

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: P130048

Luminaire Tested: **HL618TAT - HLM6930 - HL6FL - 71PS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130048  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33457)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HL618TAT - HLM6930 - HL6FL - 71PS  
Description: HALO ALLSLOPE 6" 30W, Drop Opal Glass Lens, White Polymer Trim Ring  
"Dead Front", Wet Location - Showerlight using 40 Degree Optic at a 6-12  
Pitch  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

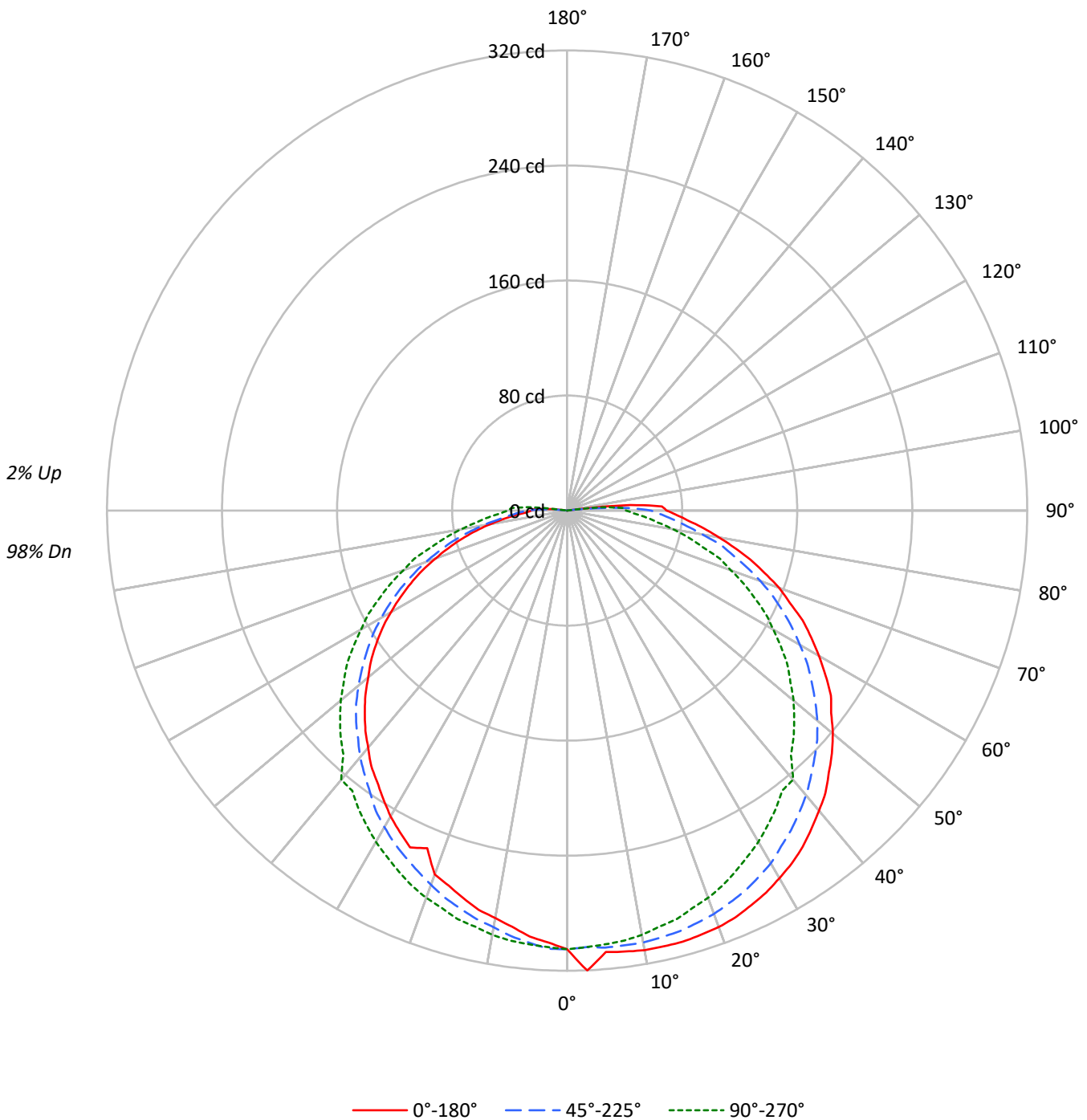
Lumens per Lamp: N/A  
Luminaire Lumens: 1079.3 lumens  
Efficiency: N/A  
Efficacy: 39.1 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.3 / 1.45  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct  
  
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (Ain): 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: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

### Luminous Intensity Polar Plot





TEST NUMBER: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

**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	110	110	110	105	105	105	100	100	100	98
1	106	100	95	90	103	98	93	89	93	89	86	89	85	83	85	82	80	77
2	95	86	78	72	92	84	77	71	80	74	69	76	71	67	73	69	65	63
3	86	75	66	59	84	73	65	58	70	62	57	66	60	55	64	58	54	52
4	79	66	56	49	76	64	55	48	61	54	48	59	52	47	56	51	46	43
5	72	58	49	42	70	57	48	41	55	47	41	52	46	40	50	44	39	37
6	67	52	43	36	64	51	42	36	49	41	35	47	40	35	46	39	34	32
7	62	47	38	32	60	46	38	31	45	37	31	43	36	31	41	35	30	28
8	57	43	34	28	56	42	34	28	41	33	28	39	32	27	38	32	27	25
9	53	39	31	25	52	39	31	25	37	30	25	36	29	24	35	29	24	22
10	50	36	28	23	49	36	28	23	35	27	22	33	27	22	32	26	22	20

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

	0°	90°	180°
0°	18206	18206	18206
5°	18047	17731	17415
10°	17972	17346	16657
15°	17907	16972	16095
20°	17851	16600	15598
25°	17744	16226	15148
30°	17640	15895	14670
35°	17541	15550	14149
40°	17362	15572	13711
45°	17167	14859	13272
50°	17011	14494	12737
55°	16891	14115	12236
60°	16531	13530	11585
65°	16249	12938	10797
70°	15818	12216	9815
75°	15273	11267	8766
80°	14685	10229	7418
85°	14487	9364	6056



TEST NUMBER: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.9	2.7
10°-20°	83.3	7.7
20°-30°	128.7	11.9
30°-40°	159.9	14.8
40°-50°	173.8	16.1
50°-60°	168.8	15.6
60°-70°	144.9	13.4
70°-80°	105.9	9.8
80°-90°	63.5	5.9
90°-100°	21.5	2.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	240.9	22.3
0°-40°	400.8	37.1
0°-60°	743.5	68.9
0°-90°	1057.8	98.0
90°-120°	21.5	2.0
90°-150°	21.5	2.0
90°-180°	22.0	2.0
0°-180°	1079.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	305	305	305	305	305	
5°	308	305	303	302	297	30
15°	310	303	294	287	279	88
25°	303	292	277	266	258	140
35°	286	271	253	239	230	179
45°	257	243	223	208	199	199
55°	224	208	187	170	162	199
65°	181	166	144	128	120	178
75°	132	119	97	82	76	139
85°	85	75	55	40	36	74
90°	69	58	41	28	25	39
95°	44	14	27	5	13	21
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



TEST NUMBER: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0
2.5°	320.1	306.1	311.5	308.2	305.0	308.2	306.1	310.4	302.8	303.9	305.0
5°	308.2	308.2	313.6	310.4	306.1	309.3	308.2	311.5	303.9	305.0	306.1
7.5°	309.3	310.4	314.7	310.4	307.1	310.4	308.2	311.5	305.0	305.0	306.1
10°	310.4	310.4	314.7	311.5	308.2	310.4	308.2	311.5	305.0	305.0	306.1
12.5°	310.4	311.5	315.8	311.5	308.2	310.4	308.2	310.4	305.0	303.9	305.0
15°	310.4	316.9	314.7	310.4	307.1	309.3	307.1	310.4	302.8	302.8	303.9
17.5°	309.3	309.3	313.6	309.3	306.1	308.2	305.0	308.2	300.6	300.6	301.7
20°	308.2	308.2	311.5	307.1	305.0	306.1	302.8	306.1	299.6	298.5	298.5
22.5°	306.1	305.0	308.2	305.0	301.7	302.8	299.6	302.8	296.3	295.2	296.3
25°	302.8	302.8	305.0	301.7	298.5	299.6	296.3	298.5	293.1	292.0	292.0
27.5°	299.6	298.5	301.7	297.4	295.2	295.2	292.0	295.2	288.7	287.7	287.7
30°	295.2	294.2	297.4	293.1	290.9	290.9	287.7	289.8	284.4	283.3	283.3
32.5°	290.9	288.7	292.0	287.7	285.5	285.5	282.3	284.4	277.9	276.9	276.9
35°	285.5	283.3	285.5	281.2	280.1	279.0	275.8	277.9	272.5	271.4	270.4
37.5°	279.0	277.9	279.0	275.8	273.6	273.6	269.3	271.4	266.0	265.0	265.0
40°	272.5	271.4	272.5	269.3	267.1	266.0	262.8	265.0	259.5	258.5	257.4
42.5°	266.0	263.9	265.0	261.7	259.5	259.5	256.3	256.3	252.0	250.9	250.9
45°	257.4	256.3	257.4	254.1	252.0	252.0	247.7	248.7	244.4	243.3	242.2
47.5°	249.8	248.7	249.8	246.6	244.4	243.3	240.1	241.2	236.8	235.8	234.7
50°	241.2	240.1	240.1	237.9	235.8	234.7	231.4	231.4	228.2	227.1	226.0
52.5°	231.4	230.3	231.4	228.2	227.1	224.9	222.8	221.7	219.5	217.4	216.3
55°	223.9	221.7	221.7	218.5	217.4	216.3	213.0	212.0	209.8	207.6	206.6
57.5°	213.0	210.9	210.9	207.6	207.6	205.5	203.3	202.2	199.0	197.9	196.8
60°	202.2	201.1	200.1	197.9	196.8	195.7	192.5	191.4	189.3	187.1	186.0
62.5°	191.4	190.3	189.3	187.1	187.1	184.9	181.7	180.6	178.4	176.3	175.2
65°	180.6	178.4	178.4	176.3	175.2	173.0	169.8	169.8	167.6	165.5	164.4
67.5°	167.6	167.6	166.5	164.4	163.3	162.2	159.0	154.6	155.7	154.6	152.5
70°	156.8	154.6	153.6	152.5	152.5	150.3	147.1	143.8	143.8	142.8	140.6
72.5°	143.8	142.8	141.7	140.6	139.5	138.4	135.2	134.1	131.9	130.9	128.7
75°	131.9	130.9	129.8	128.7	127.6	126.5	123.3	122.2	120.0	119.0	116.8
77.5°	119.0	117.9	117.9	115.7	115.7	114.6	111.4	110.3	108.1	109.2	104.9
80°	107.1	106.0	106.0	103.8	103.8	101.7	99.5	98.4	96.2	95.2	93.0
82.5°	96.2	95.2	94.1	93.0	93.0	90.8	88.7	86.5	85.4	84.4	82.2
85°	85.4	84.4	84.4	82.2	82.2	80.0	77.9	76.8	75.7	74.6	72.5
87.5°	76.8	75.7	74.6	73.5	73.5	72.5	69.2	68.1	67.0	66.0	63.8
90°	69.2	68.1	68.1	67.0	66.0	64.9	62.7	60.6	59.5	58.4	56.2
92.5°	66.0	64.9	64.9	61.6	60.6	57.3	53.0	48.7	44.3	42.2	42.2
95°	44.3	43.3	44.3	40.0	37.9	31.4	26.0	21.6	17.3	14.1	14.1
97.5°	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
102.5°	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
107.5°	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



TEST NUMBER: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	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
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0
2.5°	303.9	307.1	301.7	305.0	308.2	306.1	308.2	303.9	302.8	301.7	302.8
5°	303.9	307.1	302.8	305.0	308.2	305.0	308.2	302.8	301.7	300.6	301.7
7.5°	303.9	307.1	301.7	303.9	308.2	303.9	306.1	301.7	299.6	298.5	298.5
10°	303.9	306.1	300.6	302.8	306.1	301.7	303.9	299.6	297.4	295.2	296.3
12.5°	301.7	303.9	299.6	300.6	303.9	299.6	301.7	296.3	294.2	293.1	293.1
15°	300.6	302.8	297.4	298.5	305.0	296.3	298.5	294.2	290.9	288.7	288.7
17.5°	297.4	292.0	294.2	295.2	298.5	293.1	295.2	289.8	287.7	285.5	284.4
20°	295.2	296.3	292.0	292.0	295.2	289.8	290.9	286.6	288.7	282.3	280.1
22.5°	292.0	292.0	287.7	287.7	292.0	285.5	286.6	282.3	279.0	276.9	275.8
25°	287.7	288.7	284.4	284.4	287.7	281.2	282.3	276.9	273.6	272.5	270.4
27.5°	283.3	283.3	279.0	279.0	282.3	275.8	275.8	271.4	268.2	267.1	265.0
30°	277.9	277.9	273.6	273.6	276.9	269.3	270.4	266.0	262.8	260.6	258.5
32.5°	271.4	271.4	268.2	267.1	270.4	263.9	263.9	259.5	260.6	254.1	252.0
35°	266.0	266.0	261.7	260.6	263.9	256.3	256.3	253.1	248.7	247.7	245.5
37.5°	259.5	258.5	255.2	254.1	256.3	248.7	249.8	245.5	242.2	240.1	237.9
40°	253.1	252.0	248.7	247.7	249.8	242.2	242.2	244.4	234.7	237.9	230.3
42.5°	244.4	244.4	241.2	239.0	241.2	233.6	234.7	230.3	226.0	224.9	221.7
45°	236.8	235.8	233.6	231.4	232.5	226.0	226.0	222.8	218.5	216.3	214.1
47.5°	229.3	228.2	223.9	222.8	223.9	217.4	217.4	214.1	209.8	208.7	205.5
50°	220.6	219.5	216.3	214.1	215.2	208.7	208.7	205.5	201.1	199.0	196.8
52.5°	210.9	209.8	206.6	204.4	205.5	199.0	199.0	195.7	194.7	189.3	187.1
55°	202.2	200.1	196.8	194.7	195.7	189.3	189.3	187.1	181.7	180.6	177.4
57.5°	192.5	190.3	187.1	184.9	186.0	179.5	179.5	176.3	172.0	169.8	167.6
60°	181.7	179.5	177.4	175.2	175.2	169.8	168.7	165.5	161.1	160.1	156.8
62.5°	170.9	168.7	166.5	164.4	164.4	159.0	157.9	155.7	151.4	149.2	146.0
65°	160.1	157.9	154.6	152.5	152.5	147.1	147.1	143.8	139.5	138.4	135.2
67.5°	148.2	147.1	143.8	141.7	141.7	136.3	135.2	133.0	128.7	126.5	124.4
70°	137.3	135.2	131.9	129.8	129.8	125.4	124.4	121.1	117.9	115.7	112.5
72.5°	125.4	123.3	120.0	119.0	117.9	113.6	112.5	111.4	106.0	104.9	101.7
75°	113.6	111.4	109.2	107.1	106.0	101.7	100.6	97.3	94.1	93.0	89.8
77.5°	101.7	99.5	97.3	95.2	94.1	89.8	88.7	86.5	83.3	81.1	78.9
80°	89.8	87.6	85.4	83.3	82.2	78.9	76.8	74.6	71.4	72.5	67.0
82.5°	80.0	76.8	74.6	72.5	71.4	68.1	66.0	63.8	60.6	59.5	57.3
85°	70.3	67.0	64.9	62.7	61.6	58.4	56.2	55.2	51.9	50.8	47.6
87.5°	61.6	58.4	57.3	55.2	53.0	49.7	48.7	46.5	43.3	42.2	40.0
90°	54.1	51.9	50.8	48.7	46.5	43.3	42.2	41.1	37.9	36.8	34.6
92.5°	42.2	43.3	43.3	42.2	43.3	41.1	40.0	38.9	36.8	34.6	32.4
95°	16.2	19.5	21.6	23.8	27.0	27.0	27.0	27.0	24.9	22.7	20.5
97.5°	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
102.5°	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
107.5°	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





TEST NUMBER: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	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
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0
2.5°	306.1	299.6	299.6	302.8	300.6	305.0	303.9	303.9	302.8	301.7	295.2
5°	303.9	297.4	297.4	300.6	297.4	301.7	300.6	300.6	299.6	298.5	296.3
7.5°	301.7	295.2	294.2	297.4	294.2	298.5	297.4	296.3	295.2	294.2	292.0
10°	298.5	292.0	290.9	294.2	289.8	294.2	293.1	292.0	290.9	289.8	287.7
12.5°	295.2	288.7	287.7	289.8	286.6	290.9	289.8	288.7	287.7	285.5	283.3
15°	290.9	284.4	284.4	286.6	283.3	286.6	285.5	284.4	283.3	281.2	279.0
17.5°	287.7	280.1	280.1	282.3	277.9	282.3	280.1	279.0	277.9	276.9	273.6
20°	283.3	275.8	275.8	277.9	273.6	276.9	275.8	274.7	273.6	271.4	269.3
22.5°	277.9	271.4	270.4	272.5	268.2	271.4	270.4	269.3	268.2	267.1	265.0
25°	272.5	266.0	265.0	267.1	262.8	266.0	265.0	263.9	262.8	260.6	258.5
27.5°	267.1	260.6	259.5	261.7	257.4	260.6	259.5	257.4	256.3	255.2	253.1
30°	260.6	254.1	253.1	256.3	250.9	254.1	252.0	252.0	249.8	248.7	246.6
32.5°	254.1	247.7	246.6	248.7	244.4	247.7	245.5	250.9	242.2	241.2	239.0
35°	247.7	241.2	239.0	241.2	236.8	239.0	239.0	236.8	235.8	233.6	231.4
37.5°	239.0	233.6	232.5	233.6	229.3	231.4	230.3	229.3	228.2	227.1	223.9
40°	231.4	226.0	224.9	226.0	221.7	223.9	222.8	222.8	220.6	219.5	217.4
42.5°	223.9	217.4	216.3	217.4	214.1	215.2	214.1	214.1	212.0	210.9	208.7
45°	215.2	209.8	208.7	209.8	205.5	207.6	206.6	205.5	203.3	202.2	200.1
47.5°	206.6	201.1	200.1	201.1	196.8	199.0	197.9	196.8	194.7	193.6	191.4
50°	196.8	192.5	191.4	192.5	188.2	189.3	188.2	188.2	186.0	184.9	182.8
52.5°	188.2	182.8	181.7	182.8	178.4	179.5	179.5	178.4	176.3	175.2	174.1
55°	178.4	174.1	173.0	173.0	168.7	169.8	168.7	168.7	166.5	165.5	164.4
57.5°	168.7	163.3	162.2	162.2	159.0	160.1	159.0	159.0	156.8	155.7	153.6
60°	157.9	153.6	152.5	152.5	148.2	149.2	148.2	148.2	146.0	144.9	142.8
62.5°	147.1	142.8	141.7	141.7	137.3	138.4	138.4	137.3	135.2	134.1	133.0
65°	136.3	131.9	130.9	129.8	126.5	127.6	126.5	125.4	124.4	123.3	122.2
67.5°	124.4	121.1	122.2	119.0	115.7	115.7	115.7	114.6	112.5	112.5	111.4
70°	113.6	109.2	108.1	107.1	103.8	104.9	103.8	102.7	101.7	100.6	99.5
72.5°	101.7	98.4	96.2	96.2	93.0	93.0	93.0	91.9	89.8	89.8	88.7
75°	89.8	86.5	85.4	84.4	81.1	82.2	80.0	80.0	77.9	77.9	76.8
77.5°	77.9	74.6	74.6	72.5	70.3	70.3	69.2	69.2	68.1	67.0	66.0
80°	66.0	63.8	62.7	61.6	59.5	59.5	58.4	57.3	56.2	56.2	55.2
82.5°	56.2	54.1	53.0	50.8	49.7	48.7	48.7	47.6	46.5	46.5	45.4
85°	46.5	44.3	43.3	42.2	41.1	40.0	38.9	38.9	37.9	36.8	36.8
87.5°	38.9	37.9	36.8	35.7	33.5	33.5	32.4	32.4	31.4	30.3	29.2
90°	33.5	32.4	31.4	30.3	29.2	28.1	27.0	27.0	26.0	26.0	24.9
92.5°	30.3	27.0	23.8	22.7	19.5	19.5	18.4	19.5	19.5	20.5	21.6
95°	17.3	14.1	10.8	8.7	6.5	5.4	5.4	6.5	7.6	9.7	11.9
97.5°	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
102.5°	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
107.5°	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



TEST NUMBER: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	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
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	305.0	305.0	305.0	305.0
2.5°	305.0	307.1	303.9	300.6
5°	301.7	303.9	300.6	297.4
7.5°	297.4	298.5	296.3	292.0
10°	293.1	294.2	290.9	287.7
12.5°	288.7	289.8	287.7	284.4
15°	284.4	285.5	282.3	279.0
17.5°	279.0	280.1	277.9	273.6
20°	273.6	275.8	272.5	269.3
22.5°	268.2	270.4	267.1	254.1
25°	262.8	263.9	261.7	258.5
27.5°	256.3	257.4	255.2	252.0
30°	249.8	250.9	248.7	245.5
32.5°	242.2	243.3	242.2	237.9
35°	234.7	235.8	233.6	230.3
37.5°	227.1	228.2	226.0	223.9
40°	219.5	220.6	218.5	215.2
42.5°	210.9	212.0	209.8	207.6
45°	202.2	203.3	201.1	199.0
47.5°	196.8	193.6	192.5	190.3
50°	184.9	184.9	183.8	180.6
52.5°	175.2	175.2	174.1	172.0
55°	167.6	165.5	164.4	162.2
57.5°	154.6	154.6	153.6	152.5
60°	144.9	143.8	143.8	141.7
62.5°	134.1	134.1	134.1	130.9
65°	122.2	123.3	122.2	120.0
67.5°	112.5	111.4	111.4	109.2
70°	100.6	99.5	99.5	97.3
72.5°	88.7	88.7	88.7	86.5
75°	76.8	76.8	76.8	75.7
77.5°	66.0	66.0	66.0	64.9
80°	55.2	55.2	54.1	54.1
82.5°	45.4	44.3	45.4	44.3
85°	36.8	35.7	36.8	35.7
87.5°	29.2	29.2	29.2	28.1
90°	24.9	24.9	24.9	24.9
92.5°	22.7	22.7	23.8	22.7
95°	13.0	13.0	13.0	13.0
97.5°	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0



TEST NUMBER: P130048

CATALOG NUMBER: HL618TAT - HLM6930 - HL6FL - 71PS

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
112.5°	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0

(END OF REPORT)