

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: P130232

Luminaire Tested: **HL612ICAT - HLM6935 - HL6NFL - ERT702**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130232  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33479)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HL612ICAT - HLM6935 - HL6NFL - ERT702  
Description: HALO ALLSLOPE 6" 21W, Drop Opal Plastic Lens, White Polymer Trim  
Ring "Dead Front", Wet Location - Showerlight using 25 Degree Optic at a  
6-12 Pitch  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1143.7 lumens  
Efficiency: N/A  
Efficacy: 59.9 lumens/watt  
Spacing Criteria (0/90/45): 1.5 / 0.84 / 1.15  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct

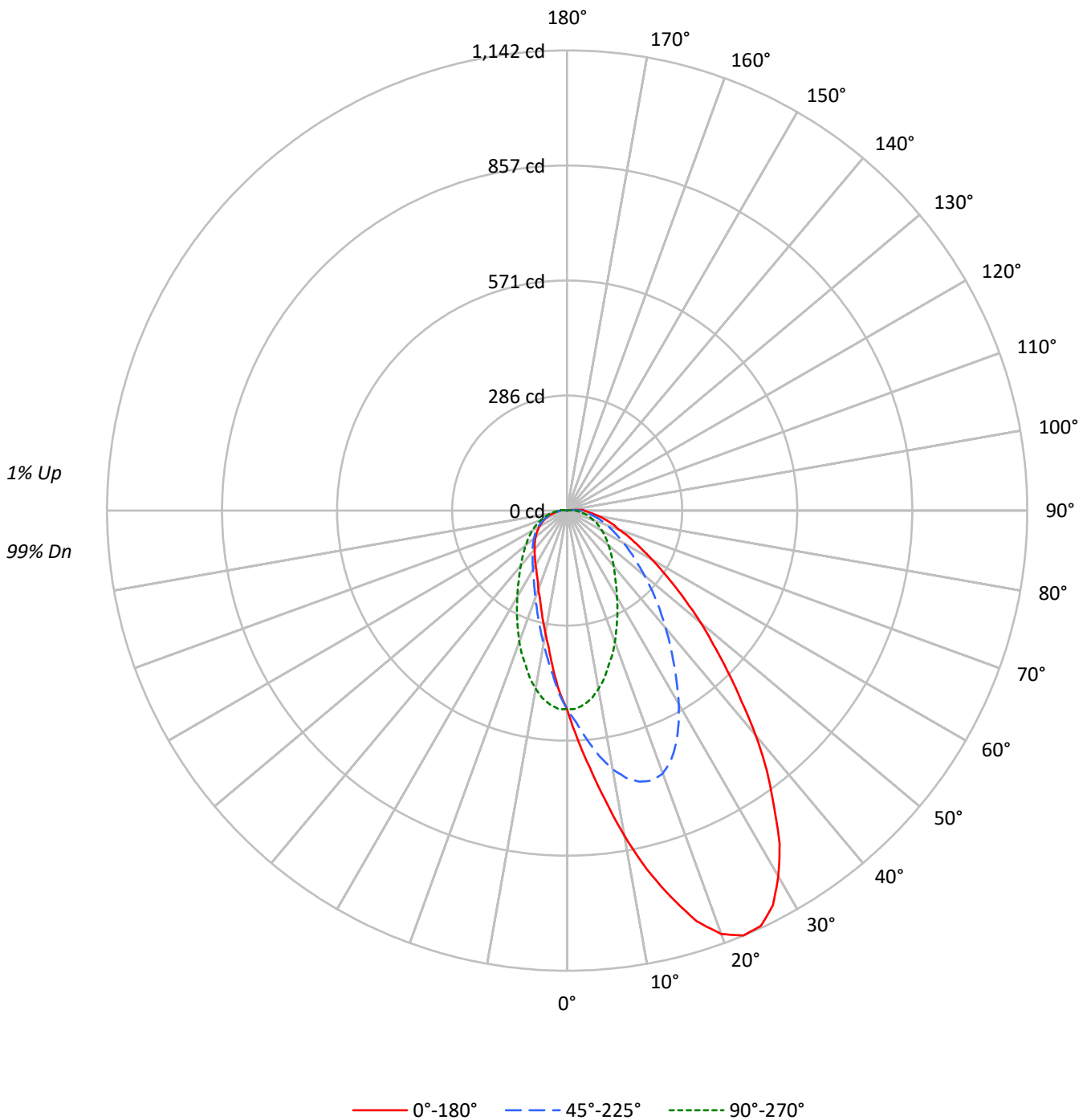
Input Watts (W): 19.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	106	106	106	101	101	101	99
1	109	104	100	96	106	102	98	94	97	94	91	93	90	88	89	87	85	83
2	100	92	85	80	97	90	84	79	86	81	77	83	78	75	79	76	73	71
3	91	81	74	67	89	80	73	67	77	71	65	74	69	64	71	67	63	61
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	64	59	55	53
5	78	66	57	51	76	65	57	51	63	55	50	60	54	49	59	53	49	47
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42
7	68	55	46	41	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34
9	59	46	39	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31
10	56	43	35	30	54	43	35	30	41	35	30	40	34	30	40	34	30	28

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

	0°	90°	180°
0°	29416	29416	29416
5°	37418	28289	23154
10°	47477	25997	17908
15°	57187	22903	14382
20°	64754	20081	12088
25°	66658	17223	10372
30°	62638	14748	9364
35°	54919	12822	8577
40°	46352	11430	8015
45°	37528	10291	7583
50°	30517	9451	7215
55°	24442	8759	6857
60°	19915	8167	6508
65°	16510	7594	6136
70°	13679	6961	5730
75°	12413	6485	5176
80°	10914	5677	4456
85°	9500	4954	3851



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	4.1
10°-20°	140.4	12.3
20°-30°	204.3	17.9
30°-40°	209.4	18.3
40°-50°	179.1	15.7
50°-60°	139.7	12.2
60°-70°	103.2	9.0
70°-80°	69.2	6.1
80°-90°	38.1	3.3
90°-100°	12.8	1.1
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°	392.1	34.3
0°-40°	601.5	52.6
0°-60°	920.4	80.5
0°-90°	1130.9	98.9
90°-120°	12.8	1.1
90°-150°	12.8	1.1
90°-180°	13.0	1.1
0°-180°	1143.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	493	493	493	493	493	
5°	639	572	483	409	395	67
15°	991	697	397	277	249	284
25°	1138	639	294	195	177	516
35°	894	460	209	149	140	558
45°	563	311	154	120	114	437
55°	324	201	116	96	91	294
65°	184	131	84	71	68	184
75°	107	82	56	46	45	114
85°	56	45	29	23	23	51
90°	42	33	21	17	16	23
95°	25	7	15	5	11	12
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°	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8
2.5°	564.3	543.2	553.7	548.9	548.9	546.4	539.1	547.2	540.7	526.9	526.9
5°	639.0	621.1	630.9	619.5	617.9	613.0	600.8	604.1	591.9	571.6	567.5
7.5°	725.0	701.5	710.4	697.4	692.6	682.8	664.1	661.7	641.4	614.6	602.4
10°	820.0	789.2	798.9	779.4	772.1	757.5	725.0	717.7	686.9	652.0	631.7
12.5°	911.0	880.1	885.0	863.1	846.0	823.3	783.5	766.4	727.5	679.6	652.0
15°	991.3	963.7	967.8	936.9	913.4	879.3	829.8	804.6	755.1	696.6	661.7
17.5°	1068.5	1034.4	1033.6	997.8	973.5	922.3	864.7	829.0	770.5	702.3	660.1
20°	1118.0	1083.9	1080.7	1035.2	1001.1	946.7	877.7	835.5	768.9	694.2	647.1
22.5°	1141.5	1107.4	1099.3	1049.8	1010.8	949.9	873.6	823.3	751.8	672.3	621.9
25°	1137.5	1102.6	1092.0	1039.2	997.0	930.4	870.4	795.7	721.0	639.0	588.6
27.5°	1105.0	1070.9	1057.9	1007.6	982.4	893.9	811.1	753.5	679.6	598.4	548.9
30°	1048.2	1017.3	1003.5	954.0	906.9	838.7	755.1	703.9	629.2	554.5	505.0
32.5°	981.6	947.5	933.7	886.6	840.3	777.8	699.1	647.9	578.1	506.6	463.6
35°	893.9	872.8	858.2	809.5	772.9	709.6	634.9	589.4	524.5	460.4	421.4
37.5°	814.3	790.0	774.6	732.3	698.2	640.6	575.6	534.2	476.6	419.8	382.4
40°	727.5	707.2	696.6	655.2	623.5	574.0	520.4	481.5	431.9	380.0	349.1
42.5°	639.8	623.5	617.9	582.1	555.3	513.1	466.0	432.7	388.9	344.3	315.0
45°	562.7	548.9	544.0	513.9	492.0	456.3	418.1	387.3	349.9	311.0	285.8
47.5°	492.0	482.3	476.6	450.6	433.6	404.3	367.8	345.1	312.6	279.3	258.2
50°	432.7	418.9	417.3	393.0	380.0	354.0	324.8	306.9	279.3	250.1	233.0
52.5°	374.3	362.1	359.7	341.8	334.5	311.0	288.2	271.2	250.1	224.1	210.3
55°	324.0	314.2	311.8	300.4	292.3	273.6	253.3	241.1	222.5	201.4	190.0
57.5°	280.9	272.8	270.4	260.6	255.8	240.3	228.1	214.3	198.1	181.1	171.3
60°	243.6	237.1	236.3	227.3	224.1	211.9	197.3	190.0	177.8	162.4	155.1
62.5°	210.3	207.0	206.2	199.7	197.3	186.7	175.4	170.5	159.1	146.1	139.6
65°	183.5	181.9	180.2	174.6	172.9	164.8	155.1	151.0	142.1	130.7	125.8
67.5°	160.8	159.1	158.3	153.5	151.8	146.1	138.8	134.0	127.5	117.7	113.7
70°	135.6	138.8	138.8	134.8	134.0	128.3	122.6	118.5	113.7	104.7	102.3
72.5°	123.4	121.0	121.0	117.7	116.9	113.7	107.2	104.7	100.7	93.4	90.9
75°	107.2	105.5	105.5	102.3	102.3	102.3	94.2	92.6	88.5	82.0	80.4
77.5°	92.6	90.9	90.9	88.5	88.5	86.1	81.2	80.4	78.8	71.4	70.6
80°	79.6	77.9	77.9	75.5	75.5	73.1	69.8	69.0	65.8	61.7	60.9
82.5°	66.6	65.8	65.8	64.1	64.1	61.7	59.3	58.5	56.0	52.8	51.2
85°	56.0	56.0	56.0	54.4	54.4	52.0	50.3	49.5	47.1	44.7	43.8
87.5°	47.9	47.9	47.1	45.5	46.3	44.7	42.2	42.2	40.6	38.2	37.3
90°	42.2	41.4	41.4	40.6	40.6	39.0	38.2	36.5	34.9	33.3	32.5
92.5°	38.2	38.2	38.2	36.5	35.7	33.3	30.9	28.4	26.0	23.5	22.7
95°	25.2	26.0	26.0	25.2	22.7	19.5	15.4	13.0	9.7	7.3	7.3
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°	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8
2.5°	519.6	519.6	522.9	505.0	505.0	503.4	496.9	492.8	480.7	478.2	474.2
5°	554.5	548.0	543.2	518.8	513.1	505.0	493.6	483.1	466.8	460.4	450.6
7.5°	582.1	566.7	557.0	526.9	513.9	500.9	483.1	469.3	448.2	437.6	426.3
10°	603.2	582.1	563.5	526.9	509.1	491.2	468.5	449.0	426.3	412.5	397.0
12.5°	615.4	585.4	561.8	518.8	486.3	473.3	448.2	426.3	401.1	386.5	369.4
15°	616.2	580.5	551.3	504.2	477.4	453.0	424.6	397.0	381.6	358.9	341.0
17.5°	608.1	567.5	534.2	483.9	454.7	427.1	398.6	374.3	349.1	332.1	314.2
20°	590.3	545.6	509.1	457.9	428.7	398.6	370.2	346.7	322.3	305.3	289.0
22.5°	561.8	518.0	479.8	428.7	400.3	371.0	343.4	319.1	296.3	280.1	264.7
25°	528.6	483.1	446.6	397.8	370.2	347.5	315.8	293.9	272.0	257.4	242.8
27.5°	489.6	446.6	411.6	365.4	340.2	314.2	288.2	269.6	249.3	236.3	223.3
30°	450.6	408.4	375.1	334.5	310.1	287.4	263.9	246.8	229.0	216.8	205.4
32.5°	413.3	374.3	343.4	306.1	284.2	263.1	242.8	227.3	211.9	201.4	191.6
35°	375.9	340.2	313.4	279.3	259.0	240.3	223.3	208.7	195.7	186.7	177.8
37.5°	343.4	310.1	285.0	255.8	237.9	220.8	206.2	193.2	181.1	172.9	164.8
40°	312.6	282.5	259.8	233.8	219.2	203.8	190.0	179.4	168.9	161.6	154.3
42.5°	284.2	258.2	237.9	214.3	200.5	189.2	176.2	166.4	156.7	151.0	145.3
45°	258.2	234.6	216.8	197.3	185.1	173.7	163.2	154.3	146.1	141.3	135.6
47.5°	233.8	213.5	199.7	181.9	171.3	160.8	151.0	143.7	137.2	132.3	127.5
50°	211.9	194.9	181.9	167.3	158.3	151.0	140.5	134.0	127.5	124.2	119.4
52.5°	192.4	177.0	166.4	152.6	145.3	138.0	130.7	125.0	118.5	116.1	112.0
55°	174.6	161.6	152.6	141.3	134.8	128.3	121.8	116.1	111.2	108.8	104.7
57.5°	158.3	147.0	139.6	129.1	123.4	118.5	112.0	108.0	103.1	100.7	98.2
60°	143.7	134.0	127.5	118.5	114.5	108.8	103.9	99.9	95.8	93.4	90.9
62.5°	130.7	121.8	116.1	108.8	104.7	99.9	95.8	92.6	88.5	86.9	84.4
65°	117.7	110.4	105.5	99.9	95.8	91.7	87.7	84.4	81.2	79.6	77.1
67.5°	106.4	100.7	96.6	90.9	86.9	84.4	80.4	77.9	74.7	73.1	70.6
70°	95.8	90.1	86.9	82.0	78.8	76.3	72.3	69.0	67.4	66.6	64.1
72.5°	85.3	80.4	77.1	73.1	70.6	68.2	65.0	62.5	60.9	61.7	57.6
75°	75.5	71.4	69.0	65.0	62.5	60.9	57.6	56.0	53.6	52.8	51.2
77.5°	65.8	62.5	60.1	56.8	55.2	52.8	50.3	48.7	46.3	46.3	43.8
80°	56.8	53.6	51.2	47.9	47.1	45.5	43.8	41.4	39.8	39.0	37.3
82.5°	48.7	46.3	43.8	41.4	39.8	38.2	36.5	34.9	33.3	32.5	30.9
85°	40.6	39.0	36.5	34.9	33.3	31.7	30.0	29.2	27.6	26.8	25.2
87.5°	34.9	33.3	31.7	30.0	28.4	26.8	25.2	24.4	22.7	22.7	21.1
90°	30.0	29.2	27.6	26.0	25.2	23.5	22.7	21.1	20.3	19.5	18.7
92.5°	22.7	23.5	22.7	22.7	22.7	21.9	21.1	20.3	19.5	18.7	17.9
95°	8.1	10.6	11.4	13.8	14.6	16.2	15.4	15.4	13.8	13.8	12.2
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: P130232

CATALOG NUMBER: HL612ICAT - HLM6935 - HL6NFL - ERT702

**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: P130232

CATALOG NUMBER: HL612ICAT - HLM6935 - HL6NFL - ERT702

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8
2.5°	466.8	468.5	466.8	462.0	458.7	454.7	453.0	447.4	450.6	444.9	448.2
5°	440.1	438.4	431.9	424.6	417.3	409.2	406.8	401.1	392.2	395.4	396.2
7.5°	410.8	406.0	397.0	388.1	380.8	371.0	367.0	358.1	357.2	352.4	352.4
10°	382.4	375.1	365.4	355.6	344.3	336.1	331.3	322.3	319.9	315.0	315.0
12.5°	353.2	344.3	333.7	324.0	313.4	303.7	298.8	290.7	287.4	283.4	280.9
15°	324.8	315.0	304.5	293.9	284.2	276.9	270.4	263.1	260.6	250.9	253.3
17.5°	298.0	289.9	278.5	268.7	259.8	251.7	246.0	239.5	236.3	232.2	231.4
20°	273.6	265.5	254.9	245.2	237.1	230.6	224.9	218.4	215.2	211.9	211.9
22.5°	250.1	242.8	233.8	224.9	222.5	211.1	206.2	199.7	198.9	194.9	194.0
25°	229.8	223.3	215.2	207.8	200.5	194.9	190.8	185.1	183.5	181.1	180.2
27.5°	211.9	205.4	198.9	192.4	185.9	181.9	177.0	172.9	171.3	168.9	168.1
30°	195.7	190.8	184.3	178.6	172.9	168.9	166.4	161.6	159.9	158.3	157.5
32.5°	182.7	177.8	172.1	168.1	162.4	159.1	156.7	152.6	151.0	149.4	149.4
35°	169.7	165.6	160.8	156.7	152.6	149.4	147.0	143.7	142.9	140.5	141.3
37.5°	158.3	155.1	151.0	147.8	143.7	141.3	138.8	135.6	134.8	134.0	134.0
40°	148.6	146.1	142.1	136.4	135.6	133.2	131.5	128.3	128.3	126.7	126.7
42.5°	139.6	137.2	134.0	131.5	128.3	126.7	125.0	122.6	121.8	120.2	121.0
45°	131.5	129.1	126.7	125.0	121.0	120.2	118.5	116.1	115.3	113.7	114.5
47.5°	123.4	121.8	120.2	117.7	115.3	113.7	112.0	109.6	109.6	108.0	108.8
50°	116.1	114.5	112.9	111.2	108.0	107.2	106.4	103.9	103.1	102.3	103.1
52.5°	108.8	108.0	106.4	104.7	102.3	101.5	99.9	98.2	97.4	96.6	97.4
55°	102.3	101.5	99.9	98.2	95.8	95.8	94.2	92.6	91.7	90.9	91.7
57.5°	95.0	95.0	93.4	92.6	90.1	89.3	88.5	86.1	86.1	85.3	86.1
60°	89.3	88.5	89.3	86.1	83.6	82.8	82.0	80.4	80.4	79.6	80.4
62.5°	82.0	82.0	81.2	80.4	77.9	77.9	76.3	74.7	74.7	73.9	74.7
65°	75.5	75.5	74.7	73.9	72.3	71.4	70.6	69.0	69.0	68.2	69.0
67.5°	69.8	69.0	68.2	67.4	65.8	65.8	64.1	63.3	62.5	62.5	63.3
70°	63.3	62.5	62.5	60.9	60.1	59.3	58.5	57.6	56.8	56.0	56.8
72.5°	56.8	56.0	56.0	55.2	53.6	52.8	52.0	51.2	51.2	50.3	51.2
75°	50.3	49.5	49.5	47.9	47.1	46.3	45.5	44.7	44.7	44.7	44.7
77.5°	43.0	43.0	42.2	41.4	40.6	39.8	39.8	39.0	38.2	38.2	39.0
80°	36.5	36.5	35.7	34.9	34.1	34.1	33.3	32.5	32.5	31.7	32.5
82.5°	30.0	30.0	29.2	29.2	27.6	28.4	27.6	26.8	26.8	26.8	26.8
85°	25.2	24.4	23.5	23.5	22.7	22.7	22.7	21.9	21.9	21.9	21.9
87.5°	20.3	20.3	19.5	19.5	18.7	18.7	18.7	18.7	17.9	17.9	18.7
90°	17.9	17.9	17.9	17.1	17.1	17.1	17.1	16.2	16.2	16.2	16.2
92.5°	17.1	16.2	15.4	14.6	13.0	13.0	13.0	13.8	13.8	14.6	15.4
95°	10.6	8.9	7.3	5.7	4.9	4.9	4.1	5.7	6.5	8.1	9.7
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: P130232

CATALOG NUMBER: HL612ICAT - HLM6935 - HL6NFL - ERT702

**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: P130232

CATALOG NUMBER: HL612ICAT - HLM6935 - HL6NFL - ERT702

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	492.8	492.8	492.8	492.8
2.5°	450.6	441.7	436.8	449.0
5°	396.2	388.1	381.6	395.4
7.5°	350.7	345.9	339.4	345.9
10°	313.4	301.2	300.4	309.3
12.5°	280.1	273.6	269.6	277.7
15°	252.5	246.8	242.8	249.3
17.5°	230.6	225.7	220.8	225.7
20°	210.3	205.4	201.4	208.7
22.5°	193.2	190.0	185.1	190.0
25°	179.4	176.2	172.1	177.0
27.5°	168.1	164.8	161.6	165.6
30°	157.5	155.1	151.8	156.7
32.5°	148.6	143.7	143.7	147.8
35°	140.5	138.8	135.6	139.6
37.5°	133.2	131.5	129.1	132.3
40°	126.7	125.0	122.6	125.8
42.5°	119.4	119.4	116.1	119.4
45°	114.5	112.9	110.4	113.7
47.5°	108.8	107.2	104.7	108.0
50°	103.1	101.5	99.9	102.3
52.5°	97.4	96.6	93.4	96.6
55°	91.7	90.9	88.5	90.9
57.5°	86.1	85.3	82.8	85.3
60°	80.4	79.6	77.9	79.6
62.5°	74.7	73.9	72.3	73.9
65°	69.0	68.2	66.6	68.2
67.5°	62.5	62.5	60.9	62.5
70°	56.8	56.8	55.2	56.8
72.5°	51.2	51.2	49.5	51.2
75°	45.5	44.7	43.0	44.7
77.5°	39.0	38.2	38.2	38.2
80°	32.5	32.5	31.7	32.5
82.5°	26.8	26.8	26.0	26.8
85°	21.9	21.9	21.1	22.7
87.5°	18.7	18.7	17.9	17.9
90°	16.2	16.2	16.2	16.2
92.5°	15.4	15.4	15.4	15.4
95°	10.6	11.4	10.6	10.6
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: P130232

CATALOG NUMBER: HL612ICAT - HLM6935 - HL6NFL - ERT702

**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)