

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: P130186

Luminaire Tested: **HL612ICAT - HLM6930 - HL6FL - 71PS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130186  
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: HL612ICAT - HLM6930 - HL6FL - 71PS  
Description: HALO ALLSLOPE 6" 21W, 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**

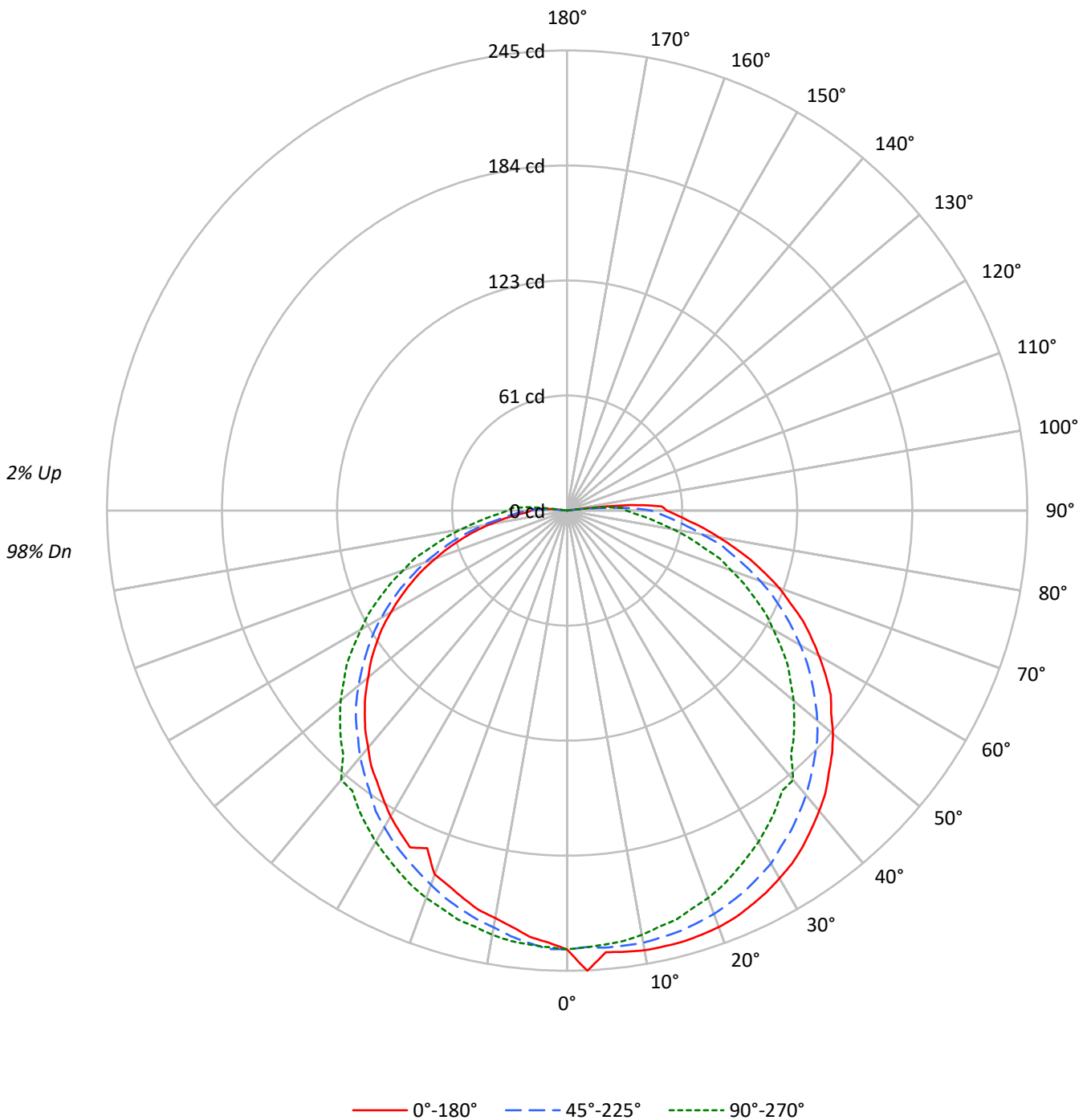
Lumens per Lamp: N/A  
Luminaire Lumens: 826.5 lumens  
Efficiency: N/A  
Efficacy: 43.3 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.3 / 1.45  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct  
  
Input Watts (W): 19.1  
Input Voltage (V): NR  
Input Current (Ain): 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



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### Luminous Intensity Polar Plot





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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	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°	13944	13944	13944
5°	13820	13579	13339
10°	13763	13282	12755
15°	13713	12997	12328
20°	13669	12713	11943
25°	13589	12423	11597
30°	13511	12173	11234
35°	13430	11907	10838
40°	13297	11927	10500
45°	13145	11378	10164
50°	13027	11101	9754
55°	12930	10810	9370
60°	12664	10358	8870
65°	12443	9915	8268
70°	12115	9361	7515
75°	11695	8627	6716
80°	11243	7829	5677
85°	11095	7159	4631



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.1	2.7
10°-20°	63.8	7.7
20°-30°	98.6	11.9
30°-40°	122.5	14.8
40°-50°	133.1	16.1
50°-60°	129.3	15.6
60°-70°	111.0	13.4
70°-80°	81.1	9.8
80°-90°	48.6	5.9
90°-100°	16.5	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°	184.5	22.3
0°-40°	307.0	37.1
0°-60°	569.4	68.9
0°-90°	810.0	98.0
90°-120°	16.5	2.0
90°-150°	16.5	2.0
90°-180°	16.0	1.9
0°-180°	826.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	234	234	234	234	234	
5°	236	234	232	231	228	23
15°	238	232	225	220	214	67
25°	232	224	212	204	198	107
35°	219	208	194	183	176	137
45°	197	186	171	159	152	152
55°	171	159	143	130	124	153
65°	138	127	110	98	92	136
75°	101	91	74	63	58	107
85°	65	57	42	31	27	57
90°	53	45	32	22	19	30
95°	34	11	21	4	10	16
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°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6
2.5°	245.2	234.4	238.5	236.0	233.6	236.0	234.4	237.7	231.9	232.7	233.6
5°	236.0	236.0	240.2	237.7	234.4	236.9	236.0	238.5	232.7	233.6	234.4
7.5°	236.9	237.7	241.0	237.7	235.2	237.7	236.0	238.5	233.6	233.6	234.4
10°	237.7	237.7	241.0	238.5	236.0	237.7	236.0	238.5	233.6	233.6	234.4
12.5°	237.7	238.5	241.8	238.5	236.0	237.7	236.0	237.7	233.6	232.7	233.6
15°	237.7	242.7	241.0	237.7	235.2	236.9	235.2	237.7	231.9	231.9	232.7
17.5°	236.9	236.9	240.2	236.9	234.4	236.0	233.6	236.0	230.2	230.2	231.1
20°	236.0	236.0	238.5	235.2	233.6	234.4	231.9	234.4	229.4	228.6	228.6
22.5°	234.4	233.6	236.0	233.6	231.1	231.9	229.4	231.9	226.9	226.1	226.9
25°	231.9	231.9	233.6	231.1	228.6	229.4	226.9	228.6	224.4	223.6	223.6
27.5°	229.4	228.6	231.1	227.8	226.1	226.1	223.6	226.1	221.1	220.3	220.3
30°	226.1	225.3	227.8	224.4	222.8	222.8	220.3	222.0	217.8	217.0	217.0
32.5°	222.8	221.1	223.6	220.3	218.6	218.6	216.2	217.8	212.9	212.0	212.0
35°	218.6	217.0	218.6	215.3	214.5	213.7	211.2	212.9	208.7	207.9	207.1
37.5°	213.7	212.9	213.7	211.2	209.5	209.5	206.2	207.9	203.7	202.9	202.9
40°	208.7	207.9	208.7	206.2	204.6	203.7	201.3	202.9	198.8	197.9	197.1
42.5°	203.7	202.1	202.9	200.4	198.8	198.8	196.3	196.3	193.0	192.1	192.1
45°	197.1	196.3	197.1	194.6	193.0	193.0	189.7	190.5	187.2	186.3	185.5
47.5°	191.3	190.5	191.3	188.8	187.2	186.3	183.9	184.7	181.4	180.6	179.7
50°	184.7	183.9	183.9	182.2	180.6	179.7	177.2	177.2	174.8	173.9	173.1
52.5°	177.2	176.4	177.2	174.8	173.9	172.3	170.6	169.8	168.1	166.5	165.6
55°	171.4	169.8	169.8	167.3	166.5	165.6	163.2	162.3	160.7	159.0	158.2
57.5°	163.2	161.5	161.5	159.0	159.0	157.4	155.7	154.9	152.4	151.6	150.7
60°	154.9	154.0	153.2	151.6	150.7	149.9	147.4	146.6	144.9	143.3	142.5
62.5°	146.6	145.8	144.9	143.3	143.3	141.6	139.1	138.3	136.7	135.0	134.2
65°	138.3	136.7	136.7	135.0	134.2	132.5	130.0	130.0	128.4	126.7	125.9
67.5°	128.4	128.4	127.5	125.9	125.1	124.2	121.7	118.4	119.3	118.4	116.8
70°	120.1	118.4	117.6	116.8	116.8	115.1	112.6	110.2	110.2	109.3	107.7
72.5°	110.2	109.3	108.5	107.7	106.8	106.0	103.5	102.7	101.0	100.2	98.6
75°	101.0	100.2	99.4	98.6	97.7	96.9	94.4	93.6	91.9	91.1	89.4
77.5°	91.1	90.3	90.3	88.6	88.6	87.8	85.3	84.5	82.8	83.6	80.3
80°	82.0	81.2	81.2	79.5	79.5	77.9	76.2	75.4	73.7	72.9	71.2
82.5°	73.7	72.9	72.1	71.2	71.2	69.6	67.9	66.3	65.4	64.6	62.9
85°	65.4	64.6	64.6	62.9	62.9	61.3	59.6	58.8	58.0	57.1	55.5
87.5°	58.8	58.0	57.1	56.3	56.3	55.5	53.0	52.2	51.3	50.5	48.9
90°	53.0	52.2	52.2	51.3	50.5	49.7	48.0	46.4	45.6	44.7	43.1
92.5°	50.5	49.7	49.7	47.2	46.4	43.9	40.6	37.3	34.0	32.3	32.3
95°	34.0	33.1	34.0	30.6	29.0	24.0	19.9	16.6	13.3	10.8	10.8
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



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**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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6
2.5°	232.7	235.2	231.1	233.6	236.0	234.4	236.0	232.7	231.9	231.1	231.9
5°	232.7	235.2	231.9	233.6	236.0	233.6	236.0	231.9	231.1	230.2	231.1
7.5°	232.7	235.2	231.1	232.7	236.0	232.7	234.4	231.1	229.4	228.6	228.6
10°	232.7	234.4	230.2	231.9	234.4	231.1	232.7	229.4	227.8	226.1	226.9
12.5°	231.1	232.7	229.4	230.2	232.7	229.4	231.1	226.9	225.3	224.4	224.4
15°	230.2	231.9	227.8	228.6	233.6	226.9	228.6	225.3	222.8	221.1	221.1
17.5°	227.8	223.6	225.3	226.1	228.6	224.4	226.1	222.0	220.3	218.6	217.8
20°	226.1	226.9	223.6	223.6	226.1	222.0	222.8	219.5	221.1	216.2	214.5
22.5°	223.6	223.6	220.3	220.3	223.6	218.6	219.5	216.2	213.7	212.0	211.2
25°	220.3	221.1	217.8	217.8	220.3	215.3	216.2	212.0	209.5	208.7	207.1
27.5°	217.0	217.0	213.7	213.7	216.2	211.2	211.2	207.9	205.4	204.6	202.9
30°	212.9	212.9	209.5	209.5	212.0	206.2	207.1	203.7	201.3	199.6	197.9
32.5°	207.9	207.9	205.4	204.6	207.1	202.1	202.1	198.8	199.6	194.6	193.0
35°	203.7	203.7	200.4	199.6	202.1	196.3	196.3	193.8	190.5	189.7	188.0
37.5°	198.8	197.9	195.5	194.6	196.3	190.5	191.3	188.0	185.5	183.9	182.2
40°	193.8	193.0	190.5	189.7	191.3	185.5	185.5	187.2	179.7	182.2	176.4
42.5°	187.2	187.2	184.7	183.0	184.7	178.9	179.7	176.4	173.1	172.3	169.8
45°	181.4	180.6	178.9	177.2	178.1	173.1	173.1	170.6	167.3	165.6	164.0
47.5°	175.6	174.8	171.4	170.6	171.4	166.5	166.5	164.0	160.7	159.8	157.4
50°	169.0	168.1	165.6	164.0	164.8	159.8	159.8	157.4	154.0	152.4	150.7
52.5°	161.5	160.7	158.2	156.5	157.4	152.4	152.4	149.9	149.1	144.9	143.3
55°	154.9	153.2	150.7	149.1	149.9	144.9	144.9	143.3	139.1	138.3	135.8
57.5°	147.4	145.8	143.3	141.6	142.5	137.5	137.5	135.0	131.7	130.0	128.4
60°	139.1	137.5	135.8	134.2	134.2	130.0	129.2	126.7	123.4	122.6	120.1
62.5°	130.9	129.2	127.5	125.9	125.9	121.7	120.9	119.3	115.9	114.3	111.8
65°	122.6	120.9	118.4	116.8	116.8	112.6	112.6	110.2	106.8	106.0	103.5
67.5°	113.5	112.6	110.2	108.5	108.5	104.4	103.5	101.9	98.6	96.9	95.2
70°	105.2	103.5	101.0	99.4	99.4	96.1	95.2	92.8	90.3	88.6	86.1
72.5°	96.1	94.4	91.9	91.1	90.3	87.0	86.1	85.3	81.2	80.3	77.9
75°	87.0	85.3	83.6	82.0	81.2	77.9	77.0	74.5	72.1	71.2	68.7
77.5°	77.9	76.2	74.5	72.9	72.1	68.7	67.9	66.3	63.8	62.1	60.5
80°	68.7	67.1	65.4	63.8	62.9	60.5	58.8	57.1	54.7	55.5	51.3
82.5°	61.3	58.8	57.1	55.5	54.7	52.2	50.5	48.9	46.4	45.6	43.9
85°	53.8	51.3	49.7	48.0	47.2	44.7	43.1	42.2	39.8	38.9	36.4
87.5°	47.2	44.7	43.9	42.2	40.6	38.1	37.3	35.6	33.1	32.3	30.6
90°	41.4	39.8	38.9	37.3	35.6	33.1	32.3	31.5	29.0	28.2	26.5
92.5°	32.3	33.1	33.1	32.3	33.1	31.5	30.6	29.8	28.2	26.5	24.8
95°	12.4	14.9	16.6	18.2	20.7	20.7	20.7	20.7	19.0	17.4	15.7
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: P130186

CATALOG NUMBER: HL612ICAT - 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: P130186

CATALOG NUMBER: HL612ICAT - HLM6930 - HL6FL - 71PS

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6
2.5°	234.4	229.4	229.4	231.9	230.2	233.6	232.7	232.7	231.9	231.1	226.1
5°	232.7	227.8	227.8	230.2	227.8	231.1	230.2	230.2	229.4	228.6	226.9
7.5°	231.1	226.1	225.3	227.8	225.3	228.6	227.8	226.9	226.1	225.3	223.6
10°	228.6	223.6	222.8	225.3	222.0	225.3	224.4	223.6	222.8	222.0	220.3
12.5°	226.1	221.1	220.3	222.0	219.5	222.8	222.0	221.1	220.3	218.6	217.0
15°	222.8	217.8	217.8	219.5	217.0	219.5	218.6	217.8	217.0	215.3	213.7
17.5°	220.3	214.5	214.5	216.2	212.9	216.2	214.5	213.7	212.9	212.0	209.5
20°	217.0	211.2	211.2	212.9	209.5	212.0	211.2	210.4	209.5	207.9	206.2
22.5°	212.9	207.9	207.1	208.7	205.4	207.9	207.1	206.2	205.4	204.6	202.9
25°	208.7	203.7	202.9	204.6	201.3	203.7	202.9	202.1	201.3	199.6	197.9
27.5°	204.6	199.6	198.8	200.4	197.1	199.6	198.8	197.1	196.3	195.5	193.8
30°	199.6	194.6	193.8	196.3	192.1	194.6	193.0	193.0	191.3	190.5	188.8
32.5°	194.6	189.7	188.8	190.5	187.2	189.7	188.0	192.1	185.5	184.7	183.0
35°	189.7	184.7	183.0	184.7	181.4	183.0	183.0	181.4	180.6	178.9	177.2
37.5°	183.0	178.9	178.1	178.9	175.6	177.2	176.4	175.6	174.8	173.9	171.4
40°	177.2	173.1	172.3	173.1	169.8	171.4	170.6	170.6	169.0	168.1	166.5
42.5°	171.4	166.5	165.6	166.5	164.0	164.8	164.0	164.0	162.3	161.5	159.8
45°	164.8	160.7	159.8	160.7	157.4	159.0	158.2	157.4	155.7	154.9	153.2
47.5°	158.2	154.0	153.2	154.0	150.7	152.4	151.6	150.7	149.1	148.2	146.6
50°	150.7	147.4	146.6	147.4	144.1	144.9	144.1	144.1	142.5	141.6	140.0
52.5°	144.1	140.0	139.1	140.0	136.7	137.5	137.5	136.7	135.0	134.2	133.3
55°	136.7	133.3	132.5	132.5	129.2	130.0	129.2	129.2	127.5	126.7	125.9
57.5°	129.2	125.1	124.2	124.2	121.7	122.6	121.7	121.7	120.1	119.3	117.6
60°	120.9	117.6	116.8	116.8	113.5	114.3	113.5	113.5	111.8	111.0	109.3
62.5°	112.6	109.3	108.5	108.5	105.2	106.0	106.0	105.2	103.5	102.7	101.9
65°	104.4	101.0	100.2	99.4	96.9	97.7	96.9	96.1	95.2	94.4	93.6
67.5°	95.2	92.8	93.6	91.1	88.6	88.6	88.6	87.8	86.1	86.1	85.3
70°	87.0	83.6	82.8	82.0	79.5	80.3	79.5	78.7	77.9	77.0	76.2
72.5°	77.9	75.4	73.7	73.7	71.2	71.2	71.2	70.4	68.7	68.7	67.9
75°	68.7	66.3	65.4	64.6	62.1	62.9	61.3	61.3	59.6	59.6	58.8
77.5°	59.6	57.1	57.1	55.5	53.8	53.8	53.0	53.0	52.2	51.3	50.5
80°	50.5	48.9	48.0	47.2	45.6	45.6	44.7	43.9	43.1	43.1	42.2
82.5°	43.1	41.4	40.6	38.9	38.1	37.3	37.3	36.4	35.6	35.6	34.8
85°	35.6	34.0	33.1	32.3	31.5	30.6	29.8	29.8	29.0	28.2	28.2
87.5°	29.8	29.0	28.2	27.3	25.7	25.7	24.8	24.8	24.0	23.2	22.4
90°	25.7	24.8	24.0	23.2	22.4	21.5	20.7	20.7	19.9	19.9	19.0
92.5°	23.2	20.7	18.2	17.4	14.9	14.9	14.1	14.9	14.9	15.7	16.6
95°	13.3	10.8	8.3	6.6	5.0	4.1	4.1	5.0	5.8	7.5	9.1
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: P130186

CATALOG NUMBER: HL612ICAT - 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: P130186

CATALOG NUMBER: HL612ICAT - HLM6930 - HL6FL - 71PS

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	233.6	233.6	233.6	233.6
2.5°	233.6	235.2	232.7	230.2
5°	231.1	232.7	230.2	227.8
7.5°	227.8	228.6	226.9	223.6
10°	224.4	225.3	222.8	220.3
12.5°	221.1	222.0	220.3	217.8
15°	217.8	218.6	216.2	213.7
17.5°	213.7	214.5	212.9	209.5
20°	209.5	211.2	208.7	206.2
22.5°	205.4	207.1	204.6	194.6
25°	201.3	202.1	200.4	197.9
27.5°	196.3	197.1	195.5	193.0
30°	191.3	192.1	190.5	188.0
32.5°	185.5	186.3	185.5	182.2
35°	179.7	180.6	178.9	176.4
37.5°	173.9	174.8	173.1	171.4
40°	168.1	169.0	167.3	164.8
42.5°	161.5	162.3	160.7	159.0
45°	154.9	155.7	154.0	152.4
47.5°	150.7	148.2	147.4	145.8
50°	141.6	141.6	140.8	138.3
52.5°	134.2	134.2	133.3	131.7
55°	128.4	126.7	125.9	124.2
57.5°	118.4	118.4	117.6	116.8
60°	111.0	110.2	110.2	108.5
62.5°	102.7	102.7	102.7	100.2
65°	93.6	94.4	93.6	91.9
67.5°	86.1	85.3	85.3	83.6
70°	77.0	76.2	76.2	74.5
72.5°	67.9	67.9	67.9	66.3
75°	58.8	58.8	58.8	58.0
77.5°	50.5	50.5	50.5	49.7
80°	42.2	42.2	41.4	41.4
82.5°	34.8	34.0	34.8	34.0
85°	28.2	27.3	28.2	27.3
87.5°	22.4	22.4	22.4	21.5
90°	19.0	19.0	19.0	19.0
92.5°	17.4	17.4	18.2	17.4
95°	9.9	9.9	9.9	9.9
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: P130186

CATALOG NUMBER: HL612ICAT - 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)