

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: P130097

Luminaire Tested: **HL618TAT - HLM6935 - HL6NFL - ERT702**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130097
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 - HLM6935 - 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 / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1568.9 lumens
Efficiency: N/A
Efficacy: 56.8 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

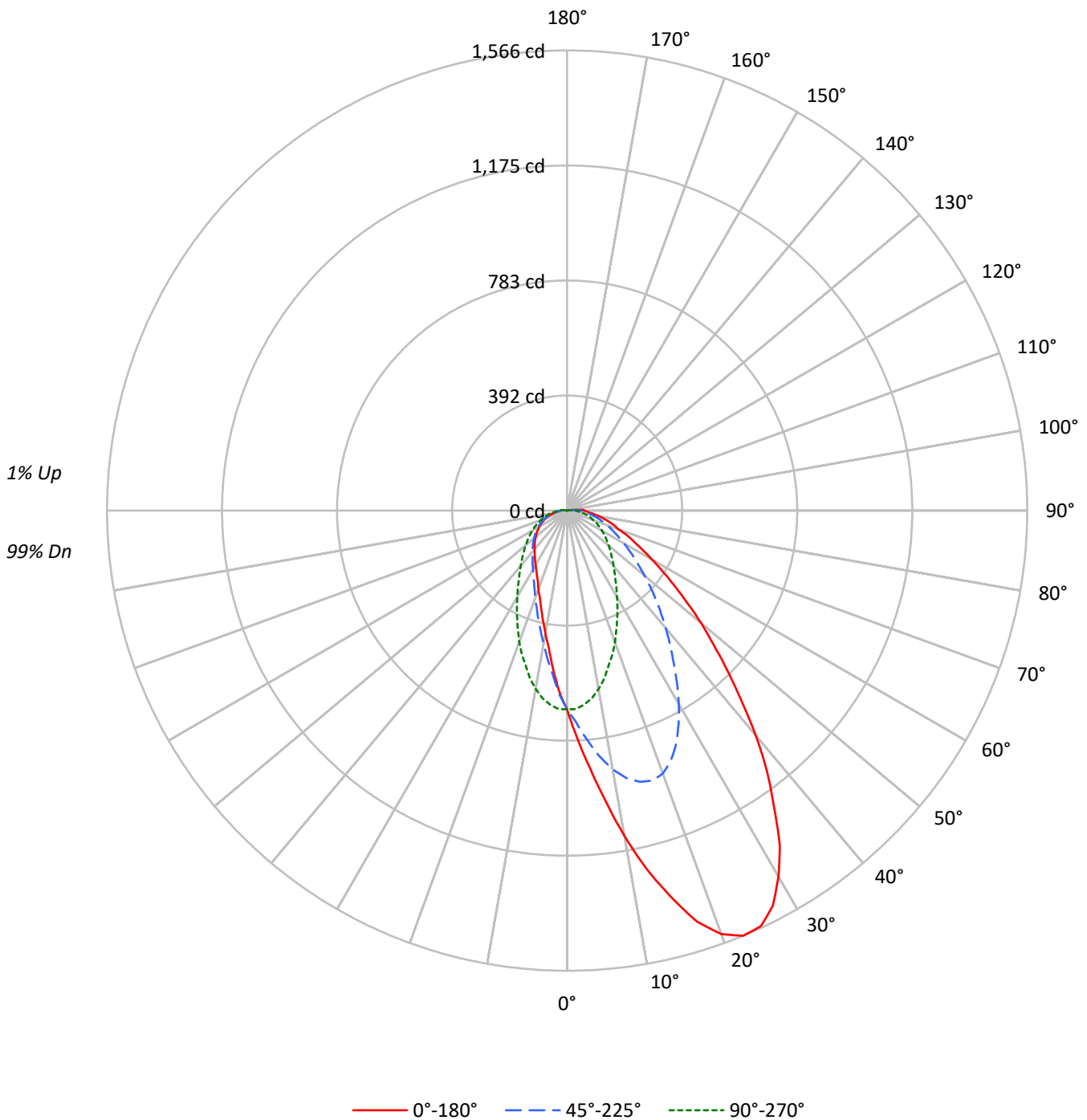
Input Watts (W): 27.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130097

CATALOG NUMBER: HL618TAT - HLM6935 - HL6NFL - ERT702

Luminous Intensity Polar Plot





TEST NUMBER: P130097

CATALOG NUMBER: HL618TAT - HLM6935 - HL6NFL - ERT702

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°	40357	40357	40357
5°	51326	38806	31762
10°	65130	35660	24566
15°	78451	31417	19724
20°	88832	27547	16577
25°	91440	23628	14228
30°	85925	20234	12848
35°	75341	17584	11771
40°	63581	15680	10997
45°	51474	14112	10398
50°	41865	12963	9895
55°	33525	12017	9407
60°	27314	11200	8919
65°	22646	10419	8421
70°	18763	9553	7868
75°	17022	8893	7098
80°	14959	7788	6115
85°	13028	6803	5293



TEST NUMBER: P130097

CATALOG NUMBER: HL618TAT - HLM6935 - HL6NFL - ERT702

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	4.1
10°-20°	192.6	12.3
20°-30°	280.2	17.9
30°-40°	287.3	18.3
40°-50°	245.7	15.7
50°-60°	191.7	12.2
60°-70°	141.6	9.0
70°-80°	95.0	6.1
80°-90°	52.3	3.3
90°-100°	17.5	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°	537.9	34.3
0°-40°	825.2	52.6
0°-60°	1262.5	80.5
0°-90°	1551.4	98.9
90°-120°	17.5	1.1
90°-150°	17.5	1.1
90°-180°	17.0	1.1
0°-180°	1568.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	676	676	676	676	676	
5°	876	784	663	561	542	91
15°	1360	956	545	380	342	389
25°	1560	876	403	267	243	708
35°	1226	632	286	205	192	765
45°	772	427	212	165	156	600
55°	444	276	159	131	125	403
65°	252	179	116	98	94	252
75°	147	112	77	64	61	156
85°	77	61	40	31	31	70
90°	58	46	29	23	22	32
95°	34	10	21	7	14	17
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: P130097

CATALOG NUMBER: HL618TAT - HLM6935 - HL6NFL - ERT702

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1
2.5°	774.1	745.1	759.6	752.9	752.9	749.6	739.5	750.7	741.8	722.8	722.8
5°	876.5	852.0	865.4	849.8	847.6	840.9	824.2	828.6	811.9	784.1	778.5
7.5°	994.6	962.3	974.5	956.7	950.0	936.7	911.1	907.7	879.9	843.1	826.4
10°	1124.9	1082.6	1095.9	1069.2	1059.2	1039.1	994.6	984.6	942.2	894.4	866.5
12.5°	1249.6	1207.3	1214.0	1183.9	1160.5	1129.4	1074.8	1051.4	997.9	932.2	894.4
15°	1359.9	1322.0	1327.6	1285.3	1253.0	1206.2	1138.3	1103.7	1035.8	955.6	907.7
17.5°	1465.7	1418.9	1417.8	1368.8	1335.4	1265.2	1186.2	1137.2	1057.0	963.4	905.5
20°	1533.7	1486.9	1482.4	1420.1	1373.3	1298.7	1204.0	1146.1	1054.7	952.3	887.7
22.5°	1566.0	1519.2	1508.0	1440.1	1386.6	1303.1	1198.4	1129.4	1031.3	922.2	853.1
25°	1560.4	1512.5	1498.0	1425.6	1367.7	1276.4	1194.0	1091.5	989.0	876.5	807.5
27.5°	1515.8	1469.1	1451.2	1382.2	1347.7	1226.3	1112.7	1033.6	932.2	820.8	752.9
30°	1437.9	1395.6	1376.6	1308.7	1244.1	1150.5	1035.8	965.6	863.2	760.7	692.8
32.5°	1346.5	1299.8	1280.8	1216.2	1152.7	1067.0	959.0	888.8	793.0	695.0	636.0
35°	1226.3	1197.3	1177.3	1110.4	1060.3	973.4	871.0	808.6	719.5	631.5	578.0
37.5°	1117.1	1083.7	1062.5	1004.6	957.8	878.8	789.7	732.9	653.8	575.8	524.6
40°	997.9	970.1	955.6	898.8	855.4	787.4	713.9	660.5	592.5	521.2	478.9
42.5°	877.6	855.4	847.6	798.6	761.8	703.9	639.3	593.6	533.5	472.2	432.1
45°	771.8	752.9	746.2	705.0	674.9	625.9	573.6	531.3	480.0	426.6	392.0
47.5°	674.9	661.6	653.8	618.1	594.8	554.7	504.5	473.4	428.8	383.1	354.2
50°	593.6	574.7	572.5	539.1	521.2	485.6	445.5	421.0	383.1	343.0	319.7
52.5°	513.4	496.7	493.4	468.9	458.9	426.6	395.4	372.0	343.0	307.4	288.5
55°	444.4	431.0	427.7	412.1	401.0	375.3	347.5	330.8	305.2	276.2	260.6
57.5°	385.4	374.2	370.9	357.5	350.8	329.7	313.0	294.0	271.8	248.4	235.0
60°	334.1	325.2	324.1	311.9	307.4	290.7	270.6	260.6	243.9	222.8	212.7
62.5°	288.5	284.0	282.9	274.0	270.6	256.2	240.6	233.9	218.3	200.5	191.6
65°	251.7	249.5	247.3	239.5	237.2	226.1	212.7	207.2	194.9	179.3	172.6
67.5°	220.5	218.3	217.2	210.5	208.3	200.5	190.5	183.8	174.9	161.5	155.9
70°	186.0	190.5	190.5	184.9	183.8	176.0	168.2	162.6	155.9	143.7	140.3
72.5°	169.3	166.0	166.0	161.5	160.4	155.9	147.0	143.7	138.1	128.1	124.7
75°	147.0	144.8	144.8	140.3	140.3	140.3	129.2	127.0	121.4	112.5	110.3
77.5°	127.0	124.7	124.7	121.4	121.4	118.1	111.4	110.3	108.0	98.0	96.9
80°	109.1	106.9	106.9	103.6	103.6	100.2	95.8	94.7	90.2	84.6	83.5
82.5°	91.3	90.2	90.2	88.0	88.0	84.6	81.3	80.2	76.8	72.4	70.2
85°	76.8	76.8	76.8	74.6	74.6	71.3	69.1	67.9	64.6	61.3	60.1
87.5°	65.7	65.7	64.6	62.4	63.5	61.3	57.9	57.9	55.7	52.3	51.2
90°	57.9	56.8	56.8	55.7	55.7	53.5	52.3	50.1	47.9	45.7	44.6
92.5°	52.3	52.3	52.3	50.1	49.0	45.7	42.3	39.0	35.6	32.3	31.2
95°	34.5	35.6	35.6	34.5	31.2	26.7	21.2	17.8	13.4	10.0	10.0
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: P130097

CATALOG NUMBER: HL618TAT - HLM6935 - HL6NFL - ERT702

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: P130097

CATALOG NUMBER: HL618TAT - HLM6935 - HL6NFL - ERT702

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1
2.5°	712.8	712.8	717.3	692.8	692.8	690.5	681.6	676.1	659.4	656.0	650.4
5°	760.7	751.8	745.1	711.7	703.9	692.8	677.2	662.7	640.4	631.5	618.1
7.5°	798.6	777.4	764.0	722.8	705.0	687.2	662.7	643.8	614.8	600.3	584.7
10°	827.5	798.6	773.0	722.8	698.3	673.8	642.6	615.9	584.7	565.8	544.6
12.5°	844.2	803.0	770.7	711.7	667.1	649.3	614.8	584.7	550.2	530.2	506.8
15°	845.3	796.3	756.2	691.6	654.9	621.5	582.5	544.6	523.5	492.3	467.8
17.5°	834.2	778.5	732.9	663.8	623.7	585.8	546.9	513.4	478.9	455.5	431.0
20°	809.7	748.5	698.3	628.2	588.1	546.9	507.9	475.6	442.2	418.8	396.5
22.5°	770.7	710.6	658.2	588.1	549.1	509.0	471.1	437.7	406.5	384.2	363.1
25°	725.1	662.7	612.6	545.7	507.9	476.7	433.3	403.2	373.1	353.1	333.0
27.5°	671.6	612.6	564.7	501.2	466.7	431.0	395.4	369.8	341.9	324.1	306.3
30°	618.1	560.2	514.6	458.9	425.5	394.3	362.0	338.6	314.1	297.4	281.8
32.5°	566.9	513.4	471.1	419.9	389.8	360.9	333.0	311.9	290.7	276.2	262.8
35°	515.7	466.7	429.9	383.1	355.3	329.7	306.3	286.2	268.4	256.2	243.9
37.5°	471.1	425.5	390.9	350.8	326.3	302.9	282.9	265.1	248.4	237.2	226.1
40°	428.8	387.6	356.4	320.8	300.7	279.6	260.6	246.1	231.7	221.6	211.6
42.5°	389.8	354.2	326.3	294.0	275.1	259.5	241.7	228.3	215.0	207.2	199.4
45°	354.2	321.9	297.4	270.6	253.9	238.3	223.9	211.6	200.5	193.8	186.0
47.5°	320.8	292.9	274.0	249.5	235.0	220.5	207.2	197.1	188.2	181.5	174.9
50°	290.7	267.3	249.5	229.4	217.2	207.2	192.7	183.8	174.9	170.4	163.7
52.5°	264.0	242.8	228.3	209.4	199.4	189.3	179.3	171.5	162.6	159.3	153.7
55°	239.5	221.6	209.4	193.8	184.9	176.0	167.1	159.3	152.6	149.2	143.7
57.5°	217.2	201.6	191.6	177.1	169.3	162.6	153.7	148.1	141.4	138.1	134.8
60°	197.1	183.8	174.9	162.6	157.0	149.2	142.6	137.0	131.4	128.1	124.7
62.5°	179.3	167.1	159.3	149.2	143.7	137.0	131.4	127.0	121.4	119.2	115.8
65°	161.5	151.5	144.8	137.0	131.4	125.9	120.3	115.8	111.4	109.1	105.8
67.5°	145.9	138.1	132.5	124.7	119.2	115.8	110.3	106.9	102.5	100.2	96.9
70°	131.4	123.6	119.2	112.5	108.0	104.7	99.1	94.7	92.4	91.3	88.0
72.5°	116.9	110.3	105.8	100.2	96.9	93.6	89.1	85.8	83.5	84.6	79.1
75°	103.6	98.0	94.7	89.1	85.8	83.5	79.1	76.8	73.5	72.4	70.2
77.5°	90.2	85.8	82.4	78.0	75.7	72.4	69.1	66.8	63.5	63.5	60.1
80°	78.0	73.5	70.2	65.7	64.6	62.4	60.1	56.8	54.6	53.5	51.2
82.5°	66.8	63.5	60.1	56.8	54.6	52.3	50.1	47.9	45.7	44.6	42.3
85°	55.7	53.5	50.1	47.9	45.7	43.4	41.2	40.1	37.9	36.8	34.5
87.5°	47.9	45.7	43.4	41.2	39.0	36.8	34.5	33.4	31.2	31.2	29.0
90°	41.2	40.1	37.9	35.6	34.5	32.3	31.2	29.0	27.8	26.7	25.6
92.5°	31.2	32.3	31.2	31.2	31.2	30.1	29.0	27.8	26.7	25.6	24.5
95°	11.1	14.5	15.6	18.9	20.0	22.3	21.2	21.2	18.9	18.9	16.7
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: P130097

CATALOG NUMBER: HL618TAT - 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: P130097

CATALOG NUMBER: HL618TAT - HLM6935 - HL6NFL - ERT702

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1
2.5°	640.4	642.6	640.4	633.7	629.3	623.7	621.5	613.7	618.1	610.3	614.8
5°	603.7	601.4	592.5	582.5	572.5	561.3	558.0	550.2	537.9	542.4	543.5
7.5°	563.6	556.9	544.6	532.4	522.4	509.0	503.4	491.2	490.1	483.4	483.4
10°	524.6	514.6	501.2	487.8	472.2	461.1	454.4	442.2	438.8	432.1	432.1
12.5°	484.5	472.2	457.8	444.4	429.9	416.5	409.9	398.7	394.3	388.7	385.4
15°	445.5	432.1	417.7	403.2	389.8	379.8	370.9	360.9	357.5	344.2	347.5
17.5°	408.8	397.6	382.0	368.7	356.4	345.3	337.5	328.6	324.1	318.5	317.4
20°	375.3	364.2	349.7	336.4	325.2	316.3	308.5	299.6	295.1	290.7	290.7
22.5°	343.0	333.0	320.8	308.5	305.2	289.6	282.9	274.0	272.9	267.3	266.2
25°	315.2	306.3	295.1	285.1	275.1	267.3	261.7	253.9	251.7	248.4	247.3
27.5°	290.7	281.8	272.9	264.0	255.1	249.5	242.8	237.2	235.0	231.7	230.5
30°	268.4	261.7	252.8	245.0	237.2	231.7	228.3	221.6	219.4	217.2	216.1
32.5°	250.6	243.9	236.1	230.5	222.8	218.3	215.0	209.4	207.2	204.9	204.9
35°	232.8	227.2	220.5	215.0	209.4	204.9	201.6	197.1	196.0	192.7	193.8
37.5°	217.2	212.7	207.2	202.7	197.1	193.8	190.5	186.0	184.9	183.8	183.8
40°	203.8	200.5	194.9	187.1	186.0	182.7	180.4	176.0	176.0	173.7	173.7
42.5°	191.6	188.2	183.8	180.4	176.0	173.7	171.5	168.2	167.1	164.8	166.0
45°	180.4	177.1	173.7	171.5	166.0	164.8	162.6	159.3	158.2	155.9	157.0
47.5°	169.3	167.1	164.8	161.5	158.2	155.9	153.7	150.4	150.4	148.1	149.2
50°	159.3	157.0	154.8	152.6	148.1	147.0	145.9	142.6	141.4	140.3	141.4
52.5°	149.2	148.1	145.9	143.7	140.3	139.2	137.0	134.8	133.7	132.5	133.7
55°	140.3	139.2	137.0	134.8	131.4	131.4	129.2	127.0	125.9	124.7	125.9
57.5°	130.3	130.3	128.1	127.0	123.6	122.5	121.4	118.1	118.1	116.9	118.1
60°	122.5	121.4	122.5	118.1	114.7	113.6	112.5	110.3	110.3	109.1	110.3
62.5°	112.5	112.5	111.4	110.3	106.9	106.9	104.7	102.5	102.5	101.4	102.5
65°	103.6	103.6	102.5	101.4	99.1	98.0	96.9	94.7	94.7	93.6	94.7
67.5°	95.8	94.7	93.6	92.4	90.2	90.2	88.0	86.9	85.8	85.8	86.9
70°	86.9	85.8	85.8	83.5	82.4	81.3	80.2	79.1	78.0	76.8	78.0
72.5°	78.0	76.8	76.8	75.7	73.5	72.4	71.3	70.2	70.2	69.1	70.2
75°	69.1	67.9	67.9	65.7	64.6	63.5	62.4	61.3	61.3	61.3	61.3
77.5°	59.0	59.0	57.9	56.8	55.7	54.6	54.6	53.5	52.3	52.3	53.5
80°	50.1	50.1	49.0	47.9	46.8	46.8	45.7	44.6	44.6	43.4	44.6
82.5°	41.2	41.2	40.1	40.1	37.9	39.0	37.9	36.8	36.8	36.8	36.8
85°	34.5	33.4	32.3	32.3	31.2	31.2	31.2	30.1	30.1	30.1	30.1
87.5°	27.8	27.8	26.7	26.7	25.6	25.6	25.6	25.6	24.5	24.5	25.6
90°	24.5	24.5	24.5	23.4	23.4	23.4	23.4	22.3	22.3	22.3	22.3
92.5°	23.4	22.3	21.2	20.0	17.8	17.8	17.8	18.9	18.9	20.0	21.2
95°	14.5	12.3	10.0	7.8	6.7	6.7	5.6	7.8	8.9	11.1	13.4
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: P130097

CATALOG NUMBER: HL618TAT - 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: P130097

CATALOG NUMBER: HL618TAT - HLM6935 - HL6NFL - ERT702

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	676.1	676.1	676.1	676.1
2.5°	618.1	605.9	599.2	615.9
5°	543.5	532.4	523.5	542.4
7.5°	481.1	474.5	465.6	474.5
10°	429.9	413.2	412.1	424.3
12.5°	384.2	375.3	369.8	380.9
15°	346.4	338.6	333.0	341.9
17.5°	316.3	309.6	302.9	309.6
20°	288.5	281.8	276.2	286.2
22.5°	265.1	260.6	253.9	260.6
25°	246.1	241.7	236.1	242.8
27.5°	230.5	226.1	221.6	227.2
30°	216.1	212.7	208.3	215.0
32.5°	203.8	197.1	197.1	202.7
35°	192.7	190.5	186.0	191.6
37.5°	182.7	180.4	177.1	181.5
40°	173.7	171.5	168.2	172.6
42.5°	163.7	163.7	159.3	163.7
45°	157.0	154.8	151.5	155.9
47.5°	149.2	147.0	143.7	148.1
50°	141.4	139.2	137.0	140.3
52.5°	133.7	132.5	128.1	132.5
55°	125.9	124.7	121.4	124.7
57.5°	118.1	116.9	113.6	116.9
60°	110.3	109.1	106.9	109.1
62.5°	102.5	101.4	99.1	101.4
65°	94.7	93.6	91.3	93.6
67.5°	85.8	85.8	83.5	85.8
70°	78.0	78.0	75.7	78.0
72.5°	70.2	70.2	67.9	70.2
75°	62.4	61.3	59.0	61.3
77.5°	53.5	52.3	52.3	52.3
80°	44.6	44.6	43.4	44.6
82.5°	36.8	36.8	35.6	36.8
85°	30.1	30.1	29.0	31.2
87.5°	25.6	25.6	24.5	24.5
90°	22.3	22.3	22.3	22.3
92.5°	21.2	21.2	21.2	21.2
95°	14.5	15.6	14.5	14.5
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: P130097

CATALOG NUMBER: HL618TAT - 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)