

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: P130195

Luminaire Tested: **HL612ICAT - HLM6935 - HL6FL - ERT702**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130195
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33460)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL612ICAT - HLM6935 - HL6FL - ERT702
Description: HALO ALLSLOPE 6" 21W, Drop Opal Plastic 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 / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1159.9 lumens
Efficiency: N/A
Efficacy: 60.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.84 / 1.09
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')
CIE Type: Direct

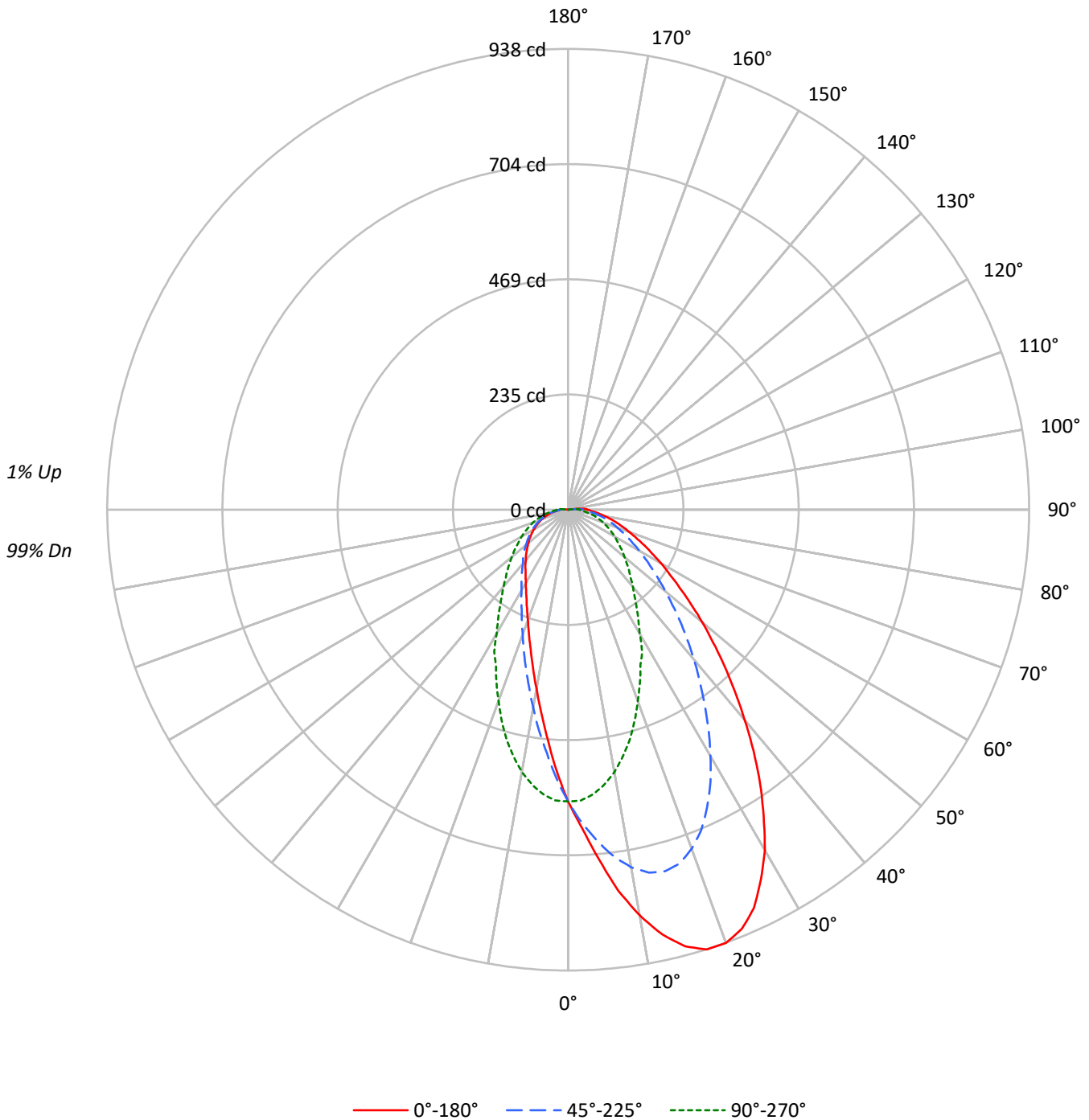
Input Watts (W): 19.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99				
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	89	87	85	83				
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71				
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61				
4	85	73	65	59	82	72	64	58	70	63	58	67	61	57	65	60	56	54				
5	79	66	58	52	76	65	57	51	63	56	51	61	55	50	59	54	50	48				
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	54	49	44	42				
7	68	55	47	41	66	55	47	41	53	46	41	52	45	41	50	44	40	38				
8	64	51	43	38	62	50	43	37	49	42	37	48	41	37	46	41	37	35				
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32				
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	35456	35456	35456
5°	41781	34063	27581
10°	48537	31393	21423
15°	53074	27933	16984
20°	54358	23973	13843
25°	52424	20393	11744
30°	47836	17383	10290
35°	41839	14899	9283
40°	35610	13042	8512
45°	29945	11665	7970
50°	25101	10537	7434
55°	20882	9611	7023
60°	17814	8911	6606
65°	15340	8223	6163
70°	13296	7626	5760
75°	11800	6925	5188
80°	10366	6019	4456
85°	9245	5225	3732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.9	4.8
10°-20°	153.4	13.2
20°-30°	205.6	17.7
30°-40°	205.0	17.7
40°-50°	176.2	15.2
50°-60°	139.4	12.0
60°-70°	103.8	8.9
70°-80°	69.7	6.0
80°-90°	38.3	3.3
90°-100°	12.7	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°	414.8	35.8
0°-40°	619.8	53.4
0°-60°	935.4	80.6
0°-90°	1147.2	98.9
90°-120°	12.7	1.1
90°-150°	12.7	1.1
90°-180°	13.0	1.1
0°-180°	1159.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	594	594	594	594	594	
5°	714	677	582	497	471	72
15°	920	762	484	333	294	259
25°	895	669	348	224	200	407
35°	681	483	242	165	151	424
45°	449	322	175	127	120	348
55°	277	207	127	98	93	251
65°	170	134	91	73	68	170
75°	102	84	60	48	45	109
85°	54	45	31	23	22	49
90°	40	32	23	18	18	22
95°	25	9	16	4	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°	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0
2.5°	648.5	655.5	653.8	643.2	654.7	653.8	643.2	642.4	637.1	638.0	634.5
5°	713.5	721.5	717.1	707.4	717.9	702.1	696.0	695.1	682.8	676.6	668.7
7.5°	782.1	787.4	782.1	768.0	777.7	755.7	744.3	742.5	723.2	711.8	698.6
10°	838.3	845.4	840.1	819.9	830.4	804.1	800.5	781.2	754.8	739.0	718.8
12.5°	885.8	893.7	889.3	867.3	871.7	840.1	820.8	809.3	778.6	756.6	730.2
15°	920.0	928.0	919.2	896.3	899.8	864.7	841.8	826.0	788.2	761.9	730.2
17.5°	938.5	945.5	935.9	911.3	911.3	874.4	848.0	828.7	785.6	754.8	718.8
20°	938.5	945.5	935.9	909.5	907.7	867.3	840.1	816.4	770.7	734.6	696.0
22.5°	923.6	931.5	919.2	891.9	888.4	847.1	817.2	792.6	744.3	706.5	665.2
25°	894.6	899.0	889.3	861.2	855.0	814.6	783.8	757.5	708.3	668.7	628.3
27.5°	848.9	856.8	845.4	818.1	813.7	771.5	739.9	713.5	663.5	626.5	584.4
30°	800.5	804.1	792.6	766.3	760.1	720.6	689.8	660.8	616.0	579.1	539.6
32.5°	739.9	743.4	732.9	708.3	703.0	665.2	635.3	609.9	565.9	531.6	493.0
35°	681.0	682.8	673.1	649.4	641.5	608.1	580.0	556.2	514.1	483.3	449.9
37.5°	619.5	623.9	611.6	591.4	581.7	554.5	526.4	503.5	465.7	439.4	408.6
40°	558.9	562.4	552.7	532.5	525.5	500.9	475.4	456.1	423.6	398.1	370.8
42.5°	501.8	505.3	497.4	478.9	473.6	449.0	429.7	410.4	382.3	358.5	333.9
45°	449.0	451.7	444.6	430.6	422.7	402.5	384.9	368.2	340.1	322.5	299.7
47.5°	399.8	400.7	393.7	378.7	377.9	357.7	341.8	327.8	304.0	288.2	269.8
50°	355.9	355.0	348.0	340.1	334.8	315.5	303.2	291.7	272.4	258.4	237.3
52.5°	313.7	314.6	308.4	299.7	300.5	282.1	269.8	260.1	243.4	231.1	217.9
55°	276.8	279.4	274.2	265.4	260.1	248.7	239.0	231.1	216.2	207.4	195.1
57.5°	245.2	246.9	243.4	235.5	231.1	220.6	212.7	206.5	193.3	186.3	175.7
60°	217.9	218.8	213.5	208.3	205.6	196.0	194.2	183.7	173.1	167.0	158.2
62.5°	192.4	193.3	190.7	183.7	181.9	174.0	168.7	163.4	154.7	149.4	140.6
65°	170.5	170.5	168.7	162.6	160.8	154.7	149.4	145.9	138.0	133.6	128.3
67.5°	149.4	150.3	147.6	144.1	141.5	137.1	132.7	130.1	123.0	119.5	114.2
70°	131.8	132.7	130.1	127.4	126.5	120.4	117.8	116.0	109.8	106.3	102.8
72.5°	116.9	116.0	114.2	112.5	110.7	107.2	103.7	101.9	97.5	94.9	91.4
75°	101.9	101.1	100.2	97.5	96.7	93.1	91.4	89.6	85.2	83.5	80.0
77.5°	88.8	87.9	87.0	85.2	84.4	80.8	79.1	78.2	74.7	72.9	70.3
80°	75.6	75.6	74.7	72.9	72.9	70.3	68.5	67.7	64.1	62.4	60.6
82.5°	64.1	64.1	63.3	62.4	61.5	59.8	58.0	57.1	54.5	52.7	51.0
85°	54.5	54.5	53.6	52.7	51.8	50.1	48.3	47.5	45.7	44.8	43.1
87.5°	45.7	45.7	44.8	43.9	43.1	42.2	41.3	40.4	38.7	37.8	36.0
90°	39.5	39.5	38.7	37.8	37.8	36.9	35.1	35.1	33.4	32.5	31.6
92.5°	36.0	36.0	36.0	34.3	33.4	31.6	29.9	27.2	24.6	23.7	23.7
95°	24.6	25.5	24.6	23.7	21.1	18.5	14.9	13.2	8.8	8.8	7.9
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°	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0
2.5°	622.2	627.4	618.6	606.3	614.2	605.5	599.3	592.3	581.7	585.2	570.3
5°	652.0	652.0	636.2	618.6	620.4	606.3	594.0	581.7	565.0	562.4	544.8
7.5°	674.9	669.6	647.6	623.9	621.3	599.3	582.6	564.2	543.9	536.0	514.9
10°	703.9	677.5	649.4	620.4	610.7	586.1	576.5	542.2	517.6	507.0	482.4
12.5°	694.2	676.6	643.2	609.0	595.8	565.0	539.6	514.1	487.7	472.8	448.2
15°	688.1	666.1	627.4	590.5	572.9	540.4	511.4	484.2	454.3	438.5	413.9
17.5°	674.0	646.8	605.5	565.0	543.9	508.8	478.9	449.9	420.0	404.2	378.7
20°	648.5	617.8	575.6	533.4	509.7	474.5	444.6	413.9	386.6	368.2	344.5
22.5°	618.6	584.4	540.4	495.6	474.5	438.5	410.4	381.4	353.3	335.7	313.7
25°	580.0	546.6	503.5	460.5	437.6	402.5	375.2	348.0	322.5	306.7	284.7
27.5°	538.7	505.3	464.0	424.4	401.6	368.2	341.8	326.0	295.3	279.4	260.1
30°	495.6	461.3	424.4	386.6	366.4	335.7	311.1	290.9	268.0	254.8	238.1
32.5°	452.6	423.6	388.4	352.4	333.9	306.7	283.8	265.4	246.0	233.7	218.8
35°	413.0	384.0	353.3	320.7	304.9	278.6	259.2	242.5	224.1	214.4	202.1
37.5°	374.3	349.7	320.7	292.6	276.8	254.0	237.3	221.4	206.5	197.7	186.3
40°	339.2	317.2	292.6	266.3	254.0	232.9	218.8	204.7	190.7	182.8	173.1
42.5°	313.7	287.4	265.4	241.7	232.0	213.5	201.2	188.1	175.7	168.7	160.8
45°	277.7	259.2	240.8	220.6	210.9	196.0	184.5	174.9	163.4	157.3	150.3
47.5°	250.4	234.6	219.7	201.2	193.3	181.0	173.1	161.7	152.0	145.9	140.6
50°	225.0	212.7	199.5	183.7	177.5	166.1	156.4	149.4	140.6	136.2	130.9
52.5°	203.9	192.4	181.0	167.8	162.6	152.9	145.0	138.8	130.9	126.5	121.3
55°	182.8	174.0	165.2	152.9	149.4	140.6	133.6	127.4	121.3	117.8	112.5
57.5°	165.2	158.2	150.3	139.7	137.1	129.2	123.0	117.8	112.5	109.0	104.6
60°	149.4	143.2	137.1	128.3	125.7	118.6	113.4	109.0	103.7	101.1	97.5
62.5°	135.3	130.1	123.9	116.0	114.2	109.0	103.7	100.2	95.8	93.1	89.6
65°	122.1	117.8	112.5	105.4	104.6	99.3	94.9	91.4	87.9	85.2	82.6
67.5°	109.8	105.4	101.9	95.8	94.0	89.6	86.1	83.5	80.0	78.2	75.6
70°	98.4	94.9	91.4	86.1	85.2	82.6	78.2	75.6	72.1	70.3	68.5
72.5°	87.0	84.4	80.8	77.3	75.6	72.9	69.4	67.7	65.0	64.1	62.4
75°	76.5	73.8	72.1	67.7	66.8	64.1	61.5	59.8	57.1	55.4	53.6
77.5°	66.8	65.0	63.3	58.9	58.0	56.2	53.6	51.8	50.1	48.3	46.6
80°	58.0	56.2	54.5	51.0	50.1	48.3	45.7	43.9	42.2	41.3	40.4
82.5°	49.2	47.5	45.7	43.1	42.2	40.4	38.7	36.9	35.1	34.3	33.4
85°	41.3	39.5	38.7	36.0	35.1	33.4	31.6	30.8	29.0	28.1	27.2
87.5°	35.1	33.4	32.5	29.9	29.9	28.1	26.4	25.5	24.6	23.7	22.8
90°	29.9	29.0	28.1	26.4	25.5	24.6	23.7	22.8	22.0	21.1	20.2
92.5°	23.7	23.7	23.7	22.8	23.7	22.8	22.0	21.1	20.2	19.3	18.5
95°	10.5	11.4	13.2	14.1	15.8	16.7	15.8	15.8	14.9	14.1	12.3
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



TEST NUMBER: P130195

CATALOG NUMBER: HL612ICAT - HLM6935 - HL6FL - 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: P130195

CATALOG NUMBER: HL612ICAT - HLM6935 - HL6FL - ERT702

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0
2.5°	571.2	574.7	565.9	566.8	556.2	547.5	543.9	545.7	536.0	543.1	544.8
5°	541.3	539.6	528.1	523.7	510.6	497.4	490.3	491.2	483.3	485.9	485.9
7.5°	507.9	502.6	486.8	481.6	465.7	453.4	443.8	441.1	433.2	432.3	432.3
10°	470.1	464.0	448.2	439.4	421.8	409.5	399.0	395.4	381.4	384.9	383.1
12.5°	435.0	429.7	409.5	399.8	381.4	368.2	358.5	355.0	346.2	343.6	342.7
15°	398.1	390.2	370.8	352.4	347.1	333.0	322.5	317.2	310.2	309.3	305.8
17.5°	363.8	354.1	336.6	326.9	309.3	299.7	290.9	285.6	279.4	278.6	275.9
20°	330.4	320.7	305.8	295.3	282.1	270.7	262.7	258.4	253.1	250.4	248.7
22.5°	301.4	291.7	276.8	268.9	256.6	246.0	239.0	235.5	230.2	229.4	226.7
25°	272.4	265.4	252.2	245.2	233.7	224.1	218.8	216.2	210.9	209.1	208.3
27.5°	249.6	242.5	231.1	224.1	213.5	206.5	201.2	199.5	195.1	194.2	192.4
30°	228.5	222.3	211.8	206.5	196.8	189.8	185.4	184.5	179.3	180.1	177.5
32.5°	210.9	205.6	196.0	190.7	183.7	176.6	173.1	171.4	167.8	167.8	166.1
35°	194.2	190.7	181.9	177.5	170.5	165.2	161.7	159.9	157.3	157.3	155.5
37.5°	179.3	175.7	169.6	165.2	159.1	153.8	151.1	149.4	147.6	146.8	145.9
40°	167.0	164.3	158.2	154.7	148.5	143.2	141.5	140.6	138.8	138.0	137.1
42.5°	155.5	153.8	148.5	145.0	139.7	136.2	133.6	132.7	130.1	130.1	130.1
45°	145.0	143.2	138.8	135.3	130.9	127.4	125.7	123.9	123.0	122.1	122.1
47.5°	135.3	134.4	130.1	127.4	123.0	120.4	117.8	116.9	115.1	115.1	114.2
50°	126.5	125.7	122.1	119.5	115.1	112.5	110.7	109.8	108.1	108.1	107.2
52.5°	118.6	116.9	114.2	111.6	108.1	105.4	103.7	102.8	101.9	101.9	101.1
55°	110.7	109.8	106.3	103.7	101.1	98.4	96.7	96.7	94.9	94.9	94.0
57.5°	102.8	101.9	99.3	96.7	94.0	92.3	90.5	89.6	88.8	88.8	87.9
60°	94.9	94.9	91.4	89.6	87.0	85.2	84.4	83.5	82.6	81.7	81.7
62.5°	85.2	87.0	85.2	82.6	80.8	79.1	77.3	77.3	76.5	75.6	75.6
65°	80.8	80.0	78.2	76.5	73.8	72.9	71.2	70.3	70.3	70.3	68.5
67.5°	72.1	72.9	71.2	69.4	67.7	65.9	65.0	64.1	63.3	63.3	63.3
70°	66.8	66.8	65.0	63.3	61.5	59.8	58.9	58.0	57.1	57.1	57.1
72.5°	59.8	59.8	58.0	56.2	54.5	53.6	52.7	51.8	51.8	51.0	51.0
75°	52.7	51.8	51.0	50.1	48.3	47.5	46.6	45.7	45.7	44.8	44.8
77.5°	45.7	44.8	43.9	43.1	41.3	41.3	39.5	39.5	39.5	38.7	38.7
80°	38.7	38.7	36.9	36.0	35.1	34.3	34.3	33.4	33.4	32.5	32.5
82.5°	31.6	31.6	30.8	29.9	29.0	28.1	28.1	27.2	27.2	27.2	26.4
85°	26.4	25.5	24.6	24.6	23.7	22.8	22.8	22.0	22.0	22.0	22.0
87.5°	22.0	22.0	21.1	20.2	19.3	19.3	19.3	18.5	18.5	18.5	18.5
90°	19.3	19.3	18.5	18.5	17.6	17.6	17.6	16.7	16.7	16.7	16.7
92.5°	17.6	16.7	15.8	14.1	13.2	12.3	13.2	13.2	14.1	14.9	14.9
95°	11.4	9.7	7.0	5.3	4.4	4.4	4.4	5.3	7.0	7.9	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: P130195

CATALOG NUMBER: HL612ICAT - HLM6935 - HL6FL - 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: P130195

CATALOG NUMBER: HL612ICAT - HLM6935 - HL6FL - ERT702

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	594.0	594.0	594.0	594.0
2.5°	536.0	536.0	540.4	532.5
5°	477.2	477.2	479.8	471.0
7.5°	426.2	423.6	423.6	417.4
10°	376.1	375.2	375.2	370.0
12.5°	335.7	334.8	336.6	330.4
15°	298.8	299.7	300.5	294.4
17.5°	269.8	269.8	268.0	265.4
20°	244.3	244.3	242.5	239.0
22.5°	222.3	223.2	223.2	218.8
25°	204.7	204.7	204.7	200.4
27.5°	188.9	188.9	189.8	185.4
30°	175.7	175.7	175.7	172.2
32.5°	164.3	164.3	164.3	160.8
35°	154.7	154.7	153.8	151.1
37.5°	145.0	145.0	144.1	143.2
40°	136.2	136.2	136.2	133.6
42.5°	129.2	129.2	128.3	127.4
45°	121.3	121.3	120.4	119.5
47.5°	114.2	113.4	113.4	112.5
50°	107.2	107.2	106.3	105.4
52.5°	101.1	101.1	100.2	100.2
55°	94.9	94.0	94.0	93.1
57.5°	87.9	87.9	87.9	87.0
60°	81.7	81.7	80.8	80.8
62.5°	75.6	75.6	74.7	74.7
65°	69.4	69.4	68.5	68.5
67.5°	63.3	63.3	62.4	62.4
70°	57.1	57.1	56.2	57.1
72.5°	51.0	51.0	50.1	51.0
75°	44.8	44.8	44.8	44.8
77.5°	38.7	38.7	38.7	38.7
80°	32.5	32.5	32.5	32.5
82.5°	27.2	27.2	26.4	27.2
85°	22.0	22.0	22.0	22.0
87.5°	18.5	18.5	18.5	18.5
90°	16.7	16.7	16.7	17.6
92.5°	14.9	15.8	15.8	15.8
95°	10.5	10.5	10.5	11.4
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: P130195

CATALOG NUMBER: HL612ICAT - HLM6935 - HL6FL - 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)