

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: P130096

Luminaire Tested: **HL618TAT - HLM6930 - HL6NFL - ERT702**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130096
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: HL618TAT - HLM6930 - HL6NFL - ERT702
Description: HALO ALLSLOPE 6" 30W, 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 / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1503.2 lumens
Efficiency: N/A
Efficacy: 54.5 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

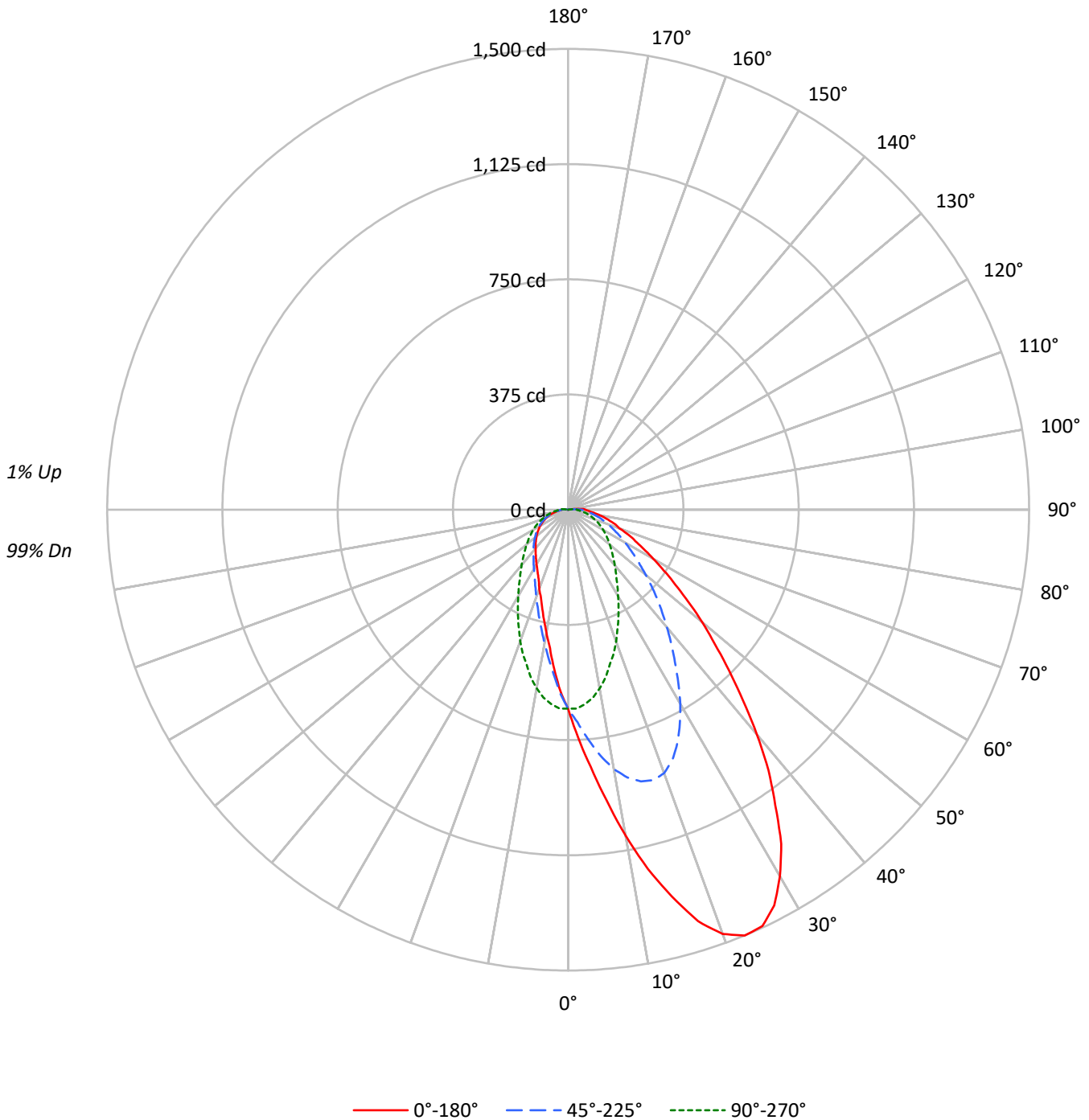
Input Watts (W): 27.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	38668	38668	38668
5°	49176	37184	30432
10°	62403	34166	23542
15°	75169	30102	18899
20°	85113	26394	15887
25°	87613	22637	13630
30°	82328	19385	12310
35°	72183	16852	11274
40°	60924	15024	10538
45°	49320	13525	9964
50°	40116	12420	9486
55°	32122	11512	9015
60°	26170	10734	8552
65°	21701	9987	8061
70°	17976	9150	7536
75°	16316	8523	6797
80°	14342	7459	5855
85°	12486	6514	5072



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.3	4.1
10°-20°	184.6	12.3
20°-30°	268.5	17.9
30°-40°	275.3	18.3
40°-50°	235.4	15.7
50°-60°	183.7	12.2
60°-70°	135.7	9.0
70°-80°	91.0	6.1
80°-90°	50.1	3.3
90°-100°	16.8	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°	515.4	34.3
0°-40°	790.6	52.6
0°-60°	1209.7	80.5
0°-90°	1486.5	98.9
90°-120°	16.8	1.1
90°-150°	16.8	1.1
90°-180°	17.0	1.1
0°-180°	1503.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	648	648	648	648	648	
5°	840	751	635	538	520	87
15°	1303	916	522	364	328	373
25°	1495	840	386	256	233	678
35°	1175	605	274	196	184	733
45°	740	409	203	158	149	575
55°	426	265	153	126	120	386
65°	241	172	111	94	90	242
75°	141	108	74	61	59	149
85°	74	59	38	30	30	67
90°	56	44	28	22	21	31
95°	33	10	20	6	14	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°	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8
2.5°	741.7	713.9	727.8	721.4	721.4	718.2	708.6	719.3	710.7	692.6	692.6
5°	839.8	816.4	829.2	814.2	812.1	805.7	789.7	794.0	778.0	751.3	745.9
7.5°	953.0	922.0	933.8	916.7	910.3	897.5	872.9	869.7	843.0	807.8	791.8
10°	1077.8	1037.3	1050.1	1024.5	1014.9	995.7	953.0	943.4	902.8	856.9	830.2
12.5°	1197.3	1156.8	1163.2	1134.4	1112.0	1082.1	1029.8	1007.4	956.2	893.2	856.9
15°	1303.0	1266.7	1272.0	1231.5	1200.5	1155.7	1090.6	1057.5	992.4	915.6	869.7
17.5°	1404.4	1359.5	1358.5	1311.5	1279.5	1212.3	1136.5	1089.6	1012.7	923.1	867.6
20°	1469.5	1424.6	1420.4	1360.6	1315.8	1244.3	1153.6	1098.1	1010.6	912.4	850.5
22.5°	1500.4	1455.6	1444.9	1379.8	1328.6	1248.6	1148.3	1082.1	988.2	883.6	817.4
25°	1495.1	1449.2	1435.3	1366.0	1310.5	1223.0	1144.0	1045.8	947.6	839.8	773.7
27.5°	1452.4	1407.6	1390.5	1324.3	1291.3	1174.9	1066.1	990.3	893.2	786.5	721.4
30°	1377.7	1337.1	1319.0	1253.9	1192.0	1102.4	992.4	925.2	827.0	728.9	663.8
32.5°	1290.2	1245.4	1227.2	1165.3	1104.5	1022.3	918.8	851.6	759.8	665.9	609.3
35°	1174.9	1147.2	1128.0	1063.9	1015.9	932.7	834.5	774.8	689.4	605.1	553.9
37.5°	1070.4	1038.3	1018.1	962.6	917.7	842.0	756.6	702.2	626.4	551.7	502.6
40°	956.2	929.5	915.6	861.2	819.6	754.5	684.0	632.8	567.7	499.4	458.9
42.5°	840.9	819.6	812.1	765.1	729.9	674.4	612.5	568.8	511.2	452.5	414.1
45°	739.5	721.4	715.0	675.5	646.7	599.7	549.6	509.0	459.9	408.7	375.6
47.5°	646.7	633.9	626.4	592.3	569.9	531.4	483.4	453.5	410.9	367.1	339.4
50°	568.8	550.6	548.5	516.5	499.4	465.3	426.9	403.4	367.1	328.7	306.3
52.5°	492.0	475.9	472.7	449.3	439.7	408.7	378.8	356.4	328.7	294.5	276.4
55°	425.8	413.0	409.8	394.8	384.2	359.6	333.0	316.9	292.4	264.7	249.7
57.5°	369.2	358.6	355.4	342.6	336.2	315.9	299.9	281.7	260.4	238.0	225.2
60°	320.1	311.6	310.5	298.8	294.5	278.5	259.3	249.7	233.7	213.4	203.8
62.5°	276.4	272.1	271.1	262.5	259.3	245.4	230.5	224.1	209.2	192.1	183.5
65°	241.2	239.0	236.9	229.4	227.3	216.6	203.8	198.5	186.8	171.8	165.4
67.5°	211.3	209.2	208.1	201.7	199.6	192.1	182.5	176.1	167.5	154.7	149.4
70°	178.2	182.5	182.5	177.1	176.1	168.6	161.1	155.8	149.4	137.7	134.5
72.5°	162.2	159.0	159.0	154.7	153.7	149.4	140.9	137.7	132.3	122.7	119.5
75°	140.9	138.7	138.7	134.5	134.5	134.5	123.8	121.7	116.3	107.8	105.6
77.5°	121.7	119.5	119.5	116.3	116.3	113.1	106.7	105.6	103.5	93.9	92.8
80°	104.6	102.4	102.4	99.2	99.2	96.0	91.8	90.7	86.4	81.1	80.0
82.5°	87.5	86.4	86.4	84.3	84.3	81.1	77.9	76.8	73.6	69.4	67.2
85°	73.6	73.6	73.6	71.5	71.5	68.3	66.2	65.1	61.9	58.7	57.6
87.5°	63.0	63.0	61.9	59.8	60.8	58.7	55.5	55.5	53.4	50.2	49.1
90°	55.5	54.4	54.4	53.4	53.4	51.2	50.2	48.0	45.9	43.8	42.7
92.5°	50.2	50.2	50.2	48.0	47.0	43.8	40.6	37.4	34.1	30.9	29.9
95°	33.1	34.1	34.1	33.1	29.9	25.6	20.3	17.1	12.8	9.6	9.6
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°	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8
2.5°	683.0	683.0	687.2	663.8	663.8	661.6	653.1	647.8	631.8	628.6	623.2
5°	728.9	720.3	713.9	681.9	674.4	663.8	648.8	635.0	613.6	605.1	592.3
7.5°	765.1	744.9	732.1	692.6	675.5	658.4	635.0	616.8	589.1	575.2	560.3
10°	792.9	765.1	740.6	692.6	669.1	645.6	615.7	590.1	560.3	542.1	521.8
12.5°	808.9	769.4	738.5	681.9	639.2	622.1	589.1	560.3	527.2	508.0	485.6
15°	810.0	763.0	724.6	662.7	627.5	595.5	558.1	521.8	501.6	471.7	448.2
17.5°	799.3	745.9	702.2	636.0	597.6	561.3	524.0	492.0	458.9	436.5	413.0
20°	775.8	717.1	669.1	601.9	563.5	524.0	486.6	455.7	423.7	401.2	379.9
22.5°	738.5	680.8	630.7	563.5	526.1	487.7	451.4	419.4	389.5	368.2	347.9
25°	694.7	635.0	586.9	522.9	486.6	456.7	415.1	386.3	357.5	338.3	319.1
27.5°	643.5	586.9	541.0	480.2	447.1	413.0	378.8	354.3	327.6	310.5	293.5
30°	592.3	536.8	493.0	439.7	407.7	377.8	346.8	324.4	300.9	284.9	270.0
32.5°	543.2	492.0	451.4	402.3	373.5	345.8	319.1	298.8	278.5	264.7	251.8
35°	494.1	447.1	411.9	367.1	340.4	315.9	293.5	274.3	257.2	245.4	233.7
37.5°	451.4	407.7	374.6	336.2	312.7	290.3	271.1	254.0	238.0	227.3	216.6
40°	410.9	371.4	341.5	307.3	288.1	267.9	249.7	235.8	222.0	212.4	202.8
42.5°	373.5	339.4	312.7	281.7	263.6	248.6	231.6	218.8	206.0	198.5	191.0
45°	339.4	308.4	284.9	259.3	243.3	228.4	214.5	202.8	192.1	185.7	178.2
47.5°	307.3	280.7	262.5	239.0	225.2	211.3	198.5	188.9	180.3	173.9	167.5
50°	278.5	256.1	239.0	219.8	208.1	198.5	184.6	176.1	167.5	163.3	156.9
52.5°	252.9	232.6	218.8	200.6	191.0	181.4	171.8	164.3	155.8	152.6	147.3
55°	229.4	212.4	200.6	185.7	177.1	168.6	160.1	152.6	146.2	143.0	137.7
57.5°	208.1	193.2	183.5	169.7	162.2	155.8	147.3	141.9	135.5	132.3	129.1
60°	188.9	176.1	167.5	155.8	150.5	143.0	136.6	131.3	125.9	122.7	119.5
62.5°	171.8	160.1	152.6	143.0	137.7	131.3	125.9	121.7	116.3	114.2	111.0
65°	154.7	145.1	138.7	131.3	125.9	120.6	115.3	111.0	106.7	104.6	101.4
67.5°	139.8	132.3	127.0	119.5	114.2	111.0	105.6	102.4	98.2	96.0	92.8
70°	125.9	118.5	114.2	107.8	103.5	100.3	95.0	90.7	88.6	87.5	84.3
72.5°	112.1	105.6	101.4	96.0	92.8	89.6	85.4	82.2	80.0	81.1	75.8
75°	99.2	93.9	90.7	85.4	82.2	80.0	75.8	73.6	70.4	69.4	67.2
77.5°	86.4	82.2	79.0	74.7	72.6	69.4	66.2	64.0	60.8	60.8	57.6
80°	74.7	70.4	67.2	63.0	61.9	59.8	57.6	54.4	52.3	51.2	49.1
82.5°	64.0	60.8	57.6	54.4	52.3	50.2	48.0	45.9	43.8	42.7	40.6
85°	53.4	51.2	48.0	45.9	43.8	41.6	39.5	38.4	36.3	35.2	33.1
87.5°	45.9	43.8	41.6	39.5	37.4	35.2	33.1	32.0	29.9	29.9	27.7
90°	39.5	38.4	36.3	34.1	33.1	30.9	29.9	27.7	26.7	25.6	24.5
92.5°	29.9	30.9	29.9	29.9	29.9	28.8	27.7	26.7	25.6	24.5	23.5
95°	10.7	13.9	14.9	18.1	19.2	21.3	20.3	20.3	18.1	18.1	16.0
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: P130096

CATALOG NUMBER: HL618TAT - HLM6930 - 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: P130096

CATALOG NUMBER: HL618TAT - HLM6930 - HL6NFL - ERT702

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8	647.8
2.5°	613.6	615.7	613.6	607.2	602.9	597.6	595.5	588.0	592.3	584.8	589.1
5°	578.4	576.3	567.7	558.1	548.5	537.8	534.6	527.2	515.4	519.7	520.8
7.5°	540.0	533.6	521.8	510.1	500.5	487.7	482.4	470.6	469.5	463.1	463.1
10°	502.6	493.0	480.2	467.4	452.5	441.8	435.4	423.7	420.5	414.1	414.1
12.5°	464.2	452.5	438.6	425.8	411.9	399.1	392.7	382.0	377.8	372.4	369.2
15°	426.9	414.1	400.2	386.3	373.5	363.9	355.4	345.8	342.6	329.7	333.0
17.5°	391.6	381.0	366.0	353.2	341.5	330.8	323.3	314.8	310.5	305.2	304.1
20°	359.6	349.0	335.1	322.3	311.6	303.1	295.6	287.1	282.8	278.5	278.5
22.5°	328.7	319.1	307.3	295.6	292.4	277.5	271.1	262.5	261.5	256.1	255.0
25°	302.0	293.5	282.8	273.2	263.6	256.1	250.8	243.3	241.2	238.0	236.9
27.5°	278.5	270.0	261.5	252.9	244.4	239.0	232.6	227.3	225.2	222.0	220.9
30°	257.2	250.8	242.2	234.8	227.3	222.0	218.8	212.4	210.2	208.1	207.0
32.5°	240.1	233.7	226.2	220.9	213.4	209.2	206.0	200.6	198.5	196.4	196.4
35°	223.0	217.7	211.3	206.0	200.6	196.4	193.2	188.9	187.8	184.6	185.7
37.5°	208.1	203.8	198.5	194.2	188.9	185.7	182.5	178.2	177.1	176.1	176.1
40°	195.3	192.1	186.8	179.3	178.2	175.0	172.9	168.6	168.6	166.5	166.5
42.5°	183.5	180.3	176.1	172.9	168.6	166.5	164.3	161.1	160.1	157.9	159.0
45°	172.9	169.7	166.5	164.3	159.0	157.9	155.8	152.6	151.5	149.4	150.5
47.5°	162.2	160.1	157.9	154.7	151.5	149.4	147.3	144.1	144.1	141.9	143.0
50°	152.6	150.5	148.3	146.2	141.9	140.9	139.8	136.6	135.5	134.5	135.5
52.5°	143.0	141.9	139.8	137.7	134.5	133.4	131.3	129.1	128.1	127.0	128.1
55°	134.5	133.4	131.3	129.1	125.9	125.9	123.8	121.7	120.6	119.5	120.6
57.5°	124.9	124.9	122.7	121.7	118.5	117.4	116.3	113.1	113.1	112.1	113.1
60°	117.4	116.3	117.4	113.1	109.9	108.8	107.8	105.6	105.6	104.6	105.6
62.5°	107.8	107.8	106.7	105.6	102.4	102.4	100.3	98.2	98.2	97.1	98.2
65°	99.2	99.2	98.2	97.1	95.0	93.9	92.8	90.7	90.7	89.6	90.7
67.5°	91.8	90.7	89.6	88.6	86.4	86.4	84.3	83.2	82.2	82.2	83.2
70°	83.2	82.2	82.2	80.0	79.0	77.9	76.8	75.8	74.7	73.6	74.7
72.5°	74.7	73.6	73.6	72.6	70.4	69.4	68.3	67.2	67.2	66.2	67.2
75°	66.2	65.1	65.1	63.0	61.9	60.8	59.8	58.7	58.7	58.7	58.7
77.5°	56.6	56.6	55.5	54.4	53.4	52.3	52.3	51.2	50.2	50.2	51.2
80°	48.0	48.0	47.0	45.9	44.8	44.8	43.8	42.7	42.7	41.6	42.7
82.5°	39.5	39.5	38.4	38.4	36.3	37.4	36.3	35.2	35.2	35.2	35.2
85°	33.1	32.0	30.9	30.9	29.9	29.9	29.9	28.8	28.8	28.8	28.8
87.5°	26.7	26.7	25.6	25.6	24.5	24.5	24.5	24.5	23.5	23.5	24.5
90°	23.5	23.5	23.5	22.4	22.4	22.4	22.4	21.3	21.3	21.3	21.3
92.5°	22.4	21.3	20.3	19.2	17.1	17.1	17.1	18.1	18.1	19.2	20.3
95°	13.9	11.7	9.6	7.5	6.4	6.4	5.3	7.5	8.5	10.7	12.8
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



TEST NUMBER: P130096

CATALOG NUMBER: HL618TAT - HLM6930 - 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: P130096

CATALOG NUMBER: HL618TAT - HLM6930 - HL6NFL - ERT702

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	647.8	647.8	647.8	647.8
2.5°	592.3	580.5	574.1	590.1
5°	520.8	510.1	501.6	519.7
7.5°	461.0	454.6	446.1	454.6
10°	411.9	395.9	394.8	406.6
12.5°	368.2	359.6	354.3	365.0
15°	331.9	324.4	319.1	327.6
17.5°	303.1	296.7	290.3	296.7
20°	276.4	270.0	264.7	274.3
22.5°	254.0	249.7	243.3	249.7
25°	235.8	231.6	226.2	232.6
27.5°	220.9	216.6	212.4	217.7
30°	207.0	203.8	199.6	206.0
32.5°	195.3	188.9	188.9	194.2
35°	184.6	182.5	178.2	183.5
37.5°	175.0	172.9	169.7	173.9
40°	166.5	164.3	161.1	165.4
42.5°	156.9	156.9	152.6	156.9
45°	150.5	148.3	145.1	149.4
47.5°	143.0	140.9	137.7	141.9
50°	135.5	133.4	131.3	134.5
52.5°	128.1	127.0	122.7	127.0
55°	120.6	119.5	116.3	119.5
57.5°	113.1	112.1	108.8	112.1
60°	105.6	104.6	102.4	104.6
62.5°	98.2	97.1	95.0	97.1
65°	90.7	89.6	87.5	89.6
67.5°	82.2	82.2	80.0	82.2
70°	74.7	74.7	72.6	74.7
72.5°	67.2	67.2	65.1	67.2
75°	59.8	58.7	56.6	58.7
77.5°	51.2	50.2	50.2	50.2
80°	42.7	42.7	41.6	42.7
82.5°	35.2	35.2	34.1	35.2
85°	28.8	28.8	27.7	29.9
87.5°	24.5	24.5	23.5	23.5
90°	21.3	21.3	21.3	21.3
92.5°	20.3	20.3	20.3	20.3
95°	13.9	14.9	13.9	13.9
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: P130096

CATALOG NUMBER: HL618TAT - HLM6930 - 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)