

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: P522084

Luminaire Tested: **HLBQL6099BLE40AWH-3000K-UNIT**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522084  
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-3000K-UNIT  
Description: Surface Mount Downlight Fixture, Single Unit  
Light Source: (16) 3000K CCT, 94 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

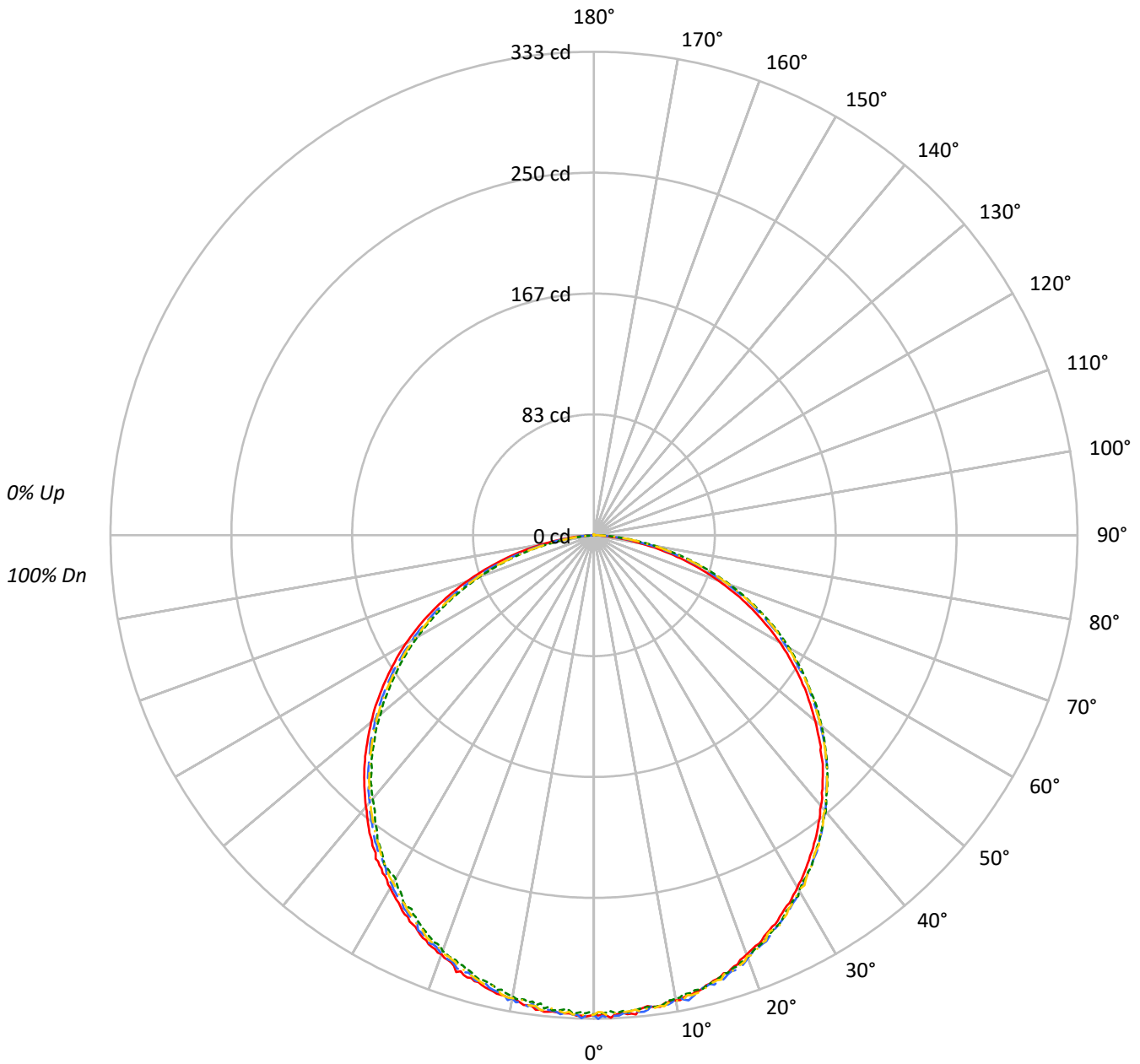
Lumens per Lamp: N/A  
Luminaire Lumens: 950.0 lumens  
Efficiency: N/A  
Efficacy: 81.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38  
Luminous Opening: Circular (Dia: 0.5m x H: 0m)  
CIE Type: Direct

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: P522084  
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### Luminous Intensity Polar Plot



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



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	1682	1682	1682	1682
5°	1694	1679	1683	1680
10°	1682	1676	1677	1667
15°	1675	1679	1677	1659
20°	1666	1675	1664	1652
25°	1661	1672	1661	1631
30°	1648	1663	1650	1606
35°	1636	1654	1642	1608
40°	1616	1651	1624	1576
45°	1605	1636	1609	1559
50°	1577	1623	1587	1521
55°	1547	1603	1560	1478
60°	1508	1585	1527	1431
65°	1447	1545	1473	1356
70°	1358	1488	1386	1249
75°	1218	1405	1265	1078
80°	991	1264	1071	807
85°	625	1058	748	374



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.2	3.3
10°-20°	89.6	9.4
20°-30°	136.0	14.3
30°-40°	164.4	17.3
40°-50°	171.4	18.0
50°-60°	155.9	16.4
60°-70°	119.4	12.6
70°-80°	66.7	7.0
80°-90°	15.0	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.1	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°	256.8	27.0
0°-40°	421.2	44.3
0°-60°	748.5	78.8
0°-90°	949.6	100.0
90°-120°	0.0	0.0
90°-150°	0.2	0.0
90°-180°	0.0	0.0
0°-180°	950.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	330	330	330	330	330	
5°	331	328	329	329	331	31
15°	318	318	318	315	318	90
25°	296	298	296	290	296	136
35°	263	266	264	259	263	164
45°	223	227	223	216	223	171
55°	174	180	176	166	174	156
65°	120	128	122	112	120	119
75°	62	71	64	55	62	66
85°	11	18	13	6	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°	330.2	330.2	330.2	330.2	330.2	330.2	330.2	330.2	330.2	330.2	330.2
0.5°	330.8	331.2	333.2	330.3	329.2	329.0	328.4	330.7	331.0	329.3	332.5
1°	330.3	330.8	331.1	329.0	329.2	330.2	328.7	329.4	331.6	331.7	331.3
1.5°	331.0	332.0	332.0	330.1	328.9	330.4	330.5	330.2	331.0	330.5	332.8
2°	332.6	334.1	331.8	332.1	328.1	330.6	330.4	330.2	331.2	330.2	330.4
2.5°	330.4	332.8	331.4	331.5	329.2	330.1	329.5	331.0	330.4	330.2	330.6
3°	330.2	330.7	331.2	331.2	329.0	330.6	329.1	330.7	329.8	330.5	329.6
3.5°	329.5	329.4	330.0	330.0	328.2	329.0	329.2	330.4	330.0	331.4	329.8
4°	330.7	330.4	329.6	330.4	329.4	330.3	328.8	329.3	329.8	331.1	330.7
4.5°	330.5	329.2	330.7	330.1	328.5	329.5	328.7	328.9	329.7	329.3	329.3
5°	331.3	328.9	329.1	330.1	328.5	329.1	328.0	328.6	329.2	328.5	328.7
5.5°	328.1	327.8	330.0	329.0	327.7	329.1	329.5	329.1	329.8	329.7	328.5
6°	327.3	328.7	330.0	328.9	327.4	328.5	330.2	329.4	330.0	329.0	328.4
6.5°	326.4	328.8	328.9	329.2	327.0	329.1	327.3	327.2	328.9	325.7	328.8
7°	327.3	328.7	326.5	329.1	327.2	329.0	328.7	327.3	329.3	327.3	327.6
7.5°	327.4	327.8	325.9	327.3	327.6	326.2	328.0	327.3	327.2	326.2	325.7
8°	328.1	327.3	327.5	328.3	326.9	326.0	327.3	326.9	326.9	325.3	327.7
8.5°	326.3	325.9	327.0	327.9	326.8	324.7	328.1	325.9	327.2	326.4	326.5
9°	325.8	324.6	327.3	326.9	324.4	326.5	326.1	326.1	325.7	325.2	325.5
9.5°	325.1	325.3	326.2	326.1	324.6	326.9	327.0	324.5	324.5	325.1	326.2
10°	325.3	326.2	324.1	326.3	324.0	324.6	326.3	325.1	324.2	324.4	323.8
10.5°	325.7	324.7	324.3	326.5	324.0	325.7	324.0	323.8	324.0	323.0	325.6
11°	324.4	323.0	325.9	324.3	322.3	324.5	325.3	324.4	323.2	322.6	322.9
11.5°	323.2	323.3	327.0	323.5	322.3	324.4	323.1	323.0	323.0	323.6	321.9
12°	323.3	322.4	325.3	324.6	322.2	323.0	324.0	321.8	322.8	319.6	321.3
12.5°	322.5	322.6	323.9	323.0	320.9	323.0	323.4	321.2	321.8	320.4	320.8
13°	322.0	322.5	322.4	322.3	321.2	320.8	323.2	320.2	321.0	320.0	319.9
13.5°	321.1	322.7	320.8	321.7	321.2	319.9	321.3	320.4	320.3	318.7	317.8
14°	319.5	321.5	320.2	320.3	319.9	320.0	321.3	318.9	319.2	318.2	318.2
14.5°	319.1	318.9	319.3	319.3	319.0	319.9	319.1	318.5	317.9	317.5	317.6
15°	317.7	317.3	320.5	317.8	318.4	318.7	318.7	317.5	318.0	316.3	317.3
15.5°	317.2	316.2	319.2	317.9	317.5	317.7	318.0	316.1	316.5	315.7	315.0
16°	316.5	316.2	319.4	317.6	316.4	317.1	318.4	316.1	316.9	314.7	313.4
16.5°	314.6	315.3	317.9	316.9	315.0	316.1	315.4	315.5	315.9	313.7	313.9
17°	315.5	315.3	316.1	316.0	315.3	315.9	315.1	315.3	314.1	313.3	312.2
17.5°	313.6	315.7	314.9	314.3	313.7	314.6	315.1	312.5	315.5	312.5	313.1
18°	312.3	313.6	315.0	314.0	313.0	313.2	314.5	313.1	311.8	311.6	310.8
18.5°	311.7	311.3	314.2	312.6	313.2	312.7	313.4	311.6	310.2	310.2	309.0
19°	309.3	310.0	313.6	311.5	310.9	311.5	312.4	310.0	309.4	309.5	309.0
19.5°	308.6	310.0	311.8	310.6	310.8	310.1	311.2	309.4	308.8	308.5	307.7
20°	307.3	308.9	310.0	309.5	309.1	309.2	308.6	308.6	307.1	306.9	307.1
20.5°	306.2	305.6	308.2	308.5	308.1	308.1	309.0	307.0	307.0	306.3	305.2
21°	305.2	305.6	307.0	307.3	306.6	306.6	307.9	305.9	305.3	303.9	303.5
21.5°	304.0	306.3	306.9	306.3	305.1	306.2	306.3	304.7	304.8	303.0	302.8
22°	303.5	304.2	305.2	306.1	304.7	304.4	305.4	303.4	303.9	302.6	303.1



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CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	302.2	302.8	304.4	304.3	303.7	303.0	303.7	302.6	302.0	301.3	300.8
23°	300.0	302.7	303.9	304.1	302.4	302.9	303.2	302.4	301.4	299.5	299.6
23.5°	298.9	301.0	302.0	302.2	300.5	300.8	299.6	300.9	299.9	298.7	298.2
24°	297.6	299.3	300.7	301.2	299.6	299.6	298.5	299.1	298.3	297.0	297.7
24.5°	296.2	298.3	298.9	299.7	298.3	299.0	298.4	298.1	296.4	295.4	293.7
25°	295.6	296.6	297.8	298.2	297.5	297.5	297.9	295.6	295.6	294.1	293.6
25.5°	294.1	295.1	296.5	297.5	296.6	295.9	297.4	295.0	294.8	293.1	292.2
26°	292.2	293.7	295.2	296.6	295.1	295.0	295.2	293.4	292.3	292.0	291.0
26.5°	290.7	292.9	293.7	294.6	293.2	294.1	294.1	292.7	292.0	291.3	289.5
27°	289.1	291.1	292.6	292.7	291.0	292.5	292.9	290.6	290.6	288.8	288.4
27.5°	287.7	289.0	291.2	291.6	290.1	291.2	290.1	288.9	288.5	287.1	285.8
28°	286.9	288.4	289.4	290.0	288.7	289.1	289.1	287.7	286.6	285.5	284.2
28.5°	285.3	286.0	287.7	288.4	286.9	287.9	287.6	286.0	285.4	284.5	283.4
29°	283.2	284.3	286.7	286.8	285.8	286.6	285.8	285.3	283.8	282.6	281.8
29.5°	282.0	283.6	285.1	284.7	285.7	284.8	284.3	282.2	282.3	279.8	280.3
30°	280.2	282.0	283.5	283.9	282.7	283.2	283.1	281.4	280.5	278.7	278.0
30.5°	278.5	279.7	281.6	282.3	280.9	281.8	281.7	280.4	279.2	277.5	276.7
31°	277.3	278.4	279.9	279.8	278.8	280.5	281.4	278.5	276.9	275.9	274.8
31.5°	275.5	276.9	278.1	278.1	277.9	278.8	278.9	275.4	275.2	274.1	273.4
32°	273.6	274.6	276.6	276.9	276.8	276.7	276.9	274.9	274.6	272.4	270.5
32.5°	271.9	273.2	275.1	275.3	274.7	275.5	274.3	273.3	272.3	270.9	268.9
33°	270.1	271.4	273.3	273.9	273.8	274.2	273.8	272.0	271.1	268.7	267.3
33.5°	268.3	270.3	271.9	272.1	272.2	272.2	272.1	269.6	269.3	267.2	265.3
34°	266.2	268.4	270.1	270.7	270.1	269.6	269.8	268.0	268.9	265.5	264.2
34.5°	264.7	266.7	268.4	268.3	267.7	268.1	267.9	266.9	265.3	263.9	263.0
35°	263.2	264.6	267.1	266.9	266.1	266.6	266.1	265.2	264.1	262.2	260.9
35.5°	260.9	262.7	265.5	265.2	264.3	264.9	264.7	263.2	262.6	259.7	259.4
36°	259.2	260.6	263.4	263.5	262.9	263.3	263.9	261.3	260.2	258.2	257.4
36.5°	257.5	258.9	261.1	261.6	261.2	261.1	260.8	259.4	258.5	256.8	255.3
37°	255.3	257.0	259.4	259.5	259.0	259.4	258.8	257.7	256.8	255.2	253.1
37.5°	253.6	254.9	257.6	257.3	257.2	257.4	257.9	255.7	254.7	253.0	250.8
38°	251.2	253.1	255.5	255.6	255.5	255.5	255.3	253.8	252.6	251.0	249.0
38.5°	249.6	251.2	253.8	253.7	252.8	253.8	253.4	251.8	250.5	249.1	246.9
39°	247.4	249.3	251.6	252.0	251.4	251.8	251.1	249.9	248.5	245.9	245.2
39.5°	244.8	247.6	249.5	249.6	250.1	249.8	248.8	248.0	246.1	244.9	243.1
40°	243.1	245.5	247.9	247.7	248.4	247.7	247.5	245.9	244.2	242.9	240.3
40.5°	241.7	243.4	246.0	245.5	246.3	245.8	245.4	244.0	242.3	240.2	238.4
41°	239.8	241.1	243.5	243.8	244.1	243.9	243.2	241.7	240.3	237.8	236.2
41.5°	236.8	239.1	241.5	241.8	241.2	241.8	241.3	239.6	238.2	236.0	234.6
42°	235.2	236.9	239.4	239.8	239.6	240.1	239.3	237.6	236.1	234.1	231.7
42.5°	233.1	234.6	236.6	237.9	237.8	237.9	237.4	235.2	234.2	231.8	230.4
43°	231.0	233.0	235.0	235.6	235.7	235.6	235.2	233.4	232.0	229.9	228.3
43.5°	228.9	231.1	233.0	233.6	233.6	233.6	233.2	231.3	229.9	227.8	226.0
44°	226.9	228.9	230.9	231.5	231.4	231.5	231.0	229.2	227.8	225.3	223.7
44.5°	224.9	226.5	228.7	229.5	229.3	229.6	229.1	227.1	225.6	223.2	221.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	222.9	224.3	226.6	227.1	227.2	227.4	226.8	224.9	223.4	221.1	219.1
45.5°	220.2	222.1	224.8	225.1	225.0	225.1	224.7	222.6	221.0	218.8	217.0
46°	217.6	220.0	222.2	223.0	222.9	223.0	222.3	220.2	219.1	216.6	214.5
46.5°	215.0	217.9	220.0	220.7	220.7	220.7	220.1	218.1	216.6	214.4	212.5
47°	213.7	215.2	217.9	218.5	218.4	218.6	217.9	215.9	214.1	212.0	210.7
47.5°	211.0	213.1	215.6	216.3	216.2	216.7	215.5	213.4	211.7	209.5	208.1
48°	208.7	210.9	213.7	214.3	213.9	214.3	213.2	211.1	209.6	207.0	205.6
48.5°	206.1	208.9	210.9	211.7	211.8	211.7	210.9	208.9	207.1	204.5	203.2
49°	203.8	206.1	208.7	209.7	209.6	209.3	208.7	206.6	204.8	202.4	200.8
49.5°	201.5	203.6	205.9	207.4	207.1	206.9	206.4	204.4	202.4	200.2	198.4
50°	199.0	201.4	203.8	204.8	204.8	204.6	204.0	202.1	200.3	197.8	195.9
50.5°	196.4	198.9	201.0	201.9	202.3	202.1	201.5	199.5	197.8	195.4	193.3
51°	194.0	196.4	198.8	199.9	200.1	200.2	198.9	197.4	195.5	192.8	191.2
51.5°	191.5	194.0	196.4	197.5	197.7	198.0	196.3	195.2	193.2	190.4	189.1
52°	189.1	191.3	194.1	195.2	195.5	195.4	194.0	192.6	190.7	187.8	186.3
52.5°	186.6	189.3	191.5	192.7	193.2	192.9	191.7	189.8	188.1	185.4	184.2
53°	184.3	186.9	189.2	190.2	190.7	190.4	189.4	187.5	185.5	182.9	181.3
53.5°	181.9	184.2	186.4	187.4	188.0	187.9	186.9	185.1	183.0	180.6	179.0
54°	179.7	181.6	184.1	184.8	185.2	185.6	184.5	183.0	180.6	178.2	176.3
54.5°	176.6	179.2	181.8	182.5	183.0	183.4	182.1	180.4	178.2	175.8	173.6
55°	174.2	176.8	179.4	180.1	180.5	180.9	179.7	177.6	175.7	173.1	171.3
55.5°	171.7	174.3	176.9	177.3	178.0	178.5	177.1	175.2	172.9	170.6	168.9
56°	169.0	171.7	174.5	174.9	175.6	175.8	174.6	172.4	170.5	168.0	166.3
56.5°	166.2	169.1	171.6	172.5	173.3	173.3	172.0	170.3	167.9	165.6	163.4
57°	163.5	166.3	168.4	169.9	170.9	170.8	169.3	167.5	165.3	162.9	161.0
57.5°	161.1	163.5	166.1	167.1	168.2	168.2	166.7	165.2	162.7	160.5	158.3
58°	158.4	161.0	163.5	164.6	165.6	165.5	164.1	162.3	160.3	157.6	155.6
58.5°	156.0	158.6	161.1	162.0	163.0	162.8	161.5	159.7	157.7	154.9	152.9
59°	153.2	155.8	158.3	159.8	160.5	160.3	159.4	156.8	155.2	152.1	150.1
59.5°	150.5	153.1	155.7	156.8	158.1	157.8	156.8	154.4	152.5	149.5	147.4
60°	148.0	150.4	153.1	154.4	155.6	155.2	154.2	151.4	149.9	146.9	144.5
60.5°	145.0	148.0	150.5	151.7	152.8	152.6	151.5	149.2	147.2	144.3	142.1
61°	142.4	145.2	147.8	149.0	150.1	149.9	148.7	146.4	144.5	141.5	139.1
61.5°	139.8	142.5	144.9	146.3	147.4	147.3	146.0	144.0	141.7	138.7	136.5
62°	137.0	139.7	142.3	143.5	144.9	144.7	143.4	141.1	138.9	136.0	133.4
62.5°	134.0	136.9	139.7	141.0	142.2	142.0	140.8	138.4	136.2	133.3	130.7
63°	131.3	134.0	136.8	138.3	139.5	139.4	138.0	135.4	133.4	130.6	127.8
63.5°	128.5	131.3	133.9	135.3	136.6	136.6	135.4	132.8	130.7	127.6	125.2
64°	125.7	128.3	131.2	132.3	133.9	133.7	132.6	129.8	127.7	124.8	122.6
64.5°	122.9	125.8	128.2	129.9	131.1	131.0	129.9	127.2	125.0	122.1	119.6
65°	120.1	123.0	125.4	127.2	128.2	128.0	127.1	124.4	122.2	119.4	116.6
65.5°	117.3	120.4	122.8	124.5	125.5	125.4	124.2	121.6	119.3	116.6	113.7
66°	114.4	117.5	120.1	121.5	122.7	122.3	121.4	118.6	116.5	113.5	111.0
66.5°	111.7	114.3	117.2	118.6	119.9	119.8	118.5	115.9	113.5	110.7	108.1
67°	109.0	111.8	114.3	115.7	117.0	116.9	115.7	112.9	110.7	107.9	105.2





TEST NUMBER: P522084  
 CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	105.8	108.9	111.7	112.7	114.1	114.0	112.9	110.2	107.8	105.0	102.3
68°	102.7	105.9	109.0	110.3	111.5	111.3	109.8	107.2	104.8	102.1	99.4
68.5°	99.7	102.9	105.8	107.2	108.5	108.4	107.1	104.3	101.9	99.0	96.5
69°	96.9	99.9	102.8	104.0	105.6	105.6	104.1	101.5	99.0	96.2	93.6
69.5°	93.9	97.0	99.8	101.2	102.8	102.7	101.3	98.5	96.1	93.2	91.0
70°	91.2	94.0	97.0	98.4	99.9	99.7	98.4	95.8	93.1	90.6	87.9
70.5°	88.4	91.2	94.0	95.5	96.9	97.0	95.5	92.9	90.5	87.6	85.0
71°	85.4	88.2	91.2	92.5	93.9	93.9	92.6	90.1	87.5	84.6	82.1
71.5°	82.5	85.6	88.2	89.8	91.1	91.1	89.7	87.2	84.6	81.7	79.3
72°	79.4	82.5	85.2	87.0	88.4	88.3	86.9	84.3	81.6	78.8	76.5
72.5°	76.6	79.7	82.2	84.0	85.6	85.4	83.9	81.5	78.7	76.0	73.6
73°	73.6	76.7	79.2	81.1	82.8	82.5	80.9	78.5	75.6	73.2	70.5
73.5°	70.6	73.7	76.5	78.2	79.7	79.5	78.0	75.7	73.0	69.9	67.7
74°	67.9	70.6	73.7	75.1	77.0	76.8	75.1	72.7	70.0	67.3	64.7
74.5°	64.8	67.8	70.5	72.3	74.1	73.9	72.3	69.8	67.2	64.3	61.7
75°	61.9	64.9	67.7	69.4	71.4	71.1	69.4	67.1	64.3	61.4	58.8
75.5°	58.9	62.0	64.7	66.7	68.4	68.1	66.7	64.2	61.5	58.6	56.1
76°	56.3	59.0	61.8	63.6	65.5	65.1	63.8	61.3	58.6	55.8	53.3
76.5°	53.3	56.4	58.8	60.9	62.6	62.4	60.8	58.4	55.8	52.9	50.4
77°	50.2	53.4	56.1	58.0	59.7	59.4	58.0	55.7	53.1	50.2	47.6
77.5°	47.8	50.5	53.3	55.0	57.0	56.7	55.3	52.9	50.3	47.4	44.9
78°	44.8	47.8	50.4	52.3	54.1	53.8	52.5	50.0	47.5	44.6	42.2
78.5°	42.2	44.9	47.6	49.4	51.4	50.9	49.6	47.3	44.6	42.0	39.5
79°	39.4	42.3	44.7	46.6	48.5	48.2	46.9	44.5	41.9	39.1	36.8
79.5°	36.5	39.4	42.1	43.7	45.6	45.3	44.1	41.9	39.2	36.4	34.1
80°	33.8	36.8	39.5	40.9	43.1	42.8	41.4	39.1	36.5	33.9	31.4
80.5°	31.3	34.0	36.5	38.2	40.3	40.0	38.7	36.4	33.9	31.2	29.0
81°	28.6	31.3	33.8	35.5	37.7	37.5	36.0	33.9	31.3	28.7	26.4
81.5°	26.1	28.9	31.2	32.9	35.0	34.8	33.4	31.2	28.8	26.0	23.9
82°	23.7	26.3	28.7	30.2	32.5	32.1	30.8	28.8	26.2	23.7	21.6
82.5°	21.4	23.8	26.2	27.7	29.8	29.6	28.4	26.2	23.8	21.5	19.4
83°	19.1	21.6	23.7	25.2	27.3	27.2	25.8	23.9	21.6	19.2	17.3
83.5°	16.8	19.3	21.4	22.9	24.9	24.6	23.4	21.5	19.2	16.9	14.9
84°	14.7	16.9	19.1	20.6	22.5	22.3	21.2	19.4	17.0	14.8	12.9
84.5°	12.7	14.8	16.8	18.3	20.3	20.2	18.9	17.0	14.8	12.8	10.8
85°	10.7	12.9	14.7	16.0	18.1	18.0	16.6	14.9	12.8	10.7	9.0
85.5°	9.0	10.8	12.7	13.9	15.9	15.7	14.6	12.8	10.7	8.8	7.1
86°	7.1	9.0	10.6	11.9	13.8	13.6	12.5	10.8	8.9	7.0	5.5
86.5°	5.6	7.2	9.1	10.0	11.7	11.4	10.5	8.9	7.1	5.5	4.1
87°	4.2	5.6	7.1	8.3	9.8	9.6	8.6	7.1	5.5	4.0	2.8
87.5°	2.9	4.3	5.6	6.7	8.2	8.0	6.9	5.5	4.1	2.7	1.6
88°	1.8	3.1	4.2	5.1	6.3	6.2	5.3	4.1	2.8	1.6	0.7
88.5°	0.9	1.9	2.9	3.7	4.9	4.6	4.0	2.8	1.5	0.6	0.0
89°	0.3	1.0	1.8	2.7	3.4	3.2	2.5	1.7	0.6	0.0	0.0
89.5°	0.0	0.4	0.9	1.6	2.0	1.9	1.3	0.7	0.0	0.0	0.0



TEST NUMBER: P522084  
 CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-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	0.8	1.0	0.9	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: P522084  
 CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-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: P522084

CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-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: P522084

CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-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	1.0	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.7	0.6
171°	0.1	1.0	0.1	0.2	0.0	0.5	0.6	0.2	0.2	0.6	0.6
171.5°	0.1	0.9	0.2	0.2	0.0	0.5	0.5	0.2	0.2	0.3	0.6
172°	0.1	0.9	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.7	0.6
172.5°	0.1	0.9	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.3	0.6
173°	0.1	0.8	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.3	0.6
173.5°	0.1	0.8	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.2	0.6
174°	0.1	0.8	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.2	0.6
174.5°	0.1	0.8	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
175°	0.1	0.8	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
175.5°	0.1	0.8	0.1	0.2	0.0	0.5	0.5	0.2	0.2	0.1	0.6
176°	0.1	0.8	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: P522084  
CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-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: P522084

CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	330.2	330.2	330.2	330.2	330.2	330.2
0.5°	329.8	328.5	328.5	330.4	328.9	330.8
1°	329.7	329.3	328.7	330.1	329.7	330.3
1.5°	328.7	328.5	329.7	330.6	330.6	331.0
2°	329.6	329.1	328.6	329.7	331.1	332.6
2.5°	328.5	329.8	327.8	330.6	330.5	330.4
3°	329.2	327.6	328.3	328.7	330.1	330.2
3.5°	329.1	327.1	328.8	329.7	328.9	329.5
4°	328.5	327.9	327.1	328.9	327.7	330.7
4.5°	328.1	328.1	328.1	328.2	328.2	330.5
5°	328.6	328.6	329.1	327.1	328.3	331.3
5.5°	328.1	326.3	327.5	327.9	326.4	328.1
6°	325.7	327.7	327.7	329.3	326.5	327.3
6.5°	327.1	324.6	326.5	328.8	326.5	326.4
7°	327.5	326.0	325.7	327.0	327.9	327.3
7.5°	326.3	324.0	326.2	326.8	328.6	327.4
8°	326.4	324.8	325.7	326.9	326.3	328.1
8.5°	325.5	323.4	324.5	323.7	325.4	326.3
9°	324.3	323.4	324.7	324.3	322.5	325.8
9.5°	322.0	324.0	321.9	324.3	324.3	325.1
10°	323.7	322.4	321.4	323.8	323.3	325.3
10.5°	321.8	321.9	323.3	324.0	323.2	325.7
11°	321.9	320.9	321.5	323.4	323.2	324.4
11.5°	320.9	319.3	321.2	322.2	321.4	323.2
12°	319.7	320.2	321.0	319.7	319.7	323.3
12.5°	319.3	318.1	319.7	318.2	318.3	322.5
13°	319.1	317.1	318.7	318.2	318.2	322.0
13.5°	317.0	316.3	316.9	318.7	318.1	321.1
14°	317.2	315.8	316.2	317.9	317.5	319.5
14.5°	315.5	315.9	315.9	316.9	317.4	319.1
15°	315.1	314.7	314.3	315.9	316.9	317.7
15.5°	314.1	313.1	313.8	315.0	316.1	317.2
16°	314.0	311.9	312.4	314.1	313.4	316.5
16.5°	313.1	311.1	311.1	312.9	313.0	314.6
17°	311.2	309.7	310.7	312.1	312.5	315.5
17.5°	311.0	309.6	310.1	311.1	310.7	313.6
18°	309.5	307.7	309.1	308.9	309.9	312.3
18.5°	308.1	307.2	307.7	308.3	308.9	311.7
19°	308.7	306.9	306.9	307.1	308.1	309.3
19.5°	306.6	305.6	305.2	306.8	306.5	308.6
20°	305.2	304.8	304.8	305.6	306.4	307.3
20.5°	303.6	302.2	304.4	303.6	304.8	306.2
21°	302.1	301.3	302.2	303.3	304.0	305.2
21.5°	300.5	301.2	301.6	302.1	302.6	304.0
22°	300.7	299.5	299.1	301.2	300.8	303.5



TEST NUMBER: P522084

CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	299.3	298.2	297.7	300.3	299.3	302.2
23°	297.9	296.6	297.2	298.4	298.8	300.0
23.5°	296.4	295.5	296.3	296.2	297.5	298.9
24°	293.5	293.8	295.1	295.9	296.7	297.6
24.5°	291.9	292.2	293.6	294.2	294.2	296.2
25°	291.2	290.3	291.5	292.7	292.8	295.6
25.5°	291.8	289.3	289.8	291.0	291.6	294.1
26°	289.6	286.4	288.6	289.7	290.2	292.2
26.5°	288.2	286.4	286.8	288.2	289.5	290.7
27°	286.2	286.0	285.3	286.2	288.4	289.1
27.5°	284.6	284.4	283.7	284.8	286.4	287.7
28°	282.8	281.6	282.6	283.2	284.4	286.9
28.5°	281.5	279.4	280.9	281.7	283.1	285.3
29°	279.7	278.1	278.6	279.5	281.2	283.2
29.5°	278.1	275.7	277.2	278.0	279.0	282.0
30°	276.4	273.1	276.0	276.6	277.6	280.2
30.5°	274.8	272.2	273.8	275.2	275.7	278.5
31°	272.9	272.0	272.4	273.9	274.5	277.3
31.5°	270.7	270.5	270.3	271.9	272.3	275.5
32°	269.1	269.8	267.9	270.1	270.8	273.6
32.5°	267.3	268.8	266.2	268.4	269.1	271.9
33°	265.7	266.2	264.6	266.5	267.4	270.1
33.5°	264.2	263.9	263.0	265.1	265.6	268.3
34°	262.6	261.8	261.2	263.1	263.6	266.2
34.5°	260.9	260.1	259.5	260.9	261.9	264.7
35°	258.9	258.6	257.6	259.1	260.0	263.2
35.5°	257.2	256.9	255.7	257.3	257.9	260.9
36°	255.1	254.0	253.9	255.4	255.9	259.2
36.5°	253.3	251.6	252.2	253.8	253.9	257.5
37°	251.2	249.8	250.3	251.6	252.2	255.3
37.5°	249.4	247.7	248.6	249.8	250.1	253.6
38°	247.5	245.0	246.6	247.9	248.2	251.2
38.5°	245.3	242.4	244.6	245.8	246.4	249.6
39°	243.0	240.6	242.5	244.0	244.3	247.4
39.5°	241.1	238.8	240.5	241.6	242.7	244.8
40°	238.8	237.1	238.2	239.9	240.6	243.1
40.5°	236.6	235.3	235.8	237.6	238.6	241.7
41°	234.7	233.5	233.8	235.4	236.7	239.8
41.5°	232.9	231.0	231.4	233.6	234.5	236.8
42°	230.5	229.7	229.4	231.1	232.5	235.2
42.5°	228.6	227.5	227.1	229.4	230.4	233.1
43°	226.4	224.7	224.8	226.6	228.1	231.0
43.5°	224.4	222.3	222.7	224.9	226.0	228.9
44°	222.2	220.4	220.9	222.2	224.0	226.9
44.5°	220.0	218.9	218.2	220.0	221.6	224.9





TEST NUMBER: P522084

CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	217.8	216.4	215.9	218.3	219.6	222.9
45.5°	215.2	213.9	213.7	216.1	217.0	220.2
46°	213.1	211.5	211.6	213.5	215.0	217.6
46.5°	210.8	208.8	209.6	211.1	212.7	215.0
47°	208.2	206.6	207.1	208.9	210.3	213.7
47.5°	206.0	204.4	205.0	206.5	207.9	211.0
48°	203.6	202.3	202.4	204.2	205.6	208.7
48.5°	201.2	199.9	199.8	202.0	203.1	206.1
49°	198.8	197.2	197.4	199.7	200.7	203.8
49.5°	196.6	194.5	195.4	197.2	198.8	201.5
50°	194.1	192.0	192.7	195.0	196.2	199.0
50.5°	191.6	189.5	190.4	192.3	193.8	196.4
51°	189.0	187.5	188.3	189.9	191.3	194.0
51.5°	186.4	185.1	185.5	187.2	188.9	191.5
52°	184.0	182.4	182.8	184.7	186.4	189.1
52.5°	181.6	179.6	180.3	182.3	183.9	186.6
53°	179.2	176.8	178.0	179.8	181.3	184.3
53.5°	176.6	174.5	175.6	177.0	178.6	181.9
54°	174.2	172.1	172.7	174.4	175.6	179.7
54.5°	171.7	169.4	170.2	171.7	173.7	176.6
55°	169.1	166.5	167.4	169.3	170.8	174.2
55.5°	166.3	164.4	165.0	166.7	168.0	171.7
56°	163.9	161.8	162.4	164.1	165.6	169.0
56.5°	161.3	159.5	160.3	161.5	163.0	166.2
57°	158.7	156.7	157.2	158.9	160.9	163.5
57.5°	156.2	153.9	154.7	156.2	158.4	161.1
58°	153.5	151.4	151.9	153.5	155.7	158.4
58.5°	150.9	148.8	149.3	151.0	152.9	156.0
59°	148.2	146.1	146.3	148.2	150.1	153.2
59.5°	145.6	143.3	143.7	145.5	147.5	150.5
60°	142.8	140.5	140.9	142.8	144.7	148.0
60.5°	140.1	137.6	138.3	140.2	141.9	145.0
61°	137.3	134.9	135.5	137.1	139.4	142.4
61.5°	134.5	132.3	132.7	134.3	136.4	139.8
62°	131.8	129.4	130.2	131.6	133.5	137.0
62.5°	129.1	126.6	127.3	128.8	130.7	134.0
63°	126.2	123.9	124.4	126.2	128.0	131.3
63.5°	123.4	121.3	121.6	123.3	125.3	128.5
64°	120.6	118.3	118.6	120.5	122.4	125.7
64.5°	117.6	115.3	116.0	117.6	119.8	122.9
65°	114.8	112.5	113.1	114.8	116.9	120.1
65.5°	111.7	109.6	110.2	112.1	114.1	117.3
66°	108.9	107.0	107.4	109.0	111.2	114.4
66.5°	106.0	104.0	104.5	106.0	108.5	111.7
67°	103.1	101.1	101.7	103.4	105.5	109.0



TEST NUMBER: P522084

CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	100.1	98.2	98.7	100.3	102.5	105.8
68°	97.3	95.5	95.6	97.4	99.6	102.7
68.5°	94.3	92.3	92.9	94.4	96.6	99.7
69°	91.5	89.5	89.9	91.8	93.6	96.9
69.5°	88.6	86.8	87.0	88.9	90.9	93.9
70°	85.8	83.9	84.3	85.8	88.0	91.2
70.5°	82.9	80.9	81.2	82.9	84.9	88.4
71°	79.9	78.0	78.4	80.1	82.1	85.4
71.5°	77.2	75.0	75.2	77.0	79.0	82.5
72°	74.1	72.0	72.3	74.1	76.5	79.4
72.5°	71.3	69.3	69.5	71.1	73.4	76.6
73°	68.3	66.2	66.6	68.1	70.4	73.6
73.5°	65.3	63.3	63.6	65.2	67.8	70.6
74°	62.5	60.6	60.8	62.4	64.7	67.9
74.5°	59.6	57.7	57.7	59.4	61.7	64.8
75°	56.9	54.8	55.0	56.8	58.8	61.9
75.5°	54.0	52.1	52.3	53.7	55.9	58.9
76°	51.2	49.1	49.3	50.8	53.0	56.3
76.5°	48.4	46.3	46.5	48.1	50.1	53.3
77°	45.7	43.6	43.7	45.3	47.4	50.2
77.5°	43.0	40.6	41.0	42.5	44.6	47.8
78°	40.2	38.0	38.2	39.8	41.9	44.8
78.5°	37.5	35.3	35.5	37.1	39.2	42.2
79°	34.9	32.7	33.0	34.4	36.4	39.4
79.5°	32.3	30.0	30.3	31.7	33.8	36.5
80°	29.6	27.5	27.6	29.1	31.0	33.8
80.5°	27.2	24.8	25.1	26.6	28.5	31.3
81°	24.7	22.6	22.9	24.1	26.1	28.6
81.5°	22.4	20.3	20.5	21.8	23.6	26.1
82°	20.1	18.0	18.2	19.5	21.4	23.7
82.5°	17.9	15.7	16.0	17.3	19.1	21.4
83°	15.7	13.8	13.9	15.1	16.7	19.1
83.5°	13.5	11.7	11.9	13.0	14.6	16.8
84°	11.4	9.8	10.0	11.0	12.6	14.7
84.5°	9.6	8.1	8.2	9.2	10.6	12.7
85°	7.8	6.4	6.4	7.4	9.0	10.7
85.5°	6.1	5.0	5.0	5.7	7.0	9.0
86°	4.6	3.6	3.8	4.4	5.5	7.1
86.5°	3.2	2.3	2.6	3.2	4.1	5.6
87°	1.8	1.4	1.5	1.9	2.9	4.2
87.5°	0.8	0.6	0.6	1.0	1.8	2.9
88°	0.0	0.3	0.2	0.4	0.9	1.8
88.5°	0.0	0.0	0.0	0.0	0.4	0.9
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: P522084  
 CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-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: P522084

CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-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: P522084

CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-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: P522084

CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-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: P522084

CATALOG NUMBER: HLBQL6099BLE40AWH-3000K-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)