

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: P284766

Luminaire Tested: **HLB6S09930**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P284766
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: HLB6S09930
Description: 6 IN SQUARE HALO BLADE (900 LUMEN) - 3000K
Light Source: -
Ballast/Driver: -

Summary

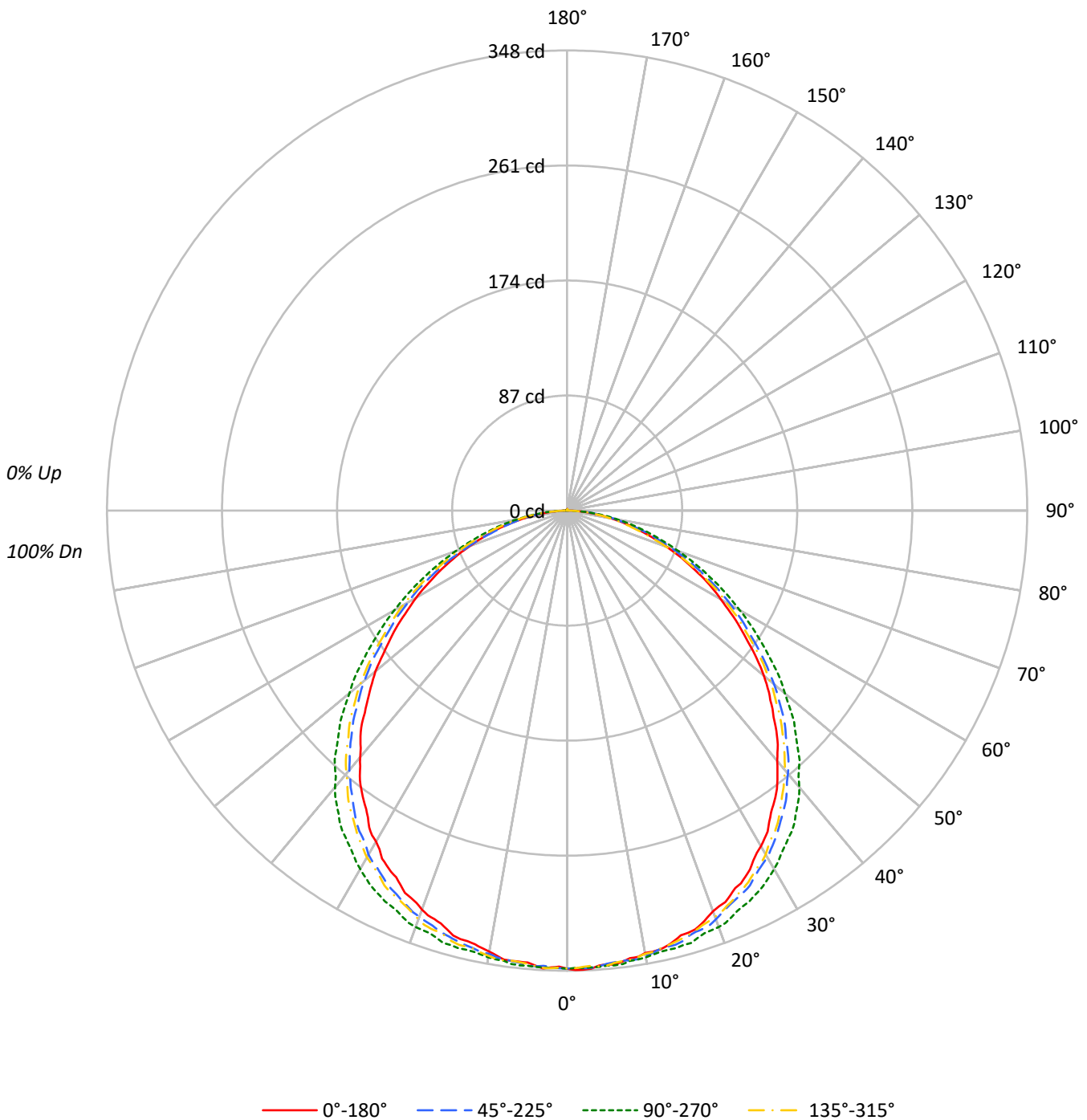
Lumens per Lamp: N/A
Luminaire Lumens: 974.4 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.33 / 1.38
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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: P284766
CATALOG NUMBER: HLB6S09930

Luminous Intensity Polar Plot





TEST NUMBER: P284766
 CATALOG NUMBER: HLB6S09930

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°	18990	18990	18990	18990
5°	18952	19013	18881	19013
10°	18910	19099	18854	19099
15°	18871	19302	18882	19302
20°	18820	19549	18732	19549
25°	18818	19719	18509	19719
30°	18553	19820	18300	19820
35°	18190	19823	17935	19823
40°	17690	19551	17433	19551
45°	17118	19010	16777	19010
50°	16554	18336	16144	18336
55°	15617	17510	15283	17510
60°	14725	16556	14462	16556
65°	13880	15462	13581	15462
70°	12855	14329	12534	14329
75°	11840	13280	11522	13280
80°	10734	12249	10229	12249
85°	9120	11007	8366	11007



TEST NUMBER: P284766
 CATALOG NUMBER: HLB6S09930

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.8	3.4
10°-20°	94.9	9.7
20°-30°	145.9	15.0
30°-40°	176.2	18.1
40°-50°	178.5	18.3
50°-60°	153.6	15.8
60°-70°	111.0	11.4
70°-80°	61.4	6.3
80°-90°	17.7	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°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	273.6	28.1
0°-40°	449.9	46.2
0°-60°	781.9	80.2
0°-90°	972.0	99.8
90°-120°	0.9	0.1
90°-150°	1.8	0.2
90°-180°	2.0	0.2
0°-180°	974.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	346	346	346	346	346	
5°	344	346	343	346	344	33
15°	332	340	333	340	332	94
25°	311	326	306	326	311	143
35°	272	296	268	296	272	170
45°	221	245	216	245	221	171
55°	163	183	160	183	163	146
65°	107	119	105	119	107	106
75°	56	63	54	63	56	59
85°	14	18	13	18	14	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: P284766
 CATALOG NUMBER: HLB6S09930

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	346.4	346.4	346.4	346.4	346.4	346.4	346.4	346.4	346.4	346.4	346.4
1°	347.5	346.2	345.8	345.8	346.0	346.7	346.2	346.0	345.0	346.0	346.2
2°	347.5	346.3	346.3	345.5	346.0	346.0	345.2	346.2	345.7	346.2	345.2
3°	346.9	346.6	346.4	346.3	346.0	345.8	344.8	344.9	346.7	344.9	344.8
4°	344.9	344.7	345.4	345.7	345.9	345.3	345.5	344.2	345.0	344.2	345.5
5°	344.4	344.7	344.0	345.5	345.5	345.0	345.4	345.1	343.1	345.1	345.4
6°	345.3	344.7	343.4	345.7	345.8	344.6	343.9	344.5	343.1	344.5	343.9
7°	343.6	343.9	342.9	345.0	345.5	344.2	343.2	342.9	343.1	342.9	343.2
8°	341.9	342.4	343.5	343.4	343.8	343.9	342.9	341.7	342.9	341.7	342.9
9°	341.8	340.8	343.4	343.3	343.7	343.4	341.9	340.8	340.7	340.8	341.9
10°	339.7	340.3	341.9	343.2	343.1	342.2	340.3	340.0	338.7	340.0	340.3
11°	339.8	340.2	340.6	341.4	342.0	341.7	340.1	339.1	337.0	339.1	340.1
12°	339.2	338.7	338.8	341.1	341.0	341.1	338.7	337.1	335.4	337.1	338.7
13°	337.7	337.2	338.4	340.4	340.9	340.6	337.7	335.3	334.3	335.3	337.7
14°	335.3	335.8	338.5	339.3	341.0	339.7	336.5	334.6	334.0	334.6	336.5
15°	332.5	333.9	337.2	339.1	340.1	339.3	335.1	333.8	332.7	333.8	335.1
16°	332.2	332.5	334.6	339.0	340.1	338.2	333.7	330.9	329.4	330.9	333.7
17°	331.1	330.9	333.1	336.8	337.9	337.2	332.1	328.5	326.6	328.5	332.1
18°	328.8	329.2	332.6	335.6	336.0	335.2	330.0	326.2	324.9	326.2	330.0
19°	325.6	327.0	331.4	334.8	335.5	332.9	328.5	325.5	323.6	325.5	328.5
20°	322.6	324.3	328.9	333.7	335.1	332.9	326.9	323.5	321.1	323.5	326.9
21°	320.5	322.0	326.1	331.5	334.1	331.3	325.3	320.1	317.9	320.1	325.3
22°	319.4	320.0	323.5	328.6	331.7	328.8	322.6	316.7	315.8	316.7	322.6
23°	316.0	317.4	321.3	327.7	329.0	325.9	320.3	314.3	314.0	314.3	320.3
24°	312.5	314.6	319.4	326.7	327.4	324.3	317.6	312.4	309.9	312.4	317.6
25°	311.1	311.8	317.7	323.6	326.0	322.9	315.4	309.2	306.0	309.2	315.4
26°	307.8	308.7	315.5	320.4	323.7	320.1	312.5	304.7	303.9	304.7	312.5
27°	304.6	304.8	311.4	318.2	321.7	316.5	309.3	302.6	301.0	302.6	309.3
28°	299.7	301.5	308.1	316.4	319.1	313.7	306.0	299.2	298.1	299.2	306.0
29°	296.0	298.7	305.4	313.0	316.1	312.0	303.6	295.1	292.9	295.1	303.6
30°	293.1	295.3	302.8	310.2	313.1	309.5	300.4	291.8	289.1	291.8	300.4
31°	289.7	291.9	299.1	306.9	309.9	305.4	295.5	288.2	286.6	288.2	295.5
32°	286.1	287.8	295.4	303.4	305.8	301.1	291.8	283.1	282.5	283.1	291.8
33°	280.6	283.3	291.6	300.2	302.4	297.1	288.8	278.7	276.6	278.7	288.8
34°	275.7	278.3	287.1	295.9	299.1	293.7	284.9	275.2	272.0	275.2	284.9
35°	271.8	275.1	283.0	291.0	296.2	290.3	279.9	271.1	268.0	271.1	279.9
36°	268.0	271.3	279.0	287.5	292.4	286.7	275.1	266.3	264.0	266.3	275.1
37°	263.7	265.7	274.8	283.9	287.2	281.4	270.2	261.9	259.8	261.9	270.2
38°	258.4	260.1	269.8	278.9	282.9	275.9	265.8	257.4	254.7	257.4	265.8
39°	252.7	256.4	264.2	273.7	278.6	271.9	260.8	252.2	248.8	252.2	260.8
40°	247.2	251.9	259.8	269.7	273.2	267.0	256.3	246.4	243.6	246.4	256.3
41°	242.4	245.5	255.1	263.2	266.8	261.7	250.7	240.8	238.0	240.8	250.7
42°	238.1	240.0	250.0	257.9	262.2	256.3	245.6	235.5	233.7	235.5	245.6
43°	232.7	235.3	244.1	252.5	257.8	251.5	240.2	231.0	229.0	231.0	240.2
44°	227.1	230.6	238.2	247.4	251.4	245.6	234.5	225.5	223.3	225.5	234.5



TEST NUMBER: P284766
 CATALOG NUMBER: HLB6S09930

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	220.8	224.5	233.5	241.9	245.2	239.5	229.4	219.5	216.4	219.5	229.4
46°	215.9	218.7	228.2	236.7	239.8	234.5	223.9	214.1	210.8	214.1	223.9
47°	210.1	213.3	221.9	231.0	234.6	227.8	217.3	209.0	205.3	209.0	217.3
48°	205.3	207.6	215.8	224.6	228.2	222.2	211.7	203.3	199.8	203.3	211.7
49°	199.9	201.8	210.5	217.7	221.4	216.2	206.3	197.1	194.4	197.1	206.3
50°	194.1	196.3	204.3	211.7	215.0	209.9	200.1	191.2	189.3	191.2	200.1
51°	188.3	190.4	197.8	206.1	209.4	203.2	193.9	185.9	182.9	185.9	193.9
52°	182.1	184.2	191.9	199.3	203.4	196.8	188.2	179.6	176.7	179.6	188.2
53°	175.7	178.6	185.4	192.4	196.5	190.4	182.0	173.4	170.9	173.4	182.0
54°	169.3	173.2	179.4	186.0	189.6	183.6	175.2	167.5	165.4	167.5	175.2
55°	163.4	167.3	172.8	179.8	183.2	177.1	168.7	162.0	159.9	162.0	168.7
56°	157.6	160.9	166.5	173.3	176.5	170.9	162.6	155.8	154.4	155.8	162.6
57°	152.2	155.1	160.9	166.5	170.1	164.6	157.0	150.4	148.4	150.4	157.0
58°	145.6	149.6	155.2	160.4	163.7	158.4	151.6	144.6	142.3	144.6	151.6
59°	139.8	143.4	149.5	154.8	157.6	152.0	145.0	139.0	137.0	139.0	145.0
60°	134.3	137.6	143.2	148.8	151.0	145.7	139.0	132.9	131.9	132.9	139.0
61°	129.2	132.0	137.3	142.4	144.4	139.9	133.6	128.0	126.6	128.0	133.6
62°	123.9	125.8	131.4	135.8	138.4	134.4	128.1	122.0	120.7	122.0	128.1
63°	118.5	120.4	125.5	130.0	132.1	128.3	121.8	115.7	114.8	115.7	121.8
64°	113.0	114.5	119.6	124.1	126.0	121.9	115.7	110.2	110.0	110.2	115.7
65°	107.0	109.0	113.6	117.9	119.2	115.6	109.8	104.7	104.7	104.7	109.8
66°	101.4	103.4	107.9	112.1	113.4	109.9	103.6	98.8	99.2	98.8	103.6
67°	96.3	98.1	102.2	106.4	107.3	104.4	97.7	92.9	93.9	92.9	97.7
68°	90.9	92.7	96.4	100.7	101.3	98.6	91.6	87.0	88.7	87.0	91.6
69°	85.2	87.1	90.7	94.9	95.3	92.6	85.5	81.5	83.4	81.5	85.5
70°	80.2	81.7	85.2	88.9	89.4	87.0	79.5	76.1	78.2	76.1	79.5
71°	75.3	76.7	80.0	83.6	83.7	81.8	73.6	70.9	73.0	70.9	73.6
72°	70.2	71.4	74.7	78.3	78.2	76.5	68.1	65.6	68.4	65.6	68.1
73°	65.1	66.4	69.5	72.9	72.9	71.2	62.5	60.5	63.9	60.5	62.5
74°	60.2	61.8	64.5	67.7	67.9	66.0	57.3	55.6	59.2	55.6	57.3
75°	55.9	56.9	59.4	62.5	62.7	61.1	52.2	50.9	54.4	50.9	52.2
76°	51.3	52.3	54.6	57.6	57.8	56.0	48.5	46.6	50.0	46.6	48.5
77°	46.8	47.9	50.0	52.8	52.9	50.8	44.3	42.5	45.4	42.5	44.3
78°	42.4	43.5	45.3	48.0	48.0	45.7	40.3	38.5	40.9	38.5	40.3
79°	38.3	39.0	40.7	43.3	43.3	41.0	36.3	34.6	36.5	34.6	36.3
80°	34.0	34.7	36.4	38.8	38.8	36.7	32.4	30.7	32.4	30.7	32.4
81°	29.8	30.6	32.3	34.5	34.3	32.5	28.7	26.9	28.2	26.9	28.7
82°	25.6	26.5	28.1	30.0	30.0	28.3	25.0	23.1	24.1	23.1	25.0
83°	21.6	22.3	24.2	25.8	25.7	24.2	21.5	19.2	20.2	19.2	21.5
84°	17.9	18.4	20.5	21.7	21.5	20.2	18.0	15.6	16.6	15.6	18.0
85°	14.5	14.9	16.8	17.8	17.5	16.3	14.5	12.5	13.3	12.5	14.5
86°	11.3	11.7	13.1	13.9	13.7	12.6	11.1	9.5	10.3	9.5	11.1
87°	8.2	8.7	9.6	10.1	9.8	9.0	7.8	6.7	7.3	6.7	7.8
88°	5.1	5.7	6.2	6.5	6.1	5.5	4.6	3.9	4.4	3.9	4.6
89°	2.1	2.9	3.2	3.6	3.4	3.0	2.3	1.7	1.8	1.7	2.3



TEST NUMBER: P284766
 CATALOG NUMBER: HLB6S09930

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.4	1.1	1.6	1.9	1.7	1.3	0.9	0.6	0.4	0.6	0.9
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: P284766
 CATALOG NUMBER: HLB6S09930

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	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
163°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
164°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
165°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
166°	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.9
167°	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
168°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
169°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
170°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
171°	1.0	0.9	0.9	0.9	0.9	0.9	1.0	1.0	0.9	1.0	1.0
172°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
173°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
174°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
175°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
176°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
177°	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
178°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
179°	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



TEST NUMBER: P284766
CATALOG NUMBER: HLB6S09930

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



TEST NUMBER: P284766
 CATALOG NUMBER: HLB6S09930

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	346.4	346.4	346.4	346.4	346.4	346.4
1°	346.7	346.0	345.8	345.8	346.2	347.5
2°	346.0	346.0	345.5	346.3	346.3	347.5
3°	345.8	346.0	346.3	346.4	346.6	346.9
4°	345.3	345.9	345.7	345.4	344.7	344.9
5°	345.0	345.5	345.5	344.0	344.7	344.4
6°	344.6	345.8	345.7	343.4	344.7	345.3
7°	344.2	345.5	345.0	342.9	343.9	343.6
8°	343.9	343.8	343.4	343.5	342.4	341.9
9°	343.4	343.7	343.3	343.4	340.8	341.8
10°	342.2	343.1	343.2	341.9	340.3	339.7
11°	341.7	342.0	341.4	340.6	340.2	339.8
12°	341.1	341.0	341.1	338.8	338.7	339.2
13°	340.6	340.9	340.4	338.4	337.2	337.7
14°	339.7	341.0	339.3	338.5	335.8	335.3
15°	339.3	340.1	339.1	337.2	333.9	332.5
16°	338.2	340.1	339.0	334.6	332.5	332.2
17°	337.2	337.9	336.8	333.1	330.9	331.1
18°	335.2	336.0	335.6	332.6	329.2	328.8
19°	332.9	335.5	334.8	331.4	327.0	325.6
20°	332.9	335.1	333.7	328.9	324.3	322.6
21°	331.3	334.1	331.5	326.1	322.0	320.5
22°	328.8	331.7	328.6	323.5	320.0	319.4
23°	325.9	329.0	327.7	321.3	317.4	316.0
24°	324.3	327.4	326.7	319.4	314.6	312.5
25°	322.9	326.0	323.6	317.7	311.8	311.1
26°	320.1	323.7	320.4	315.5	308.7	307.8
27°	316.5	321.7	318.2	311.4	304.8	304.6
28°	313.7	319.1	316.4	308.1	301.5	299.7
29°	312.0	316.1	313.0	305.4	298.7	296.0
30°	309.5	313.1	310.2	302.8	295.3	293.1
31°	305.4	309.9	306.9	299.1	291.9	289.7
32°	301.1	305.8	303.4	295.4	287.8	286.1
33°	297.1	302.4	300.2	291.6	283.3	280.6
34°	293.7	299.1	295.9	287.1	278.3	275.7
35°	290.3	296.2	291.0	283.0	275.1	271.8
36°	286.7	292.4	287.5	279.0	271.3	268.0
37°	281.4	287.2	283.9	274.8	265.7	263.7
38°	275.9	282.9	278.9	269.8	260.1	258.4
39°	271.9	278.6	273.7	264.2	256.4	252.7
40°	267.0	273.2	269.7	259.8	251.9	247.2
41°	261.7	266.8	263.2	255.1	245.5	242.4
42°	256.3	262.2	257.9	250.0	240.0	238.1
43°	251.5	257.8	252.5	244.1	235.3	232.7
44°	245.6	251.4	247.4	238.2	230.6	227.1



TEST NUMBER: P284766
 CATALOG NUMBER: HLB6S09930

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	239.5	245.2	241.9	233.5	224.5	220.8
46°	234.5	239.8	236.7	228.2	218.7	215.9
47°	227.8	234.6	231.0	221.9	213.3	210.1
48°	222.2	228.2	224.6	215.8	207.6	205.3
49°	216.2	221.4	217.7	210.5	201.8	199.9
50°	209.9	215.0	211.7	204.3	196.3	194.1
51°	203.2	209.4	206.1	197.8	190.4	188.3
52°	196.8	203.4	199.3	191.9	184.2	182.1
53°	190.4	196.5	192.4	185.4	178.6	175.7
54°	183.6	189.6	186.0	179.4	173.2	169.3
55°	177.1	183.2	179.8	172.8	167.3	163.4
56°	170.9	176.5	173.3	166.5	160.9	157.6
57°	164.6	170.1	166.5	160.9	155.1	152.2
58°	158.4	163.7	160.4	155.2	149.6	145.6
59°	152.0	157.6	154.8	149.5	143.4	139.8
60°	145.7	151.0	148.8	143.2	137.6	134.3
61°	139.9	144.4	142.4	137.3	132.0	129.2
62°	134.4	138.4	135.8	131.4	125.8	123.9
63°	128.3	132.1	130.0	125.5	120.4	118.5
64°	121.9	126.0	124.1	119.6	114.5	113.0
65°	115.6	119.2	117.9	113.6	109.0	107.0
66°	109.9	113.4	112.1	107.9	103.4	101.4
67°	104.4	107.3	106.4	102.2	98.1	96.3
68°	98.6	101.3	100.7	96.4	92.7	90.9
69°	92.6	95.3	94.9	90.7	87.1	85.2
70°	87.0	89.4	88.9	85.2	81.7	80.2
71°	81.8	83.7	83.6	80.0	76.7	75.3
72°	76.5	78.2	78.3	74.7	71.4	70.2
73°	71.2	72.9	72.9	69.5	66.4	65.1
74°	66.0	67.9	67.7	64.5	61.8	60.2
75°	61.1	62.7	62.5	59.4	56.9	55.9
76°	56.0	57.8	57.6	54.6	52.3	51.3
77°	50.8	52.9	52.8	50.0	47.9	46.8
78°	45.7	48.0	48.0	45.3	43.5	42.4
79°	41.0	43.3	43.3	40.7	39.0	38.3
80°	36.7	38.8	38.8	36.4	34.7	34.0
81°	32.5	34.3	34.5	32.3	30.6	29.8
82°	28.3	30.0	30.0	28.1	26.5	25.6
83°	24.2	25.7	25.8	24.2	22.3	21.6
84°	20.2	21.5	21.7	20.5	18.4	17.9
85°	16.3	17.5	17.8	16.8	14.9	14.5
86°	12.6	13.7	13.9	13.1	11.7	11.3
87°	9.0	9.8	10.1	9.6	8.7	8.2
88°	5.5	6.1	6.5	6.2	5.7	5.1
89°	3.0	3.4	3.6	3.2	2.9	2.1



TEST NUMBER: P284766
 CATALOG NUMBER: HLB6S09930

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	1.3	1.7	1.9	1.6	1.1	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: P284766
 CATALOG NUMBER: HLB6S09930

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°	0.8	0.8	0.8	0.7	0.7	0.7
163°	0.8	0.8	0.8	0.8	0.8	0.8
164°	0.8	0.8	0.8	0.8	0.8	0.8
165°	0.8	0.8	0.8	0.8	0.8	0.8
166°	0.8	0.8	0.8	0.8	0.8	0.8
167°	0.9	0.9	0.9	0.9	0.8	0.9
168°	0.9	0.9	0.9	0.9	0.9	0.9
169°	0.9	0.9	0.9	0.9	0.9	0.9
170°	0.9	0.9	0.9	0.9	0.9	0.9
171°	0.9	0.9	0.9	0.9	0.9	1.0
172°	1.0	1.0	1.0	1.0	1.0	1.0
173°	1.0	1.0	1.0	1.0	1.0	1.0
174°	1.0	1.0	1.0	1.0	1.0	1.0
175°	1.0	1.0	1.0	1.0	1.0	1.0
176°	1.0	1.0	1.0	1.0	1.0	1.0
177°	1.0	1.0	1.0	1.0	1.0	1.1
178°	1.0	1.0	1.0	1.0	1.0	1.0
179°	1.0	1.0	1.0	1.0	1.0	1.1



TEST NUMBER: P284766
CATALOG NUMBER: HLB6S09930

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	1.0	1.0	1.0	1.0	1.0	1.0

(END OF REPORT)