

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P284769

Luminaire Tested: **HLB6S09950**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P284769
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (GONIOTESTING)
Test Lab: UL-CCIC
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HLB6S09950
Description: 6 IN SQUARE HALO BLADE (900 LUMEN) - 5000K
Light Source: -
Ballast/Driver: -

Summary

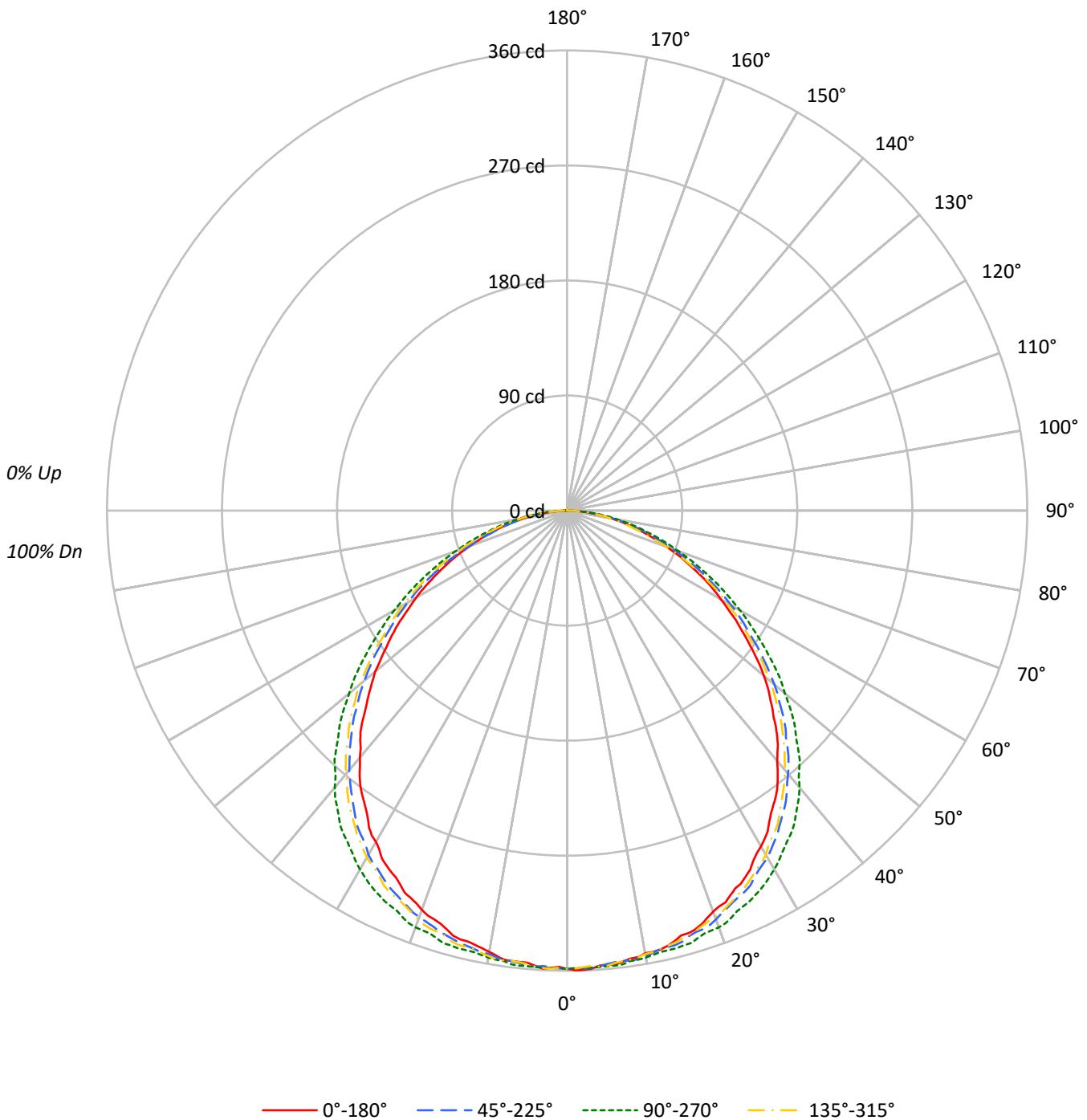
Lumens per Lamp: N/A
Luminaire Lumens: 1008.6 lumens
Efficiency: N/A
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.33 / 1.38
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 13.7
Input Voltage (V): NR
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: P284769
CATALOG NUMBER: HLB6S09950

Luminous Intensity Polar Plot





TEST NUMBER: P284769
 CATALOG NUMBER: HLB6S09950

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	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	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	43	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	19653	19653	19653	19653
5°	19618	19684	19541	19684
10°	19572	19767	19516	19767
15°	19535	19977	19546	19977
20°	19479	20238	19392	20238
25°	19477	20408	19162	20408
30°	19205	20516	18940	20516
35°	18825	20519	18564	20519
40°	18306	20238	18048	20238
45°	17715	19676	17366	19676
50°	17134	18976	16716	18976
55°	16162	18131	15827	18131
60°	15240	17137	14966	17137
65°	14360	16007	14061	16007
70°	13304	14826	12983	14826
75°	12243	13746	11925	13746
80°	11113	12691	10576	12691
85°	9435	11385	8680	11385



TEST NUMBER: P284769
 CATALOG NUMBER: HLB6S09950

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.0	3.4
10°-20°	98.3	9.7
20°-30°	151.0	15.0
30°-40°	182.4	18.1
40°-50°	184.7	18.3
50°-60°	158.9	15.8
60°-70°	114.9	11.4
70°-80°	63.6	6.3
80°-90°	18.3	1.8
90°-100°	0.4	0.0
100°-110°	0.2	0.0
110°-120°	0.2	0.0
120°-130°	0.3	0.0
130°-140°	0.3	0.0
140°-150°	0.3	0.0
150°-160°	0.3	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	283.2	28.1
0°-40°	465.6	46.2
0°-60°	809.3	80.2
0°-90°	1006.1	99.8
90°-120°	0.9	0.1
90°-150°	1.8	0.2
90°-180°	2.0	0.2
0°-180°	1008.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	358	358	358	358	358	
5°	356	358	355	358	356	34
15°	344	352	344	352	344	98
25°	322	337	317	337	322	148
35°	281	307	277	307	281	176
45°	228	254	224	254	228	177
55°	169	190	166	190	169	152
65°	111	123	108	123	111	110
75°	58	65	56	65	58	61
85°	15	18	14	18	15	16
90°	0	2	0	2	0	1
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	1	0	1	0	0
155°	1	1	1	1	1	0
165°	1	1	1	1	1	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



TEST NUMBER: P284769
 CATALOG NUMBER: HLB6S09950

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	358.5	358.5	358.5	358.5	358.5	358.5	358.5	358.5	358.5	358.5	358.5
1°	359.7	358.3	357.9	357.9	358.1	358.9	358.3	358.1	357.1	358.1	358.3
2°	359.7	358.4	358.4	357.7	358.1	358.1	357.4	358.3	357.8	358.3	357.4
3°	359.1	358.7	358.5	358.4	358.1	357.9	356.9	357.0	358.9	357.0	356.9
4°	357.0	356.8	357.6	357.8	358.0	357.5	357.7	356.3	357.1	356.3	357.7
5°	356.5	356.8	356.1	357.7	357.7	357.1	357.6	357.2	355.1	357.2	357.6
6°	357.5	356.8	355.4	357.8	357.9	356.7	356.0	356.6	355.1	356.6	356.0
7°	355.6	356.0	354.9	357.1	357.7	356.3	355.2	354.9	355.1	354.9	355.2
8°	353.9	354.5	355.5	355.4	355.9	356.0	354.9	353.7	354.9	353.7	354.9
9°	353.8	352.8	355.4	355.3	355.7	355.4	353.9	352.8	352.6	352.8	353.9
10°	351.6	352.2	353.9	355.2	355.1	354.2	352.2	351.9	350.6	351.9	352.2
11°	351.7	352.1	352.5	353.4	354.0	353.7	352.0	351.0	348.8	351.0	352.0
12°	351.1	350.6	350.7	353.1	353.0	353.1	350.6	348.9	347.2	348.9	350.6
13°	349.5	349.0	350.3	352.3	352.9	352.5	349.5	347.1	346.0	347.1	349.5
14°	347.1	347.6	350.4	351.3	353.0	351.6	348.4	346.3	345.7	346.3	348.4
15°	344.2	345.6	349.0	351.0	352.0	351.3	346.9	345.5	344.4	345.5	346.9
16°	343.9	344.2	346.3	350.9	352.0	350.1	345.4	342.5	341.0	342.5	345.4
17°	342.7	342.5	344.8	348.6	349.8	349.0	343.8	340.0	338.1	340.0	343.8
18°	340.3	340.8	344.3	347.4	347.8	347.0	341.6	337.7	336.3	337.7	341.6
19°	337.0	338.5	343.0	346.5	347.3	344.6	340.0	336.9	335.0	336.9	340.0
20°	333.9	335.7	340.4	345.4	346.9	344.6	338.4	334.9	332.4	334.9	338.4
21°	331.8	333.3	337.5	343.1	345.8	342.9	336.7	331.3	329.1	331.3	336.7
22°	330.6	331.2	334.9	340.1	343.3	340.3	333.9	327.8	326.8	327.8	333.9
23°	327.0	328.5	332.6	339.1	340.5	337.3	331.5	325.3	325.0	325.3	331.5
24°	323.5	325.7	330.6	338.2	338.9	335.7	328.8	323.4	320.7	323.4	328.8
25°	322.0	322.8	328.9	335.0	337.4	334.2	326.5	320.1	316.8	320.1	326.5
26°	318.6	319.6	326.6	331.7	335.1	331.3	323.5	315.4	314.5	315.4	323.5
27°	315.3	315.5	322.3	329.4	332.9	327.6	320.2	313.2	311.5	313.2	320.2
28°	310.2	312.1	318.9	327.5	330.3	324.7	316.8	309.7	308.5	309.7	316.8
29°	306.4	309.2	316.1	323.9	327.2	323.0	314.3	305.4	303.2	305.4	314.3
30°	303.4	305.6	313.4	321.1	324.1	320.4	311.0	302.0	299.2	302.0	311.0
31°	299.8	302.1	309.6	317.6	320.7	316.1	305.8	298.3	296.6	298.3	305.8
32°	296.1	297.9	305.7	314.1	316.6	311.6	302.0	293.0	292.5	293.0	302.0
33°	290.4	293.2	301.9	310.8	313.0	307.6	298.9	288.5	286.4	288.5	298.9
34°	285.4	288.1	297.2	306.3	309.6	304.0	294.9	284.9	281.5	284.9	294.9
35°	281.3	284.7	292.9	301.2	306.6	300.5	289.7	280.6	277.4	280.6	289.7
36°	277.4	280.8	288.8	297.6	302.6	296.7	284.7	275.6	273.3	275.6	284.7
37°	273.0	275.0	284.4	293.9	297.3	291.3	279.7	271.0	268.9	271.0	279.7
38°	267.5	269.2	279.3	288.7	292.8	285.6	275.1	266.4	263.7	266.4	275.1
39°	261.6	265.4	273.5	283.4	288.4	281.4	270.0	261.1	257.5	261.1	270.0
40°	255.8	260.8	268.9	279.2	282.8	276.4	265.3	255.1	252.2	255.1	265.3
41°	250.9	254.1	264.1	272.4	276.2	270.9	259.5	249.3	246.3	249.3	259.5
42°	246.4	248.4	258.7	267.0	271.4	265.3	254.2	243.7	241.9	243.7	254.2
43°	240.8	243.5	252.6	261.4	266.9	260.3	248.7	239.1	237.0	239.1	248.7
44°	235.1	238.7	246.5	256.0	260.2	254.2	242.8	233.5	231.1	233.5	242.8



TEST NUMBER: P284769
 CATALOG NUMBER: HLB6S09950

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	228.5	232.4	241.7	250.4	253.8	247.9	237.4	227.2	224.0	227.2	237.4
46°	223.5	226.4	236.2	245.0	248.2	242.8	231.7	221.6	218.2	221.6	231.7
47°	217.5	220.8	229.7	239.1	242.9	235.8	224.9	216.3	212.5	216.3	224.9
48°	212.5	214.9	223.4	232.5	236.2	230.0	219.1	210.4	206.8	210.4	219.1
49°	206.9	208.9	217.9	225.3	229.2	223.8	213.5	204.0	201.2	204.0	213.5
50°	200.9	203.1	211.5	219.1	222.5	217.3	207.1	197.9	196.0	197.9	207.1
51°	194.9	197.0	204.8	213.3	216.7	210.3	200.7	192.4	189.3	192.4	200.7
52°	188.5	190.6	198.6	206.3	210.5	203.7	194.8	185.9	182.9	185.9	194.8
53°	181.8	184.8	191.9	199.2	203.4	197.0	188.4	179.5	176.9	179.5	188.4
54°	175.2	179.3	185.7	192.5	196.3	190.1	181.3	173.4	171.2	173.4	181.3
55°	169.1	173.2	178.8	186.1	189.7	183.3	174.7	167.7	165.6	167.7	174.7
56°	163.1	166.5	172.3	179.4	182.7	176.9	168.3	161.3	159.8	161.3	168.3
57°	157.5	160.5	166.5	172.3	176.1	170.4	162.6	155.7	153.6	155.7	162.6
58°	150.7	154.9	160.6	166.0	169.4	164.0	156.9	149.7	147.2	149.7	156.9
59°	144.7	148.4	154.7	160.2	163.1	157.3	150.1	143.9	141.8	143.9	150.1
60°	139.0	142.4	148.2	154.0	156.3	150.8	143.9	137.6	136.5	137.6	143.9
61°	133.8	136.6	142.1	147.4	149.5	144.8	138.3	132.5	131.1	132.5	138.3
62°	128.3	130.2	136.0	140.6	143.3	139.1	132.6	126.3	125.0	126.3	132.6
63°	122.6	124.7	129.9	134.6	136.8	132.8	126.0	119.7	118.9	119.7	126.0
64°	116.9	118.5	123.8	128.5	130.4	126.2	119.7	114.0	113.8	114.0	119.7
65°	110.7	112.9	117.6	122.1	123.4	119.6	113.6	108.4	108.4	108.4	113.6
66°	104.9	107.0	111.7	116.1	117.4	113.7	107.2	102.3	102.7	102.3	107.2
67°	99.7	101.5	105.8	110.1	111.1	108.1	101.1	96.2	97.2	96.2	101.1
68°	94.1	96.0	99.8	104.2	104.8	102.1	94.8	90.1	91.8	90.1	94.8
69°	88.2	90.2	93.9	98.2	98.6	95.8	88.5	84.4	86.3	84.4	88.5
70°	83.0	84.6	88.2	92.0	92.5	90.1	82.2	78.8	81.0	78.8	82.2
71°	78.0	79.4	82.8	86.5	86.6	84.7	76.1	73.4	75.6	73.4	76.1
72°	72.7	73.9	77.3	81.1	81.0	79.1	70.5	67.9	70.8	67.9	70.5
73°	67.4	68.8	72.0	75.5	75.5	73.7	64.7	62.6	66.2	62.6	64.7
74°	62.3	63.9	66.7	70.0	70.3	68.3	59.3	57.5	61.3	57.5	59.3
75°	57.8	58.9	61.5	64.7	64.9	63.3	54.1	52.7	56.3	52.7	54.1
76°	53.1	54.2	56.5	59.6	59.9	57.9	50.2	48.2	51.7	48.2	50.2
77°	48.4	49.6	51.7	54.6	54.7	52.6	45.8	44.0	47.0	44.0	45.8
78°	43.9	45.0	46.9	49.7	49.7	47.3	41.8	39.8	42.3	39.8	41.8
79°	39.6	40.4	42.1	44.9	44.9	42.4	37.6	35.8	37.8	35.8	37.6
80°	35.2	35.9	37.7	40.2	40.2	38.0	33.5	31.8	33.5	31.8	33.5
81°	30.8	31.7	33.4	35.7	35.6	33.6	29.7	27.8	29.2	27.8	29.7
82°	26.5	27.4	29.1	31.1	31.1	29.3	25.9	23.9	25.0	23.9	25.9
83°	22.4	23.1	25.1	26.7	26.6	25.1	22.3	19.9	20.9	19.9	22.3
84°	18.5	19.1	21.2	22.5	22.3	20.9	18.6	16.2	17.1	16.2	18.6
85°	15.0	15.4	17.3	18.4	18.1	16.9	15.0	13.0	13.8	13.0	15.0
86°	11.7	12.1	13.6	14.3	14.1	13.1	11.5	9.9	10.7	9.9	11.5
87°	8.5	9.0	10.0	10.5	10.2	9.3	8.0	7.0	7.6	7.0	8.0
88°	5.2	5.9	6.4	6.7	6.3	5.7	4.7	4.1	4.6	4.1	4.7
89°	2.1	3.0	3.3	3.7	3.5	3.1	2.4	1.7	1.8	1.7	2.4



TEST NUMBER: P284769
 CATALOG NUMBER: HLB6S09950

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.4	1.2	1.6	1.9	1.7	1.4	1.0	0.6	0.4	0.6	1.0
91°	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.3	0.5	0.5
92°	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.3	0.5	0.5
93°	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4
94°	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4
95°	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4
96°	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3
97°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
98°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
99°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
100°	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
101°	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.3
102°	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2
103°	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2
104°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
106°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
107°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
108°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
109°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
110°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
111°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
112°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
113°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
114°	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
115°	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3
116°	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2
117°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
118°	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
119°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
120°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
121°	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3
122°	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
123°	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3
124°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
125°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
126°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
127°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
128°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
129°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
130°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
131°	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
132°	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
133°	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
134°	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P284769
 CATALOG NUMBER: HLB6S09950

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
136°	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
137°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
138°	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
139°	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4
140°	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
141°	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
142°	0.4	0.5	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5
143°	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
144°	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.6
145°	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.5	0.6	0.5
146°	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
147°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.6	0.6
148°	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6
149°	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6
150°	0.6	0.6	0.5	0.6	0.6	0.7	0.6	0.6	0.5	0.6	0.6
151°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
152°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
153°	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
154°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
155°	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
156°	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
157°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
158°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
159°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
160°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
161°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
162°	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
163°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
164°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
165°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
166°	0.9	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.9	1.0
167°	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
168°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
169°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
170°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
171°	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.0	1.1	1.1
172°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
173°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
174°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
175°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
176°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
177°	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
178°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
179°	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1



TEST NUMBER: P284769
CATALOG NUMBER: HLB6S09950

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1



TEST NUMBER: P284769
 CATALOG NUMBER: HLB6S09950

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	358.5	358.5	358.5	358.5	358.5	358.5
1°	358.9	358.1	357.9	357.9	358.3	359.7
2°	358.1	358.1	357.7	358.4	358.4	359.7
3°	357.9	358.1	358.4	358.5	358.7	359.1
4°	357.5	358.0	357.8	357.6	356.8	357.0
5°	357.1	357.7	357.7	356.1	356.8	356.5
6°	356.7	357.9	357.8	355.4	356.8	357.5
7°	356.3	357.7	357.1	354.9	356.0	355.6
8°	356.0	355.9	355.4	355.5	354.5	353.9
9°	355.4	355.7	355.3	355.4	352.8	353.8
10°	354.2	355.1	355.2	353.9	352.2	351.6
11°	353.7	354.0	353.4	352.5	352.1	351.7
12°	353.1	353.0	353.1	350.7	350.6	351.1
13°	352.5	352.9	352.3	350.3	349.0	349.5
14°	351.6	353.0	351.3	350.4	347.6	347.1
15°	351.3	352.0	351.0	349.0	345.6	344.2
16°	350.1	352.0	350.9	346.3	344.2	343.9
17°	349.0	349.8	348.6	344.8	342.5	342.7
18°	347.0	347.8	347.4	344.3	340.8	340.3
19°	344.6	347.3	346.5	343.0	338.5	337.0
20°	344.6	346.9	345.4	340.4	335.7	333.9
21°	342.9	345.8	343.1	337.5	333.3	331.8
22°	340.3	343.3	340.1	334.9	331.2	330.6
23°	337.3	340.5	339.1	332.6	328.5	327.0
24°	335.7	338.9	338.2	330.6	325.7	323.5
25°	334.2	337.4	335.0	328.9	322.8	322.0
26°	331.3	335.1	331.7	326.6	319.6	318.6
27°	327.6	332.9	329.4	322.3	315.5	315.3
28°	324.7	330.3	327.5	318.9	312.1	310.2
29°	323.0	327.2	323.9	316.1	309.2	306.4
30°	320.4	324.1	321.1	313.4	305.6	303.4
31°	316.1	320.7	317.6	309.6	302.1	299.8
32°	311.6	316.6	314.1	305.7	297.9	296.1
33°	307.6	313.0	310.8	301.9	293.2	290.4
34°	304.0	309.6	306.3	297.2	288.1	285.4
35°	300.5	306.6	301.2	292.9	284.7	281.3
36°	296.7	302.6	297.6	288.8	280.8	277.4
37°	291.3	297.3	293.9	284.4	275.0	273.0
38°	285.6	292.8	288.7	279.3	269.2	267.5
39°	281.4	288.4	283.4	273.5	265.4	261.6
40°	276.4	282.8	279.2	268.9	260.8	255.8
41°	270.9	276.2	272.4	264.1	254.1	250.9
42°	265.3	271.4	267.0	258.7	248.4	246.4
43°	260.3	266.9	261.4	252.6	243.5	240.8
44°	254.2	260.2	256.0	246.5	238.7	235.1



TEST NUMBER: P284769
 CATALOG NUMBER: HLB6S09950

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	247.9	253.8	250.4	241.7	232.4	228.5
46°	242.8	248.2	245.0	236.2	226.4	223.5
47°	235.8	242.9	239.1	229.7	220.8	217.5
48°	230.0	236.2	232.5	223.4	214.9	212.5
49°	223.8	229.2	225.3	217.9	208.9	206.9
50°	217.3	222.5	219.1	211.5	203.1	200.9
51°	210.3	216.7	213.3	204.8	197.0	194.9
52°	203.7	210.5	206.3	198.6	190.6	188.5
53°	197.0	203.4	199.2	191.9	184.8	181.8
54°	190.1	196.3	192.5	185.7	179.3	175.2
55°	183.3	189.7	186.1	178.8	173.2	169.1
56°	176.9	182.7	179.4	172.3	166.5	163.1
57°	170.4	176.1	172.3	166.5	160.5	157.5
58°	164.0	169.4	166.0	160.6	154.9	150.7
59°	157.3	163.1	160.2	154.7	148.4	144.7
60°	150.8	156.3	154.0	148.2	142.4	139.0
61°	144.8	149.5	147.4	142.1	136.6	133.8
62°	139.1	143.3	140.6	136.0	130.2	128.3
63°	132.8	136.8	134.6	129.9	124.7	122.6
64°	126.2	130.4	128.5	123.8	118.5	116.9
65°	119.6	123.4	122.1	117.6	112.9	110.7
66°	113.7	117.4	116.1	111.7	107.0	104.9
67°	108.1	111.1	110.1	105.8	101.5	99.7
68°	102.1	104.8	104.2	99.8	96.0	94.1
69°	95.8	98.6	98.2	93.9	90.2	88.2
70°	90.1	92.5	92.0	88.2	84.6	83.0
71°	84.7	86.6	86.5	82.8	79.4	78.0
72°	79.1	81.0	81.1	77.3	73.9	72.7
73°	73.7	75.5	75.5	72.0	68.8	67.4
74°	68.3	70.3	70.0	66.7	63.9	62.3
75°	63.3	64.9	64.7	61.5	58.9	57.8
76°	57.9	59.9	59.6	56.5	54.2	53.1
77°	52.6	54.7	54.6	51.7	49.6	48.4
78°	47.3	49.7	49.7	46.9	45.0	43.9
79°	42.4	44.9	44.9	42.1	40.4	39.6
80°	38.0	40.2	40.2	37.7	35.9	35.2
81°	33.6	35.6	35.7	33.4	31.7	30.8
82°	29.3	31.1	31.1	29.1	27.4	26.5
83°	25.1	26.6	26.7	25.1	23.1	22.4
84°	20.9	22.3	22.5	21.2	19.1	18.5
85°	16.9	18.1	18.4	17.3	15.4	15.0
86°	13.1	14.1	14.3	13.6	12.1	11.7
87°	9.3	10.2	10.5	10.0	9.0	8.5
88°	5.7	6.3	6.7	6.4	5.9	5.2
89°	3.1	3.5	3.7	3.3	3.0	2.1



TEST NUMBER: P284769
 CATALOG NUMBER: HLB6S09950

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	1.4	1.7	1.9	1.6	1.2	0.4
91°	0.5	0.4	0.5	0.5	0.5	0.4
92°	0.4	0.4	0.4	0.5	0.5	0.4
93°	0.4	0.4	0.4	0.5	0.4	0.3
94°	0.4	0.4	0.4	0.4	0.4	0.3
95°	0.4	0.4	0.4	0.4	0.3	0.3
96°	0.4	0.3	0.4	0.3	0.3	0.3
97°	0.3	0.3	0.3	0.3	0.3	0.3
98°	0.3	0.3	0.3	0.3	0.3	0.3
99°	0.3	0.3	0.3	0.3	0.3	0.3
100°	0.3	0.3	0.3	0.2	0.3	0.3
101°	0.3	0.3	0.2	0.2	0.2	0.3
102°	0.3	0.3	0.2	0.2	0.2	0.2
103°	0.3	0.3	0.2	0.2	0.2	0.2
104°	0.2	0.2	0.2	0.2	0.2	0.2
105°	0.2	0.2	0.2	0.2	0.2	0.2
106°	0.2	0.2	0.2	0.2	0.2	0.2
107°	0.2	0.2	0.2	0.2	0.2	0.1
108°	0.2	0.2	0.2	0.2	0.2	0.1
109°	0.2	0.2	0.2	0.2	0.2	0.1
110°	0.2	0.2	0.2	0.2	0.2	0.1
111°	0.2	0.2	0.2	0.2	0.2	0.1
112°	0.2	0.2	0.2	0.2	0.2	0.1
113°	0.2	0.2	0.2	0.2	0.2	0.1
114°	0.3	0.2	0.2	0.2	0.2	0.1
115°	0.2	0.2	0.2	0.2	0.2	0.1
116°	0.3	0.2	0.2	0.2	0.2	0.1
117°	0.2	0.2	0.2	0.2	0.2	0.2
118°	0.2	0.2	0.1	0.1	0.2	0.2
119°	0.2	0.2	0.2	0.2	0.2	0.2
120°	0.3	0.3	0.2	0.2	0.2	0.2
121°	0.4	0.3	0.3	0.3	0.3	0.2
122°	0.4	0.4	0.4	0.3	0.3	0.2
123°	0.4	0.3	0.3	0.3	0.3	0.2
124°	0.3	0.3	0.3	0.3	0.3	0.2
125°	0.3	0.3	0.3	0.3	0.3	0.2
126°	0.3	0.3	0.3	0.3	0.3	0.2
127°	0.3	0.3	0.3	0.3	0.3	0.2
128°	0.3	0.3	0.3	0.3	0.3	0.2
129°	0.3	0.3	0.3	0.3	0.3	0.2
130°	0.3	0.3	0.3	0.3	0.3	0.2
131°	0.4	0.4	0.4	0.3	0.3	0.3
132°	0.4	0.3	0.3	0.3	0.3	0.3
133°	0.4	0.4	0.4	0.3	0.3	0.3
134°	0.4	0.4	0.4	0.4	0.3	0.3



TEST NUMBER: P284769
 CATALOG NUMBER: HLB6S09950

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.4	0.4	0.4	0.4	0.4	0.3
136°	0.4	0.4	0.4	0.4	0.4	0.3
137°	0.4	0.4	0.4	0.4	0.4	0.4
138°	0.5	0.5	0.5	0.4	0.4	0.4
139°	0.5	0.5	0.4	0.4	0.4	0.4
140°	0.5	0.5	0.5	0.5	0.4	0.4
141°	0.5	0.4	0.4	0.4	0.4	0.4
142°	0.6	0.5	0.6	0.5	0.5	0.4
143°	0.6	0.6	0.6	0.5	0.5	0.5
144°	0.5	0.6	0.6	0.5	0.5	0.5
145°	0.5	0.6	0.5	0.5	0.5	0.5
146°	0.5	0.5	0.5	0.5	0.5	0.5
147°	0.6	0.6	0.5	0.5	0.5	0.5
148°	0.6	0.6	0.6	0.6	0.5	0.5
149°	0.6	0.6	0.6	0.6	0.5	0.5
150°	0.7	0.6	0.6	0.5	0.6	0.6
151°	0.6	0.6	0.6	0.6	0.6	0.6
152°	0.6	0.6	0.6	0.6	0.6	0.6
153°	0.6	0.6	0.6	0.6	0.5	0.6
154°	0.6	0.6	0.6	0.6	0.6	0.6
155°	0.6	0.6	0.6	0.6	0.6	0.6
156°	0.7	0.7	0.7	0.6	0.6	0.6
157°	0.7	0.7	0.7	0.7	0.7	0.7
158°	0.7	0.7	0.7	0.7	0.7	0.7
159°	0.7	0.7	0.7	0.7	0.7	0.7
160°	0.7	0.7	0.7	0.7	0.7	0.7
161°	0.7	0.7	0.7	0.7	0.7	0.7
162°	0.9	0.9	0.9	0.7	0.7	0.7
163°	0.9	0.9	0.9	0.9	0.9	0.9
164°	0.9	0.9	0.9	0.9	0.9	0.9
165°	0.9	0.9	0.9	0.9	0.9	0.9
166°	0.9	0.9	0.9	0.9	0.9	0.9
167°	1.0	1.0	1.0	1.0	0.9	1.0
168°	1.0	1.0	1.0	1.0	1.0	1.0
169°	1.0	1.0	1.0	1.0	1.0	1.0
170°	1.0	1.0	1.0	1.0	1.0	1.0
171°	1.0	1.0	1.0	1.0	1.0	1.1
172°	1.1	1.1	1.1	1.1	1.1	1.1
173°	1.1	1.1	1.1	1.1	1.1	1.1
174°	1.1	1.1	1.1	1.1	1.1	1.1
175°	1.1	1.1	1.1	1.1	1.1	1.1
176°	1.1	1.1	1.1	1.1	1.1	1.1
177°	1.1	1.1	1.1	1.1	1.1	1.2
178°	1.1	1.1	1.1	1.1	1.1	1.1
179°	1.1	1.1	1.1	1.1	1.1	1.2



TEST NUMBER: P284769
CATALOG NUMBER: HLB6S09950

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	1.1	1.1	1.1	1.1	1.1	1.1

(END OF REPORT)