

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: P130098

Luminaire Tested: **HL618TAT - HLM6940 - HL6NFL - ERT702**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130098
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 - HLM6940 - 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 / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1662.4 lumens
Efficiency: N/A
Efficacy: 60.2 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

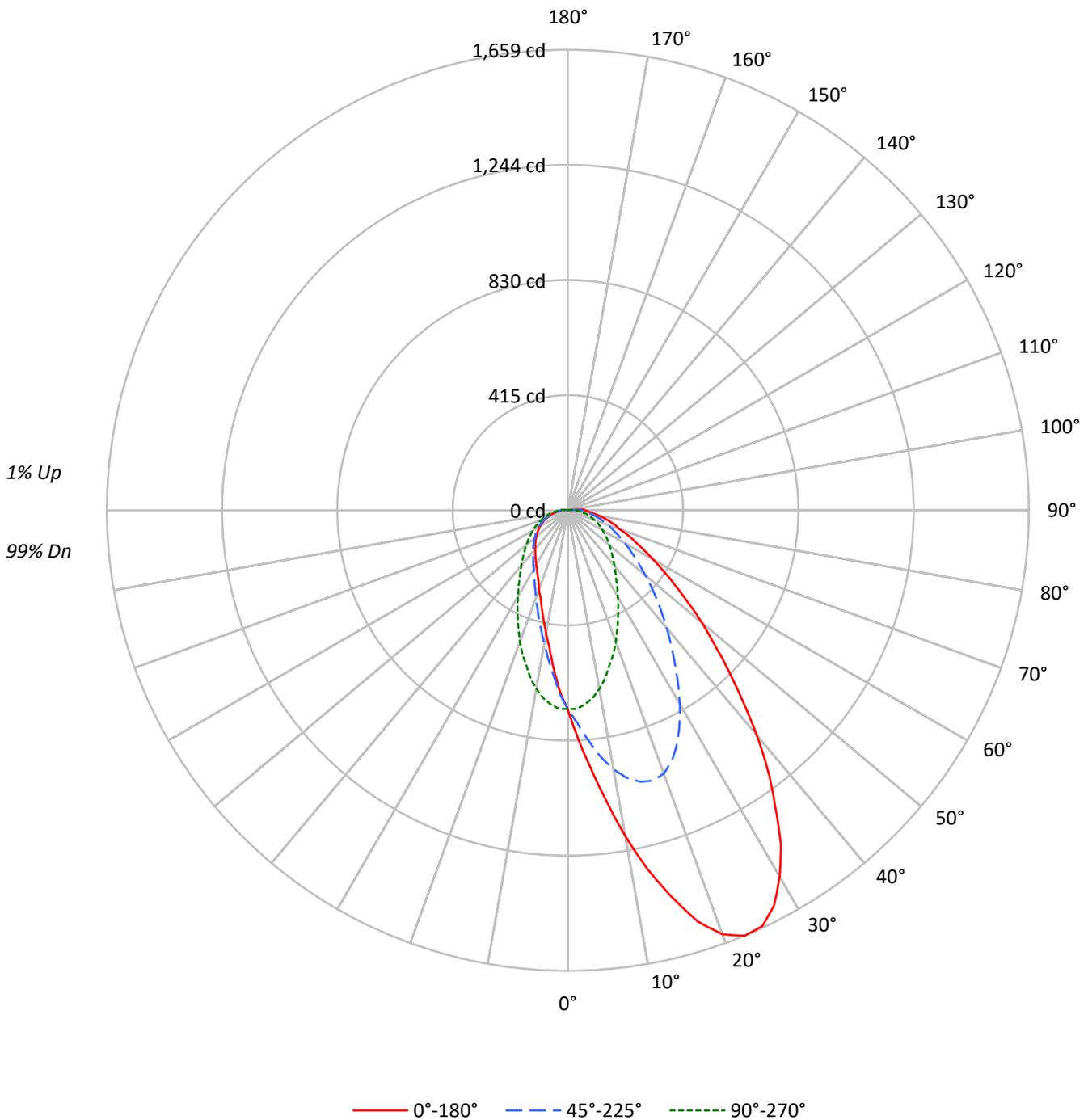
Input Watts (W): 27.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	42756	42756	42756
5°	54388	41119	33653
10°	69010	37785	26031
15°	83130	33292	20901
20°	94126	29186	17567
25°	96890	25034	15078
30°	91046	21441	13613
35°	79826	18634	12472
40°	67372	16617	11653
45°	54542	14953	11018
50°	44362	13732	10488
55°	35524	12734	9973
60°	28941	11871	9459
65°	23995	11039	8916
70°	19883	10118	8332
75°	18041	9426	7515
80°	15864	8254	6472
85°	13809	7210	5598



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	4.1
10°-20°	204.1	12.3
20°-30°	296.9	17.9
30°-40°	304.4	18.3
40°-50°	260.3	15.7
50°-60°	203.1	12.2
60°-70°	150.1	9.0
70°-80°	100.6	6.1
80°-90°	55.4	3.3
90°-100°	18.5	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°	569.9	34.3
0°-40°	874.3	52.6
0°-60°	1337.8	80.5
0°-90°	1643.8	98.9
90°-120°	18.5	1.1
90°-150°	18.5	1.1
90°-180°	19.0	1.1
0°-180°	1662.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	716	716	716	716	716	
5°	929	831	702	595	575	97
15°	1441	1013	577	402	362	412
25°	1653	929	427	283	257	750
35°	1299	669	303	217	203	811
45°	818	452	224	175	165	636
55°	471	293	169	139	132	427
65°	267	190	123	104	99	267
75°	156	119	81	67	65	165
85°	81	65	42	33	33	74
90°	61	48	31	25	24	34
95°	37	11	22	7	15	18
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°	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3
2.5°	820.2	789.5	804.9	797.8	797.8	794.2	783.6	795.4	786.0	765.9	765.9
5°	928.8	902.8	917.0	900.5	898.1	891.0	873.3	878.0	860.3	830.8	824.9
7.5°	1053.9	1019.6	1032.6	1013.7	1006.7	992.5	965.4	961.8	932.3	893.4	875.7
10°	1191.9	1147.1	1161.3	1132.9	1122.3	1101.1	1053.9	1043.3	998.4	947.7	918.2
12.5°	1324.1	1279.3	1286.4	1254.5	1229.7	1196.7	1138.8	1114.1	1057.4	987.8	947.7
15°	1441.0	1400.8	1406.7	1361.9	1327.7	1278.1	1206.1	1169.5	1097.5	1012.6	961.8
17.5°	1553.1	1503.5	1502.3	1450.4	1415.0	1340.6	1256.9	1204.9	1120.0	1020.8	959.5
20°	1625.1	1575.5	1570.8	1504.7	1455.1	1376.1	1275.7	1214.4	1117.6	1009.0	940.6
22.5°	1659.3	1609.7	1597.9	1525.9	1469.3	1380.8	1269.8	1196.7	1092.8	977.2	904.0
25°	1653.4	1602.6	1587.3	1510.6	1449.2	1352.4	1265.1	1156.5	1048.0	928.8	855.6
27.5°	1606.2	1556.6	1537.7	1464.6	1428.0	1299.3	1179.0	1095.2	987.8	869.8	797.8
30°	1523.6	1478.7	1458.7	1386.7	1318.2	1219.1	1097.5	1023.2	914.6	806.0	734.1
32.5°	1426.8	1377.2	1357.2	1288.7	1221.5	1130.6	1016.1	941.8	840.3	736.4	673.9
35°	1299.3	1268.7	1247.4	1176.6	1123.5	1031.4	922.9	856.8	762.4	669.1	612.5
37.5°	1183.7	1148.3	1125.9	1064.5	1014.9	931.1	836.7	776.5	692.7	610.1	555.8
40°	1057.4	1027.9	1012.6	952.4	906.4	834.4	756.5	699.8	627.8	552.3	507.5
42.5°	930.0	906.4	898.1	846.2	807.2	745.9	677.4	629.0	565.3	500.4	457.9
45°	817.8	797.8	790.7	747.0	715.2	663.2	607.8	562.9	508.6	452.0	415.4
47.5°	715.2	701.0	692.7	655.0	630.2	587.7	534.6	501.6	454.4	406.0	375.3
50°	629.0	609.0	606.6	571.2	552.3	514.5	472.1	446.1	406.0	363.5	338.7
52.5°	544.0	526.3	522.8	496.8	486.2	452.0	419.0	394.2	363.5	325.7	305.7
55°	470.9	456.7	453.2	436.7	424.9	397.7	368.2	350.5	323.4	292.7	276.2
57.5°	408.3	396.5	393.0	378.8	371.7	349.3	331.6	311.6	288.0	263.2	249.0
60°	354.0	344.6	343.4	330.4	325.7	308.0	286.8	276.2	258.5	236.0	225.4
62.5°	305.7	300.9	299.8	290.3	286.8	271.4	254.9	247.8	231.3	212.4	203.0
65°	266.7	264.4	262.0	253.7	251.4	239.6	225.4	219.5	206.5	190.0	182.9
67.5°	233.7	231.3	230.1	223.0	220.7	212.4	201.8	194.7	185.3	171.1	165.2
70°	197.1	201.8	201.8	195.9	194.7	186.5	178.2	172.3	165.2	152.2	148.7
72.5°	179.4	175.8	175.8	171.1	169.9	165.2	155.8	152.2	146.3	135.7	132.2
75°	155.8	153.4	153.4	148.7	148.7	148.7	136.9	134.5	128.6	119.2	116.8
77.5°	134.5	132.2	132.2	128.6	128.6	125.1	118.0	116.8	114.5	103.9	102.7
80°	115.7	113.3	113.3	109.8	109.8	106.2	101.5	100.3	95.6	89.7	88.5
82.5°	96.8	95.6	95.6	93.2	93.2	89.7	86.2	85.0	81.4	76.7	74.3
85°	81.4	81.4	81.4	79.1	79.1	75.5	73.2	72.0	68.4	64.9	63.7
87.5°	69.6	69.6	68.4	66.1	67.3	64.9	61.4	61.4	59.0	55.5	54.3
90°	61.4	60.2	60.2	59.0	59.0	56.6	55.5	53.1	50.7	48.4	47.2
92.5°	55.5	55.5	55.5	53.1	51.9	48.4	44.8	41.3	37.8	34.2	33.0
95°	36.6	37.8	37.8	36.6	33.0	28.3	22.4	18.9	14.2	10.6	10.6
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°	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3
2.5°	755.3	755.3	760.0	734.1	734.1	731.7	722.3	716.3	698.6	695.1	689.2
5°	806.0	796.6	789.5	754.1	745.9	734.1	717.5	702.2	678.6	669.1	655.0
7.5°	846.2	823.7	809.6	765.9	747.0	728.2	702.2	682.1	651.4	636.1	619.6
10°	876.9	846.2	819.0	765.9	740.0	714.0	680.9	652.6	619.6	599.5	577.1
12.5°	894.6	850.9	816.7	754.1	706.9	688.0	651.4	619.6	583.0	561.8	537.0
15°	895.7	843.8	801.3	732.9	693.9	658.5	617.2	577.1	554.7	521.6	495.7
17.5°	883.9	824.9	776.5	703.4	660.9	620.8	579.5	544.0	507.5	482.7	456.7
20°	858.0	793.1	740.0	665.6	623.1	579.5	538.1	503.9	468.5	443.7	420.1
22.5°	816.7	752.9	697.5	623.1	581.8	539.3	499.2	463.8	430.8	407.2	384.7
25°	768.3	702.2	649.1	578.3	538.1	505.1	459.1	427.2	395.3	374.1	352.9
27.5°	711.6	649.1	598.3	531.1	494.5	456.7	419.0	391.8	362.3	343.4	324.5
30°	655.0	593.6	545.2	486.2	450.8	417.8	383.5	358.8	332.8	315.1	298.6
32.5°	600.7	544.0	499.2	444.9	413.1	382.4	352.9	330.4	308.0	292.7	278.5
35°	546.4	494.5	455.5	406.0	376.5	349.3	324.5	303.3	284.4	271.4	258.5
37.5°	499.2	450.8	414.2	371.7	345.8	321.0	299.8	280.9	263.2	251.4	239.6
40°	454.4	410.7	377.6	339.9	318.6	296.2	276.2	260.8	245.5	234.8	224.2
42.5°	413.1	375.3	345.8	311.6	291.5	275.0	256.1	241.9	227.8	219.5	211.2
45°	375.3	341.1	315.1	286.8	269.1	252.6	237.2	224.2	212.4	205.3	197.1
47.5°	339.9	310.4	290.3	264.4	249.0	233.7	219.5	208.9	199.4	192.4	185.3
50°	308.0	283.2	264.4	243.1	230.1	219.5	204.2	194.7	185.3	180.6	173.5
52.5°	279.7	257.3	241.9	221.9	211.2	200.6	190.0	181.7	172.3	168.8	162.9
55°	253.7	234.8	221.9	205.3	195.9	186.5	177.0	168.8	161.7	158.1	152.2
57.5°	230.1	213.6	203.0	187.6	179.4	172.3	162.9	157.0	149.9	146.3	142.8
60°	208.9	194.7	185.3	172.3	166.4	158.1	151.1	145.2	139.3	135.7	132.2
62.5°	190.0	177.0	168.8	158.1	152.2	145.2	139.3	134.5	128.6	126.3	122.7
65°	171.1	160.5	153.4	145.2	139.3	133.4	127.5	122.7	118.0	115.7	112.1
67.5°	154.6	146.3	140.4	132.2	126.3	122.7	116.8	113.3	108.6	106.2	102.7
70°	139.3	131.0	126.3	119.2	114.5	110.9	105.0	100.3	98.0	96.8	93.2
72.5°	123.9	116.8	112.1	106.2	102.7	99.1	94.4	90.9	88.5	89.7	83.8
75°	109.8	103.9	100.3	94.4	90.9	88.5	83.8	81.4	77.9	76.7	74.3
77.5°	95.6	90.9	87.3	82.6	80.3	76.7	73.2	70.8	67.3	67.3	63.7
80°	82.6	77.9	74.3	69.6	68.4	66.1	63.7	60.2	57.8	56.6	54.3
82.5°	70.8	67.3	63.7	60.2	57.8	55.5	53.1	50.7	48.4	47.2	44.8
85°	59.0	56.6	53.1	50.7	48.4	46.0	43.7	42.5	40.1	38.9	36.6
87.5°	50.7	48.4	46.0	43.7	41.3	38.9	36.6	35.4	33.0	33.0	30.7
90°	43.7	42.5	40.1	37.8	36.6	34.2	33.0	30.7	29.5	28.3	27.1
92.5°	33.0	34.2	33.0	33.0	33.0	31.9	30.7	29.5	28.3	27.1	26.0
95°	11.8	15.3	16.5	20.1	21.2	23.6	22.4	22.4	20.1	20.1	17.7
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: P130098

CATALOG NUMBER: HL618TAT - HLM6940 - 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: P130098

CATALOG NUMBER: HL618TAT - HLM6940 - HL6NFL - ERT702

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3	716.3
2.5°	678.6	680.9	678.6	671.5	666.8	660.9	658.5	650.3	655.0	646.7	651.4
5°	639.6	637.3	627.8	617.2	606.6	594.8	591.3	583.0	570.0	574.7	575.9
7.5°	597.2	590.1	577.1	564.1	553.5	539.3	533.4	520.4	519.3	512.2	512.2
10°	555.8	545.2	531.1	516.9	500.4	488.6	481.5	468.5	465.0	457.9	457.9
12.5°	513.4	500.4	485.0	470.9	455.5	441.4	434.3	422.5	417.8	411.9	408.3
15°	472.1	457.9	442.6	427.2	413.1	402.4	393.0	382.4	378.8	364.7	368.2
17.5°	433.1	421.3	404.8	390.6	377.6	365.8	357.6	348.1	343.4	337.5	336.3
20°	397.7	385.9	370.6	356.4	344.6	335.2	326.9	317.5	312.7	308.0	308.0
22.5°	363.5	352.9	339.9	326.9	323.4	306.8	299.8	290.3	289.1	283.2	282.1
25°	334.0	324.5	312.7	302.1	291.5	283.2	277.3	269.1	266.7	263.2	262.0
27.5°	308.0	298.6	289.1	279.7	270.3	264.4	257.3	251.4	249.0	245.5	244.3
30°	284.4	277.3	267.9	259.6	251.4	245.5	241.9	234.8	232.5	230.1	228.9
32.5°	265.5	258.5	250.2	244.3	236.0	231.3	227.8	221.9	219.5	217.1	217.1
35°	246.7	240.8	233.7	227.8	221.9	217.1	213.6	208.9	207.7	204.2	205.3
37.5°	230.1	225.4	219.5	214.8	208.9	205.3	201.8	197.1	195.9	194.7	194.7
40°	216.0	212.4	206.5	198.3	197.1	193.5	191.2	186.5	186.5	184.1	184.1
42.5°	203.0	199.4	194.7	191.2	186.5	184.1	181.7	178.2	177.0	174.7	175.8
45°	191.2	187.6	184.1	181.7	175.8	174.7	172.3	168.8	167.6	165.2	166.4
47.5°	179.4	177.0	174.7	171.1	167.6	165.2	162.9	159.3	159.3	157.0	158.1
50°	168.8	166.4	164.0	161.7	157.0	155.8	154.6	151.1	149.9	148.7	149.9
52.5°	158.1	157.0	154.6	152.2	148.7	147.5	145.2	142.8	141.6	140.4	141.6
55°	148.7	147.5	145.2	142.8	139.3	139.3	136.9	134.5	133.4	132.2	133.4
57.5°	138.1	138.1	135.7	134.5	131.0	129.8	128.6	125.1	125.1	123.9	125.1
60°	129.8	128.6	129.8	125.1	121.6	120.4	119.2	116.8	116.8	115.7	116.8
62.5°	119.2	119.2	118.0	116.8	113.3	113.3	110.9	108.6	108.6	107.4	108.6
65°	109.8	109.8	108.6	107.4	105.0	103.9	102.7	100.3	100.3	99.1	100.3
67.5°	101.5	100.3	99.1	98.0	95.6	95.6	93.2	92.1	90.9	90.9	92.1
70°	92.1	90.9	90.9	88.5	87.3	86.2	85.0	83.8	82.6	81.4	82.6
72.5°	82.6	81.4	81.4	80.3	77.9	76.7	75.5	74.3	74.3	73.2	74.3
75°	73.2	72.0	72.0	69.6	68.4	67.3	66.1	64.9	64.9	64.9	64.9
77.5°	62.5	62.5	61.4	60.2	59.0	57.8	57.8	56.6	55.5	55.5	56.6
80°	53.1	53.1	51.9	50.7	49.6	49.6	48.4	47.2	47.2	46.0	47.2
82.5°	43.7	43.7	42.5	42.5	40.1	41.3	40.1	38.9	38.9	38.9	38.9
85°	36.6	35.4	34.2	34.2	33.0	33.0	33.0	31.9	31.9	31.9	31.9
87.5°	29.5	29.5	28.3	28.3	27.1	27.1	27.1	27.1	26.0	26.0	27.1
90°	26.0	26.0	26.0	24.8	24.8	24.8	24.8	23.6	23.6	23.6	23.6
92.5°	24.8	23.6	22.4	21.2	18.9	18.9	18.9	20.1	20.1	21.2	22.4
95°	15.3	13.0	10.6	8.3	7.1	7.1	5.9	8.3	9.4	11.8	14.2
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: P130098

CATALOG NUMBER: HL618TAT - HLM6940 - 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: P130098

CATALOG NUMBER: HL618TAT - HLM6940 - HL6NFL - ERT702

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	716.3	716.3	716.3	716.3
2.5°	655.0	642.0	634.9	652.6
5°	575.9	564.1	554.7	574.7
7.5°	509.8	502.7	493.3	502.7
10°	455.5	437.8	436.7	449.6
12.5°	407.2	397.7	391.8	403.6
15°	367.0	358.8	352.9	362.3
17.5°	335.2	328.1	321.0	328.1
20°	305.7	298.6	292.7	303.3
22.5°	280.9	276.2	269.1	276.2
25°	260.8	256.1	250.2	257.3
27.5°	244.3	239.6	234.8	240.8
30°	228.9	225.4	220.7	227.8
32.5°	216.0	208.9	208.9	214.8
35°	204.2	201.8	197.1	203.0
37.5°	193.5	191.2	187.6	192.4
40°	184.1	181.7	178.2	182.9
42.5°	173.5	173.5	168.8	173.5
45°	166.4	164.0	160.5	165.2
47.5°	158.1	155.8	152.2	157.0
50°	149.9	147.5	145.2	148.7
52.5°	141.6	140.4	135.7	140.4
55°	133.4	132.2	128.6	132.2
57.5°	125.1	123.9	120.4	123.9
60°	116.8	115.7	113.3	115.7
62.5°	108.6	107.4	105.0	107.4
65°	100.3	99.1	96.8	99.1
67.5°	90.9	90.9	88.5	90.9
70°	82.6	82.6	80.3	82.6
72.5°	74.3	74.3	72.0	74.3
75°	66.1	64.9	62.5	64.9
77.5°	56.6	55.5	55.5	55.5
80°	47.2	47.2	46.0	47.2
82.5°	38.9	38.9	37.8	38.9
85°	31.9	31.9	30.7	33.0
87.5°	27.1	27.1	26.0	26.0
90°	23.6	23.6	23.6	23.6
92.5°	22.4	22.4	22.4	22.4
95°	15.3	16.5	15.3	15.3
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: P130098

CATALOG NUMBER: HL618TAT - HLM6940 - 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)