9	318.6	319.7	320.6	319.2	318.8	319.9	317.8	318.3	316.9	317.5



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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°	316.5	317.1	318.8	318.7	318.1	317.4	318.1	316.9	316.3	315.5	315.0
23°	314.3	317.0	318.3	318.5	316.7	317.2	317.6	316.7	315.6	313.7	313.8
23.5°	313.1	315.2	316.3	316.5	314.8	315.0	313.8	315.1	314.1	312.9	312.3
24°	311.7	313.5	314.9	315.4	313.8	313.8	312.6	313.3	312.4	311.0	311.8
24.5°	310.2	312.4	313.1	313.9	312.4	313.2	312.5	312.2	310.4	309.4	307.6
25°	309.7	310.6	311.9	312.3	311.6	311.6	312.0	309.7	309.7	308.0	307.5
25.5°	308.0	309.1	310.5	311.6	310.6	309.9	311.5	309.0	308.8	307.0	306.0
26°	306.0	307.6	309.2	310.6	309.1	309.0	309.2	307.3	306.1	305.8	304.7
26.5°	304.5	306.8	307.6	308.6	307.1	308.0	308.0	306.6	305.8	305.1	303.2
27°	302.8	304.8	306.4	306.6	304.7	306.3	306.8	304.4	304.4	302.5	302.1
27.5°	301.3	302.7	304.9	305.4	303.9	304.9	303.9	302.6	302.2	300.7	299.4
28°	300.5	302.1	303.1	303.8	302.4	302.8	302.8	301.3	300.1	299.1	297.7
28.5°	298.9	299.5	301.3	302.1	300.5	301.5	301.2	299.5	299.0	298.0	296.8
29°	296.6	297.8	300.2	300.4	299.4	300.1	299.4	298.9	297.3	296.0	295.1
29.5°	295.3	297.0	298.6	298.2	299.3	298.3	297.8	295.5	295.6	293.1	293.6
30°	293.5	295.3	296.9	297.4	296.1	296.6	296.5	294.7	293.8	291.9	291.2
30.5°	291.7	293.0	294.9	295.6	294.3	295.1	295.0	293.7	292.4	290.6	289.8
31°	290.4	291.6	293.2	293.1	292.0	293.8	294.7	291.7	290.0	289.0	287.8
31.5°	288.6	290.0	291.3	291.3	291.0	292.0	292.1	288.5	288.3	287.1	286.3
32°	286.6	287.6	289.7	290.0	289.9	289.8	290.0	287.9	287.6	285.3	283.4
32.5°	284.7	286.1	288.2	288.4	287.7	288.6	287.3	286.2	285.2	283.8	281.6
33°	282.9	284.2	286.2	286.9	286.8	287.2	286.8	284.8	284.0	281.4	279.9
33.5°	281.0	283.1	284.7	285.0	285.1	285.1	285.0	282.4	282.1	279.8	277.9
34°	278.9	281.1	282.9	283.6	282.9	282.4	282.6	280.7	281.6	278.1	276.7
34.5°	277.3	279.3	281.1	281.0	280.4	280.8	280.6	279.5	277.9	276.4	275.4
35°	275.7	277.1	279.7	279.5	278.8	279.2	278.8	277.8	276.6	274.6	273.3
35.5°	273.3	275.1	278.1	277.8	276.8	277.5	277.3	275.7	275.0	272.0	271.7
36°	271.5	273.0	275.9	276.0	275.3	275.8	276.4	273.7	272.6	270.4	269.6
36.5°	269.7	271.2	273.5	273.9	273.6	273.5	273.2	271.7	270.7	268.9	267.4
37°	267.4	269.1	271.7	271.8	271.3	271.7	271.1	269.9	268.9	267.3	265.1
37.5°	265.6	267.0	269.8	269.5	269.3	269.6	270.1	267.8	266.8	265.0	262.7
38°	263.1	265.1	267.6	267.7	267.6	267.6	267.4	265.8	264.5	262.9	260.8
38.5°	261.4	263.1	265.8	265.7	264.7	265.8	265.4	263.7	262.4	260.9	258.5
39°	259.1	261.1	263.6	263.9	263.4	263.7	263.0	261.8	260.3	257.6	256.8
39.5°	256.4	259.3	261.3	261.4	262.0	261.6	260.6	259.7	257.8	256.5	254.6
40°	254.6	257.2	259.6	259.4	260.1	259.4	259.2	257.6	255.8	254.4	251.7
40.5°	253.2	254.9	257.7	257.2	258.0	257.5	257.0	255.5	253.7	251.6	249.7
41°	251.2	252.6	255.0	255.3	255.7	255.4	254.7	253.2	251.7	249.0	247.4
41.5°	248.1	250.4	253.0	253.3	252.7	253.3	252.8	251.0	249.5	247.2	245.7
42°	246.4	248.2	250.7	251.2	251.0	251.5	250.6	248.8	247.3	245.2	242.7
42.5°	244.1	245.7	247.9	249.1	249.0	249.1	248.6	246.4	245.3	242.8	241.3
43°	242.0	244.0	246.1	246.8	246.9	246.8	246.4	244.4	243.0	240.8	239.1
43.5°	239.7	242.1	244.0	244.6	244.6	244.6	244.2	242.3	240.8	238.5	236.7
44°	237.7	239.7	241.9	242.5	242.4	242.5	242.0	240.0	238.5	236.0	234.3
44.5°	235.6	237.3	239.5	240.4	240.2	240.5	239.9	237.9	236.3	233.7	231.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	233.4	234.9	237.4	237.9	238.0	238.1	237.6	235.6	234.0	231.6	229.5
45.5°	230.6	232.7	235.4	235.8	235.7	235.8	235.3	233.1	231.5	229.1	227.3
46°	227.9	230.4	232.8	233.5	233.4	233.5	232.9	230.6	229.5	226.9	224.6
46.5°	225.2	228.2	230.4	231.2	231.2	231.2	230.5	228.4	226.9	224.5	222.6
47°	223.8	225.4	228.2	228.8	228.7	228.9	228.2	226.1	224.2	222.1	220.7
47.5°	221.0	223.2	225.8	226.6	226.5	227.0	225.7	223.5	221.8	219.4	217.9
48°	218.6	220.9	223.8	224.4	224.0	224.4	223.3	221.1	219.5	216.8	215.3
48.5°	215.9	218.8	220.9	221.8	221.9	221.8	220.9	218.8	217.0	214.2	212.8
49°	213.4	215.9	218.6	219.6	219.5	219.2	218.6	216.4	214.5	212.0	210.3
49.5°	211.1	213.2	215.7	217.3	217.0	216.7	216.2	214.1	212.0	209.7	207.8
50°	208.4	211.0	213.4	214.5	214.5	214.3	213.6	211.7	209.8	207.2	205.2
50.5°	205.7	208.3	210.5	211.5	211.9	211.7	211.1	208.9	207.2	204.7	202.4
51°	203.2	205.7	208.2	209.4	209.6	209.7	208.3	206.8	204.8	202.0	200.3
51.5°	200.6	203.2	205.7	206.9	207.1	207.3	205.6	204.4	202.3	199.4	198.0
52°	198.0	200.4	203.3	204.4	204.8	204.7	203.2	201.8	199.7	196.7	195.1
52.5°	195.5	198.2	200.6	201.9	202.3	202.1	200.8	198.8	197.1	194.2	192.9
53°	193.0	195.8	198.1	199.2	199.7	199.4	198.3	196.4	194.3	191.6	189.9
53.5°	190.5	192.9	195.2	196.3	197.0	196.8	195.8	193.9	191.7	189.1	187.4
54°	188.2	190.2	192.8	193.5	194.0	194.4	193.2	191.7	189.1	186.7	184.7
54.5°	185.0	187.7	190.4	191.2	191.7	192.0	190.8	188.9	186.7	184.1	181.8
55°	182.4	185.2	187.9	188.6	189.0	189.5	188.2	186.0	184.0	181.3	179.4
55.5°	179.8	182.5	185.3	185.7	186.5	186.9	185.5	183.5	181.1	178.7	176.9
56°	177.0	179.8	182.7	183.2	183.9	184.1	182.8	180.6	178.6	176.0	174.2
56.5°	174.1	177.1	179.7	180.7	181.6	181.6	180.2	178.4	175.9	173.4	171.2
57°	171.3	174.2	176.4	177.9	179.0	178.9	177.3	175.5	173.1	170.7	168.6
57.5°	168.7	171.3	174.0	175.0	176.2	176.2	174.6	173.0	170.4	168.1	165.8
58°	165.9	168.6	171.3	172.4	173.4	173.3	171.8	170.0	167.9	165.1	163.0
58.5°	163.4	166.2	168.7	169.7	170.8	170.5	169.2	167.2	165.2	162.2	160.2
59°	160.5	163.2	165.8	167.3	168.1	167.9	166.9	164.2	162.5	159.3	157.2
59.5°	157.6	160.4	163.1	164.2	165.6	165.3	164.2	161.7	159.7	156.5	154.4
60°	155.0	157.5	160.4	161.7	163.0	162.5	161.5	158.6	157.0	153.9	151.3
60.5°	151.8	155.0	157.6	158.9	160.1	159.9	158.7	156.2	154.2	151.1	148.8
61°	149.2	152.0	154.8	156.1	157.2	157.0	155.8	153.3	151.3	148.2	145.7
61.5°	146.4	149.3	151.7	153.2	154.4	154.3	152.9	150.9	148.4	145.3	143.0
62°	143.5	146.3	149.1	150.3	151.7	151.5	150.2	147.8	145.5	142.4	139.8
62.5°	140.4	143.4	146.3	147.7	148.9	148.7	147.4	145.0	142.6	139.6	136.9
63°	137.5	140.4	143.3	144.9	146.1	146.0	144.6	141.8	139.8	136.8	133.9
63.5°	134.6	137.5	140.3	141.7	143.1	143.1	141.8	139.1	136.9	133.7	131.1
64°	131.6	134.4	137.4	138.6	140.3	140.1	138.9	135.9	133.8	130.7	128.4
64.5°	128.7	131.7	134.3	136.0	137.3	137.2	136.0	133.2	130.9	127.9	125.3
65°	125.7	128.8	131.3	133.2	134.3	134.1	133.1	130.3	128.0	125.1	122.1
65.5°	122.9	126.1	128.6	130.4	131.4	131.3	130.1	127.3	125.0	122.1	119.1
66°	119.9	123.1	125.7	127.2	128.5	128.1	127.1	124.2	122.0	118.9	116.2
66.5°	117.0	119.8	122.7	124.2	125.5	125.4	124.1	121.4	118.9	115.9	113.2
67°	114.2	117.1	119.8	121.1	122.5	122.4	121.1	118.3	115.9	113.0	110.1



TEST NUMBER: P522086
 CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	110.8	114.1	117.0	118.0	119.5	119.4	118.3	115.4	112.9	110.0	107.1
68°	107.6	110.9	114.2	115.5	116.8	116.5	115.1	112.3	109.8	106.9	104.1
68.5°	104.5	107.8	110.8	112.3	113.7	113.6	112.2	109.3	106.7	103.7	101.0
69°	101.5	104.7	107.7	109.0	110.6	110.6	109.1	106.3	103.7	100.7	98.0
69.5°	98.4	101.6	104.6	106.0	107.7	107.6	106.1	103.2	100.6	97.6	95.3
70°	95.5	98.5	101.6	103.1	104.7	104.5	103.1	100.3	97.5	94.8	92.1
70.5°	92.6	95.5	98.5	100.0	101.5	101.6	100.0	97.3	94.7	91.7	89.1
71°	89.5	92.4	95.5	96.9	98.4	98.4	97.0	94.4	91.6	88.6	86.0
71.5°	86.4	89.6	92.4	94.1	95.4	95.4	94.0	91.3	88.6	85.5	83.1
72°	83.2	86.4	89.3	91.1	92.6	92.5	91.0	88.3	85.4	82.5	80.1
72.5°	80.2	83.5	86.1	88.0	89.6	89.5	87.9	85.3	82.4	79.6	77.1
73°	77.1	80.3	83.0	84.9	86.7	86.4	84.7	82.2	79.2	76.7	73.9
73.5°	74.0	77.2	80.1	81.9	83.5	83.3	81.7	79.3	76.5	73.2	70.9
74°	71.1	74.0	77.2	78.7	80.6	80.4	78.7	76.1	73.4	70.5	67.8
74.5°	67.9	71.0	73.9	75.7	77.6	77.4	75.7	73.1	70.4	67.4	64.6
75°	64.8	68.0	70.9	72.7	74.7	74.4	72.7	70.2	67.4	64.3	61.6
75.5°	61.7	64.9	67.8	69.8	71.6	71.3	69.8	67.3	64.4	61.4	58.8
76°	58.9	61.8	64.7	66.6	68.6	68.2	66.8	64.2	61.4	58.5	55.8
76.5°	55.8	59.0	61.6	63.8	65.5	65.3	63.7	61.2	58.5	55.4	52.8
77°	52.6	55.9	58.8	60.7	62.6	62.2	60.7	58.4	55.6	52.6	49.8
77.5°	50.0	52.9	55.8	57.6	59.7	59.3	58.0	55.4	52.7	49.6	47.0
78°	46.9	50.0	52.8	54.7	56.7	56.3	55.0	52.4	49.7	46.7	44.2
78.5°	44.2	47.0	49.8	51.8	53.8	53.4	52.0	49.5	46.7	43.9	41.4
79°	41.3	44.3	46.8	48.8	50.8	50.5	49.1	46.6	43.8	41.0	38.5
79.5°	38.3	41.3	44.1	45.8	47.8	47.5	46.2	43.8	41.1	38.2	35.7
80°	35.4	38.5	41.4	42.9	45.1	44.8	43.4	41.0	38.3	35.5	32.9
80.5°	32.8	35.6	38.3	40.0	42.2	41.9	40.5	38.2	35.5	32.7	30.4
81°	29.9	32.8	35.4	37.2	39.5	39.2	37.7	35.5	32.8	30.0	27.7
81.5°	27.4	30.3	32.7	34.4	36.7	36.5	35.0	32.7	30.2	27.3	25.0
82°	24.8	27.6	30.0	31.6	34.0	33.6	32.3	30.2	27.5	24.8	22.7
82.5°	22.5	24.9	27.5	29.0	31.2	31.0	29.7	27.5	24.9	22.6	20.3
83°	20.0	22.7	24.8	26.4	28.5	28.4	27.1	25.0	22.7	20.1	18.1
83.5°	17.6	20.2	22.5	24.0	26.1	25.8	24.5	22.6	20.1	17.7	15.6
84°	15.4	17.7	20.0	21.6	23.5	23.3	22.2	20.3	17.9	15.5	13.5
84.5°	13.3	15.5	17.6	19.1	21.3	21.2	19.8	17.9	15.5	13.4	11.3
85°	11.2	13.5	15.4	16.8	18.9	18.8	17.4	15.6	13.4	11.2	9.4
85.5°	9.4	11.3	13.3	14.5	16.7	16.5	15.3	13.4	11.2	9.2	7.5
86°	7.5	9.4	11.1	12.5	14.4	14.2	13.0	11.3	9.3	7.4	5.8
86.5°	5.9	7.6	9.5	10.5	12.3	12.0	11.0	9.3	7.5	5.8	4.3
87°	4.4	5.9	7.5	8.7	10.3	10.1	9.0	7.5	5.8	4.2	2.9
87.5°	3.0	4.5	5.9	7.1	8.6	8.3	7.3	5.8	4.3	2.8	1.7
88°	1.9	3.2	4.4	5.3	6.6	6.5	5.6	4.3	2.9	1.7	0.7
88.5°	1.0	2.0	3.0	3.8	5.1	4.8	4.2	2.9	1.6	0.6	0.0
89°	0.3	1.1	1.9	2.8	3.5	3.3	2.6	1.8	0.6	0.0	0.0
89.5°	0.0	0.4	1.0	1.7	2.1	2.0	1.4	0.7	0.0	0.0	0.0



TEST NUMBER: P522086
 CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-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	0.3	0.9	1.1	1.0	0.4	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: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-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°	0.3	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°	0.3	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	0.3	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: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-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	0.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.1	0.3	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	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139.5°	0.1	0.2	0.1	0.3	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	0.3	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	0.3	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	0.3	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2
154°	0.1	0.3	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2
154.5°	0.1	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.3
155°	0.1	0.3	0.1	0.2	0.1	0.3	0.2	0.2	0.2	0.1	0.3
155.5°	0.1	0.3	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.3
156°	0.1	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.3
156.5°	0.1	0.5	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.1	0.4
157°	0.1	0.5	0.1	0.2	0.1	0.3	0.3	0.2	0.2	0.1	0.3



TEST NUMBER: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
157.5°	0.1	0.5	0.1	0.2	0.0	0.2	0.3	0.2	0.2	0.1	0.3
158°	0.1	0.5	0.1	0.2	0.0	0.3	0.3	0.2	0.2	0.1	0.4
158.5°	0.1	0.5	0.1	0.2	0.0	0.3	0.3	0.2	0.2	0.1	0.4
159°	0.1	0.5	0.1	0.2	0.0	0.4	0.3	0.2	0.2	0.1	0.5
159.5°	0.1	0.5	0.1	0.2	0.0	0.3	0.3	0.2	0.2	0.1	0.5
160°	0.1	0.5	0.1	0.2	0.0	0.3	0.3	0.2	0.2	0.1	0.5
160.5°	0.1	0.5	0.1	0.2	0.0	0.3	0.3	0.2	0.2	0.1	0.5
161°	0.1	0.5	0.1	0.2	0.0	0.3	0.3	0.2	0.2	0.1	0.5
161.5°	0.1	0.5	0.1	0.2	0.0	0.3	0.3	0.2	0.2	0.1	0.5
162°	0.1	0.5	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.5
162.5°	0.1	0.5	0.1	0.2	0.0	0.3	0.4	0.2	0.2	0.1	0.5
163°	0.1	0.5	0.1	0.2	0.0	0.3	0.4	0.2	0.2	0.1	0.5
163.5°	0.1	0.6	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.5
164°	0.1	0.6	0.1	0.2	0.0	0.5	0.4	0.2	0.2	0.1	0.5
164.5°	0.1	0.4	0.1	0.2	0.0	0.4	0.4	0.2	0.2	0.1	0.7
165°	0.1	0.6	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.1	0.7
165.5°	0.1	0.7	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.1	0.6
166°	0.1	0.7	0.1	0.2	0.0	0.4	0.5	0.2	0.2	0.1	0.6
166.5°	0.1	0.7	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
167°	0.1	0.7	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
167.5°	0.1	0.7	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
168°	0.1	0.2	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.2	0.6
168.5°	0.1	0.2	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
169°	0.1	0.4	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.2	0.6
169.5°	0.1	0.4	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.6	0.6
170°	0.1	0.4	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.6	0.6
170.5°	0.1	1.1	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.7	0.6
171°	0.1	1.1	0.1	0.2	0.0	0.5	0.6	0.2	0.2	0.6	0.6
171.5°	0.1	1.0	0.2	0.2	0.0	0.5	0.5	0.2	0.2	0.3	0.6
172°	0.1	1.0	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.7	0.6
172.5°	0.1	1.0	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.3	0.6
173°	0.1	0.9	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.3	0.6
173.5°	0.1	0.9	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.2	0.6
174°	0.1	0.9	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.2	0.6
174.5°	0.1	0.9	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
175°	0.1	0.9	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
175.5°	0.1	0.9	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
176°	0.1	0.9	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
176.5°	0.1	0.7	0.1	0.2	0.0	0.5	0.6	0.2	0.2	0.1	0.6
177°	0.1	0.7	0.1	0.2	0.0	0.5	0.6	0.2	0.2	0.1	0.6
177.5°	0.1	0.7	0.1	0.2	0.0	0.5	0.6	0.2	0.2	0.1	0.6
178°	0.1	0.7	0.1	0.2	0.0	0.5	0.6	0.2	0.2	0.1	0.6
178.5°	0.1	0.7	0.1	0.2	0.0	0.5	0.7	0.2	0.2	0.1	0.6
179°	0.1	0.6	0.1	0.2	0.0	0.5	0.7	0.2	0.2	0.1	0.6
179.5°	0.1	0.6	0.1	0.2	0.0	0.5	0.7	0.2	0.2	0.1	0.6



TEST NUMBER: P522086
CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-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: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	345.9	345.9	345.9	345.9	345.9	345.9
0.5°	345.5	344.1	344.1	346.0	344.5	346.4
1°	345.4	344.9	344.3	345.7	345.4	345.9
1.5°	344.3	344.1	345.4	346.2	346.2	346.6
2°	345.3	344.7	344.2	345.4	346.8	348.4
2.5°	344.1	345.5	343.3	346.2	346.1	346.0
3°	344.8	343.1	343.9	344.3	345.7	345.8
3.5°	344.7	342.6	344.4	345.4	344.5	345.2
4°	344.1	343.4	342.6	344.5	343.2	346.3
4.5°	343.7	343.7	343.7	343.8	343.8	346.1
5°	344.2	344.2	344.7	342.6	343.9	347.0
5.5°	343.7	341.7	343.0	343.4	341.8	343.7
6°	341.1	343.2	343.2	344.9	341.9	342.8
6.5°	342.6	340.0	341.9	344.4	341.9	341.8
7°	343.0	341.4	341.1	342.5	343.4	342.8
7.5°	341.7	339.4	341.6	342.3	344.2	342.9
8°	341.8	340.2	341.1	342.4	341.7	343.7
8.5°	340.9	338.7	339.9	339.1	340.8	341.7
9°	339.7	338.7	340.1	339.7	337.8	341.2
9.5°	337.2	339.4	337.1	339.7	339.7	340.4
10°	339.1	337.7	336.6	339.2	338.6	340.7
10.5°	337.0	337.1	338.6	339.4	338.5	341.1
11°	337.1	336.1	336.7	338.7	338.5	339.8
11.5°	336.1	334.5	336.4	337.5	336.6	338.5
12°	334.9	335.3	336.2	334.9	334.9	338.6
12.5°	334.5	333.2	334.9	333.3	333.4	337.8
13°	334.2	332.1	333.8	333.3	333.3	337.2
13.5°	332.0	331.3	331.9	333.8	333.2	336.3
14°	332.2	330.7	331.1	333.0	332.5	334.7
14.5°	330.4	330.8	330.8	331.9	332.4	334.2
15°	330.1	329.6	329.2	330.8	331.9	332.7
15.5°	329.0	327.9	328.7	330.0	331.0	332.2
16°	328.9	326.7	327.2	329.0	328.3	331.5
16.5°	327.9	325.8	325.8	327.7	327.8	329.5
17°	325.9	324.4	325.4	326.9	327.3	330.4
17.5°	325.7	324.3	324.8	325.8	325.4	328.5
18°	324.2	322.3	323.8	323.6	324.6	327.1
18.5°	322.7	321.7	322.3	322.9	323.6	326.4
19°	323.3	321.4	321.4	321.6	322.7	324.0
19.5°	321.1	320.0	319.7	321.3	321.0	323.2
20°	319.7	319.3	319.3	320.0	320.9	321.8
20.5°	318.0	316.5	318.8	318.0	319.3	320.7
21°	316.4	315.5	316.5	317.7	318.4	319.7
21.5°	314.8	315.4	315.9	316.4	316.9	318.4
22°	314.9	313.7	313.3	315.4	315.0	317.9



TEST NUMBER: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	313.5	312.3	311.8	314.6	313.5	316.5
23°	312.0	310.6	311.3	312.5	313.0	314.3
23.5°	310.4	309.5	310.3	310.2	311.6	313.1
24°	307.4	307.7	309.1	309.9	310.7	311.7
24.5°	305.7	306.0	307.5	308.2	308.2	310.2
25°	304.9	304.1	305.3	306.6	306.7	309.7
25.5°	305.6	303.0	303.6	304.7	305.4	308.0
26°	303.3	299.9	302.3	303.5	304.0	306.0
26.5°	301.8	299.9	300.4	301.8	303.2	304.5
27°	299.7	299.5	298.9	299.7	302.1	302.8
27.5°	298.1	297.9	297.1	298.3	299.9	301.3
28°	296.2	294.9	296.0	296.6	297.9	300.5
28.5°	294.8	292.7	294.3	295.0	296.5	298.9
29°	293.0	291.3	291.8	292.8	294.5	296.6
29.5°	291.3	288.8	290.3	291.2	292.2	295.3
30°	289.4	286.0	289.1	289.7	290.7	293.5
30.5°	287.8	285.1	286.8	288.3	288.8	291.7
31°	285.8	284.8	285.3	286.9	287.5	290.4
31.5°	283.6	283.4	283.1	284.7	285.2	288.6
32°	281.9	282.6	280.6	282.9	283.7	286.6
32.5°	279.9	281.5	278.9	281.1	281.9	284.7
33°	278.3	278.9	277.1	279.1	280.0	282.9
33.5°	276.7	276.4	275.4	277.7	278.2	281.0
34°	275.0	274.2	273.6	275.5	276.1	278.9
34.5°	273.3	272.4	271.8	273.3	274.3	277.3
35°	271.2	270.8	269.8	271.4	272.3	275.7
35.5°	269.3	269.0	267.8	269.5	270.1	273.3
36°	267.2	266.0	265.9	267.5	268.1	271.5
36.5°	265.3	263.6	264.1	265.8	265.9	269.7
37°	263.1	261.6	262.2	263.6	264.1	267.4
37.5°	261.2	259.4	260.4	261.6	262.0	265.6
38°	259.2	256.6	258.3	259.6	259.9	263.1
38.5°	256.9	253.8	256.2	257.5	258.1	261.4
39°	254.5	252.0	253.9	255.5	255.9	259.1
39.5°	252.6	250.1	251.9	253.1	254.2	256.4
40°	250.1	248.3	249.5	251.3	252.0	254.6
40.5°	247.9	246.5	247.0	248.8	249.9	253.2
41°	245.8	244.5	244.9	246.6	248.0	251.2
41.5°	243.9	242.0	242.4	244.6	245.6	248.1
42°	241.4	240.6	240.3	242.1	243.5	246.4
42.5°	239.4	238.2	237.9	240.3	241.3	244.1
43°	237.2	235.3	235.4	237.4	238.9	242.0
43.5°	235.0	232.9	233.2	235.6	236.7	239.7
44°	232.8	230.9	231.4	232.8	234.6	237.7
44.5°	230.4	229.2	228.5	230.4	232.1	235.6



TEST NUMBER: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	228.1	226.7	226.1	228.6	230.0	233.4
45.5°	225.4	224.0	223.8	226.4	227.3	230.6
46°	223.2	221.5	221.7	223.6	225.2	227.9
46.5°	220.8	218.7	219.5	221.1	222.7	225.2
47°	218.0	216.4	217.0	218.8	220.3	223.8
47.5°	215.8	214.1	214.7	216.3	217.7	221.0
48°	213.2	211.9	212.0	213.8	215.3	218.6
48.5°	210.7	209.4	209.3	211.6	212.7	215.9
49°	208.2	206.6	206.8	209.1	210.2	213.4
49.5°	205.9	203.7	204.7	206.6	208.2	211.1
50°	203.3	201.1	201.9	204.2	205.5	208.4
50.5°	200.7	198.5	199.4	201.4	202.9	205.7
51°	197.9	196.4	197.2	198.9	200.4	203.2
51.5°	195.2	193.9	194.3	196.1	197.8	200.6
52°	192.7	191.1	191.5	193.4	195.2	198.0
52.5°	190.2	188.1	188.8	191.0	192.6	195.5
53°	187.7	185.2	186.5	188.3	189.9	193.0
53.5°	185.0	182.7	183.9	185.4	187.0	190.5
54°	182.4	180.3	180.9	182.6	183.9	188.2
54.5°	179.8	177.4	178.2	179.8	181.9	185.0
55°	177.1	174.4	175.4	177.3	178.9	182.4
55.5°	174.2	172.1	172.8	174.6	176.0	179.8
56°	171.6	169.5	170.1	171.8	173.4	177.0
56.5°	168.9	167.0	167.9	169.2	170.8	174.1
57°	166.3	164.1	164.7	166.4	168.5	171.3
57.5°	163.6	161.2	162.0	163.6	165.9	168.7
58°	160.8	158.6	159.1	160.8	163.1	165.9
58.5°	158.0	155.9	156.3	158.1	160.2	163.4
59°	155.3	153.0	153.2	155.3	157.2	160.5
59.5°	152.5	150.1	150.5	152.4	154.5	157.6
60°	149.6	147.1	147.6	149.6	151.5	155.0
60.5°	146.7	144.1	144.9	146.8	148.6	151.8
61°	143.8	141.2	141.9	143.6	146.0	149.2
61.5°	140.8	138.6	139.0	140.7	142.9	146.4
62°	138.0	135.6	136.3	137.8	139.9	143.5
62.5°	135.3	132.6	133.3	134.9	136.9	140.4
63°	132.2	129.8	130.3	132.2	134.1	137.5
63.5°	129.3	127.0	127.3	129.2	131.2	134.6
64°	126.3	123.9	124.2	126.2	128.2	131.6
64.5°	123.2	120.7	121.5	123.2	125.4	128.7
65°	120.3	117.8	118.5	120.3	122.4	125.7
65.5°	117.0	114.8	115.4	117.4	119.5	122.9
66°	114.1	112.1	112.5	114.2	116.4	119.9
66.5°	111.0	109.0	109.5	111.0	113.7	117.0
67°	108.0	105.9	106.5	108.3	110.5	114.2



TEST NUMBER: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	104.9	102.9	103.4	105.0	107.4	110.8
68°	101.9	100.0	100.1	102.0	104.4	107.6
68.5°	98.8	96.7	97.3	98.9	101.2	104.5
69°	95.8	93.8	94.2	96.1	98.0	101.5
69.5°	92.8	90.9	91.1	93.1	95.2	98.4
70°	89.8	87.9	88.3	89.8	92.2	95.5
70.5°	86.8	84.7	85.0	86.8	89.0	92.6
71°	83.7	81.7	82.1	83.9	86.0	89.5
71.5°	80.8	78.6	78.8	80.6	82.8	86.4
72°	77.6	75.4	75.7	77.6	80.1	83.2
72.5°	74.6	72.6	72.8	74.4	76.9	80.2
73°	71.5	69.3	69.7	71.3	73.8	77.1
73.5°	68.4	66.3	66.6	68.3	71.0	74.0
74°	65.4	63.5	63.7	65.3	67.8	71.1
74.5°	62.4	60.4	60.4	62.2	64.6	67.9
75°	59.6	57.4	57.6	59.5	61.6	64.8
75.5°	56.6	54.5	54.7	56.2	58.6	61.7
76°	53.7	51.4	51.6	53.2	55.5	58.9
76.5°	50.7	48.5	48.7	50.4	52.5	55.8
77°	47.9	45.7	45.8	47.5	49.6	52.6
77.5°	45.0	42.6	43.0	44.5	46.7	50.0
78°	42.1	39.8	40.0	41.7	43.8	46.9
78.5°	39.2	37.0	37.2	38.8	41.1	44.2
79°	36.6	34.2	34.5	36.0	38.2	41.3
79.5°	33.8	31.4	31.8	33.3	35.4	38.3
80°	31.0	28.8	28.9	30.5	32.5	35.4
80.5°	28.4	26.0	26.3	27.9	29.8	32.8
81°	25.9	23.6	24.0	25.2	27.4	29.9
81.5°	23.4	21.3	21.5	22.9	24.7	27.4
82°	21.1	18.8	19.0	20.4	22.5	24.8
82.5°	18.7	16.5	16.8	18.1	20.0	22.5
83°	16.5	14.4	14.5	15.8	17.5	20.0
83.5°	14.1	12.3	12.5	13.6	15.3	17.6
84°	12.0	10.3	10.5	11.5	13.2	15.4
84.5°	10.1	8.4	8.6	9.6	11.1	13.3
85°	8.1	6.7	6.7	7.7	9.4	11.2
85.5°	6.4	5.2	5.2	6.0	7.4	9.4
86°	4.8	3.7	4.0	4.6	5.8	7.5
86.5°	3.3	2.5	2.7	3.3	4.3	5.9
87°	1.9	1.5	1.6	2.0	3.0	4.4
87.5°	0.9	0.6	0.6	1.1	1.9	3.0
88°	0.0	0.3	0.2	0.4	1.0	1.9
88.5°	0.0	0.0	0.0	0.0	0.4	1.0
89°	0.0	0.0	0.0	0.0	0.0	0.3
89.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P522086
 CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-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: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-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	0.3
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	0.3	0.2	0.3
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	0.3	0.1	0.2	0.1
134.5°	0.0	0.1	0.3	0.1	0.2	0.1



TEST NUMBER: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.0	0.1	0.2	0.3	0.2	0.1
135.5°	0.0	0.1	0.2	0.3	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°	0.3	0.1	0.2	0.2	0.2	0.1
154°	0.3	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: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-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	0.3	0.2	0.2	0.1
174.5°	0.1	0.3	0.3	0.2	0.2	0.1
175°	0.1	0.3	0.3	0.2	0.2	0.1
175.5°	0.1	0.3	0.3	0.2	0.2	0.1
176°	0.1	0.4	0.3	0.2	0.2	0.1
176.5°	0.1	0.5	0.5	0.2	0.2	0.1
177°	0.1	0.6	0.6	0.2	0.2	0.1
177.5°	0.1	0.6	0.7	0.2	0.2	0.1
178°	0.1	0.5	0.7	0.2	0.2	0.1
178.5°	0.1	0.5	0.7	0.2	0.2	0.1
179°	0.1	0.5	0.7	0.2	0.2	0.1
179.5°	0.1	0.5	0.7	0.2	0.2	0.1



TEST NUMBER: P522086

CATALOG NUMBER: HLBQL6099BLE40AWH-4000K-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)