

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: P130230

Luminaire Tested: **HL612ICAT - HLM6927 - HL6NFL - ERT702**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130230
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 - HLM6927 - 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 / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1027.1 lumens
Efficiency: N/A
Efficacy: 53.8 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

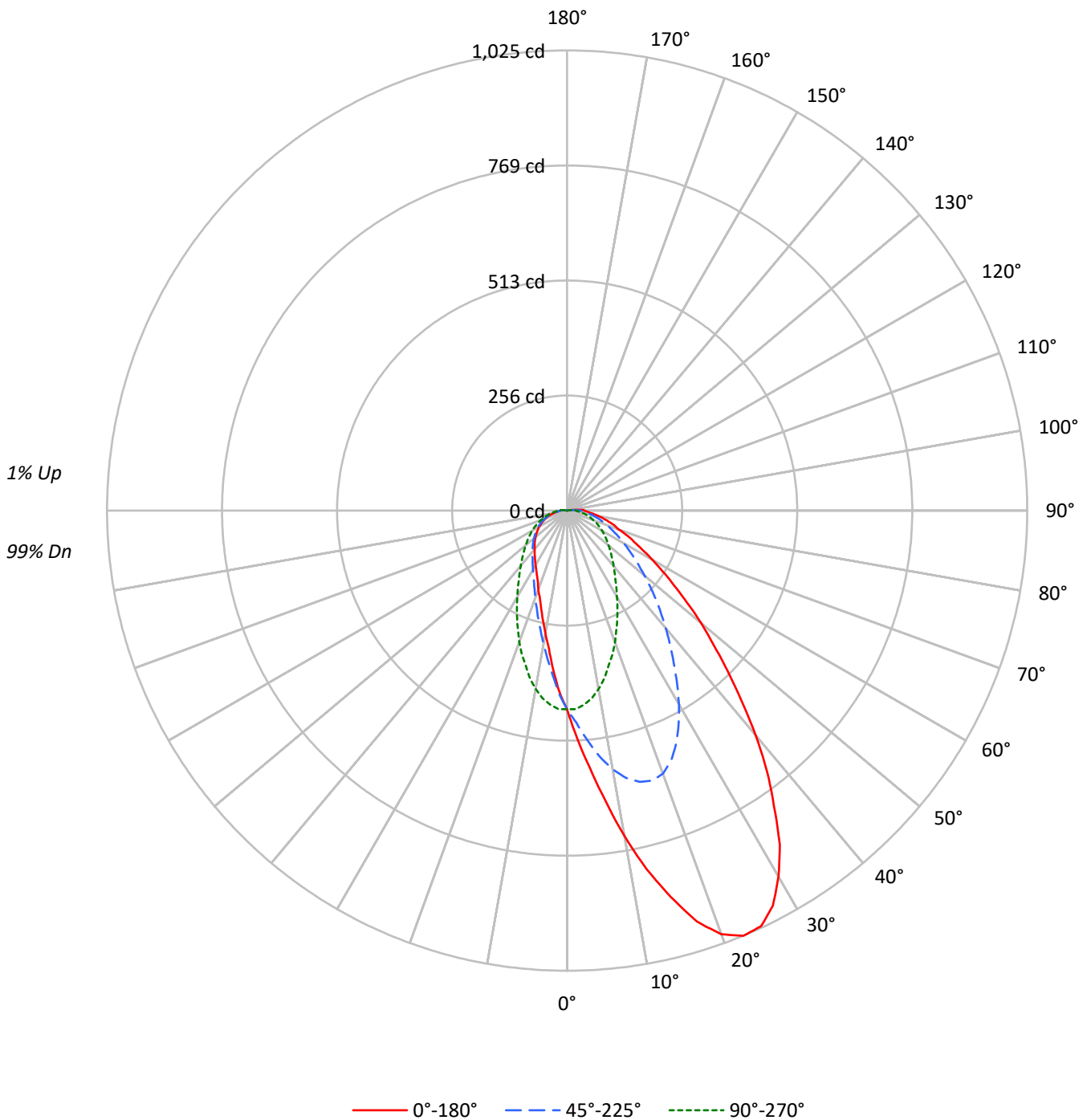
Input Watts (W): 19.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - HL6NFL - ERT702

Luminous Intensity Polar Plot





TEST NUMBER: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - 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°	26419	26419	26419
5°	33606	25408	20794
10°	42642	23345	16084
15°	51360	20572	12917
20°	58157	18036	10854
25°	59866	15471	9317
30°	56256	13248	8408
35°	49322	11513	7704
40°	41625	10264	7200
45°	33700	9237	6809
50°	27407	8485	6482
55°	21945	7868	6163
60°	17888	7333	5845
65°	14827	6820	5515
70°	12287	6254	5145
75°	11151	5825	4643
80°	9804	5101	4004
85°	8533	4462	3461



TEST NUMBER: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - HL6NFL - ERT702

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.6	4.1
10°-20°	126.1	12.3
20°-30°	183.4	17.9
30°-40°	188.1	18.3
40°-50°	160.8	15.7
50°-60°	125.5	12.2
60°-70°	92.7	9.0
70°-80°	62.2	6.1
80°-90°	34.2	3.3
90°-100°	11.5	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°	352.1	34.3
0°-40°	540.2	52.6
0°-60°	826.6	80.5
0°-90°	1015.7	98.9
90°-120°	11.5	1.1
90°-150°	11.5	1.1
90°-180°	11.0	1.1
0°-180°	1027.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	443	443	443	443	443	
5°	574	513	434	368	355	60
15°	890	626	357	249	224	255
25°	1022	574	264	175	159	463
35°	803	413	187	134	125	501
45°	505	279	138	108	102	393
55°	291	181	104	86	82	264
65°	165	117	76	64	61	165
75°	96	74	50	42	40	102
85°	50	40	26	20	20	46
90°	38	30	19	15	15	21
95°	23	7	14	4	10	11
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: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - HL6NFL - ERT702

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6
2.5°	506.8	487.8	497.3	492.9	492.9	490.7	484.2	491.5	485.6	473.2	473.2
5°	573.9	557.8	566.6	556.4	554.9	550.5	539.6	542.5	531.6	513.3	509.7
7.5°	651.1	630.0	638.0	626.4	622.0	613.2	596.5	594.3	576.0	552.0	541.0
10°	736.5	708.8	717.5	700.0	693.4	680.3	651.1	644.6	616.9	585.5	567.3
12.5°	818.1	790.4	794.8	775.1	759.8	739.4	703.6	688.3	653.3	610.3	585.5
15°	890.3	865.5	869.2	841.5	820.3	789.7	745.2	722.6	678.1	625.6	594.3
17.5°	959.6	929.0	928.2	896.1	874.3	828.3	776.6	744.5	692.0	630.7	592.8
20°	1004.1	973.4	970.5	929.7	899.1	850.2	788.2	750.3	690.5	623.4	581.1
22.5°	1025.2	994.6	987.3	942.8	907.8	853.1	784.6	739.4	675.2	603.8	558.5
25°	1021.6	990.2	980.7	933.3	895.4	835.6	781.7	714.6	647.5	573.9	528.6
27.5°	992.4	961.8	950.1	904.9	882.3	802.8	728.4	676.7	610.3	537.4	492.9
30°	941.4	913.6	901.3	856.8	814.5	753.2	678.1	632.2	565.1	498.0	453.5
32.5°	881.6	850.9	838.5	796.3	754.7	698.5	627.8	581.9	519.2	455.0	416.4
35°	802.8	783.9	770.7	727.0	694.2	637.3	570.2	529.4	471.0	413.4	378.4
37.5°	731.4	709.5	695.6	657.7	627.1	575.3	517.0	479.8	428.0	377.0	343.4
40°	653.3	635.1	625.6	588.4	560.0	515.5	467.4	432.4	387.9	341.3	313.5
42.5°	574.6	560.0	554.9	522.8	498.8	460.8	418.5	388.6	349.3	309.2	282.9
45°	505.3	492.9	488.5	461.6	441.9	409.8	375.5	347.8	314.3	279.3	256.7
47.5°	441.9	433.1	428.0	404.7	389.4	363.1	330.3	309.9	280.7	250.8	231.9
50°	388.6	376.3	374.8	352.9	341.3	317.9	291.7	275.6	250.8	224.6	209.3
52.5°	336.1	325.2	323.0	307.0	300.4	279.3	258.9	243.5	224.6	201.3	188.9
55°	290.9	282.2	280.0	269.8	262.5	245.7	227.5	216.6	199.8	180.8	170.6
57.5°	252.3	245.0	242.8	234.1	229.7	215.8	204.9	192.5	177.9	162.6	153.9
60°	218.8	212.9	212.2	204.2	201.3	190.3	177.2	170.6	159.7	145.8	139.3
62.5°	188.9	185.9	185.2	179.4	177.2	167.7	157.5	153.1	142.9	131.3	125.4
65°	164.8	163.3	161.9	156.8	155.3	148.0	139.3	135.6	127.6	117.4	113.0
67.5°	144.4	142.9	142.2	137.8	136.4	131.3	124.7	120.3	114.5	105.7	102.1
70°	121.8	124.7	124.7	121.0	120.3	115.2	110.1	106.5	102.1	94.1	91.9
72.5°	110.8	108.6	108.6	105.7	105.0	102.1	96.3	94.1	90.4	83.9	81.7
75°	96.3	94.8	94.8	91.9	91.9	91.9	84.6	83.1	79.5	73.6	72.2
77.5°	83.1	81.7	81.7	79.5	79.5	77.3	72.9	72.2	70.7	64.2	63.4
80°	71.5	70.0	70.0	67.8	67.8	65.6	62.7	62.0	59.1	55.4	54.7
82.5°	59.8	59.1	59.1	57.6	57.6	55.4	53.2	52.5	50.3	47.4	45.9
85°	50.3	50.3	50.3	48.9	48.9	46.7	45.2	44.5	42.3	40.1	39.4
87.5°	43.0	43.0	42.3	40.8	41.6	40.1	37.9	37.9	36.5	34.3	33.5
90°	37.9	37.2	37.2	36.5	36.5	35.0	34.3	32.8	31.4	29.9	29.2
92.5°	34.3	34.3	34.3	32.8	32.1	29.9	27.7	25.5	23.3	21.1	20.4
95°	22.6	23.3	23.3	22.6	20.4	17.5	13.9	11.7	8.8	6.6	6.6
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



TEST NUMBER: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - 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: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - HL6NFL - ERT702

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6
2.5°	466.7	466.7	469.6	453.5	453.5	452.1	446.3	442.6	431.7	429.5	425.8
5°	498.0	492.2	487.8	465.9	460.8	453.5	443.3	433.9	419.3	413.4	404.7
7.5°	522.8	509.0	500.2	473.2	461.6	449.9	433.9	421.5	402.5	393.0	382.8
10°	541.8	522.8	506.0	473.2	457.2	441.1	420.7	403.2	382.8	370.4	356.6
12.5°	552.7	525.7	504.6	465.9	436.8	425.1	402.5	382.8	360.2	347.1	331.8
15°	553.4	521.4	495.1	452.8	428.8	406.9	381.4	356.6	342.7	322.3	306.3
17.5°	546.1	509.7	479.8	434.6	408.3	383.5	358.0	336.1	313.5	298.2	282.2
20°	530.1	490.0	457.2	411.3	385.0	358.0	332.5	311.4	289.5	274.2	259.6
22.5°	504.6	465.2	430.9	385.0	359.5	333.2	308.4	286.6	266.1	251.6	237.7
25°	474.7	433.9	401.0	357.3	332.5	312.1	283.6	264.0	244.3	231.1	218.0
27.5°	439.7	401.0	369.7	328.1	305.5	282.2	258.9	242.1	223.9	212.2	200.5
30°	404.7	366.8	336.9	300.4	278.5	258.1	237.0	221.7	205.6	194.7	184.5
32.5°	371.1	336.1	308.4	274.9	255.2	236.3	218.0	204.2	190.3	180.8	172.1
35°	337.6	305.5	281.5	250.8	232.6	215.8	200.5	187.4	175.7	167.7	159.7
37.5°	308.4	278.5	255.9	229.7	213.6	198.3	185.2	173.5	162.6	155.3	148.0
40°	280.7	253.8	233.3	210.0	196.9	183.0	170.6	161.1	151.7	145.1	138.5
42.5°	255.2	231.9	213.6	192.5	180.1	169.9	158.2	149.5	140.7	135.6	130.5
45°	231.9	210.7	194.7	177.2	166.3	156.0	146.6	138.5	131.3	126.9	121.8
47.5°	210.0	191.8	179.4	163.3	153.9	144.4	135.6	129.1	123.2	118.9	114.5
50°	190.3	175.0	163.3	150.2	142.2	135.6	126.1	120.3	114.5	111.6	107.2
52.5°	172.8	159.0	149.5	137.1	130.5	124.0	117.4	112.3	106.5	104.3	100.6
55°	156.8	145.1	137.1	126.9	121.0	115.2	109.4	104.3	99.9	97.7	94.1
57.5°	142.2	132.0	125.4	115.9	110.8	106.5	100.6	97.0	92.6	90.4	88.2
60°	129.1	120.3	114.5	106.5	102.8	97.7	93.3	89.7	86.0	83.9	81.7
62.5°	117.4	109.4	104.3	97.7	94.1	89.7	86.0	83.1	79.5	78.0	75.8
65°	105.7	99.2	94.8	89.7	86.0	82.4	78.8	75.8	72.9	71.5	69.3
67.5°	95.5	90.4	86.8	81.7	78.0	75.8	72.2	70.0	67.1	65.6	63.4
70°	86.0	80.9	78.0	73.6	70.7	68.5	64.9	62.0	60.5	59.8	57.6
72.5°	76.6	72.2	69.3	65.6	63.4	61.3	58.3	56.1	54.7	55.4	51.8
75°	67.8	64.2	62.0	58.3	56.1	54.7	51.8	50.3	48.1	47.4	45.9
77.5°	59.1	56.1	54.0	51.0	49.6	47.4	45.2	43.8	41.6	41.6	39.4
80°	51.0	48.1	45.9	43.0	42.3	40.8	39.4	37.2	35.7	35.0	33.5
82.5°	43.8	41.6	39.4	37.2	35.7	34.3	32.8	31.4	29.9	29.2	27.7
85°	36.5	35.0	32.8	31.4	29.9	28.4	27.0	26.3	24.8	24.1	22.6
87.5°	31.4	29.9	28.4	27.0	25.5	24.1	22.6	21.9	20.4	20.4	19.0
90°	27.0	26.3	24.8	23.3	22.6	21.1	20.4	19.0	18.2	17.5	16.8
92.5°	20.4	21.1	20.4	20.4	20.4	19.7	19.0	18.2	17.5	16.8	16.0
95°	7.3	9.5	10.2	12.4	13.1	14.6	13.9	13.9	12.4	12.4	10.9
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



TEST NUMBER: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - 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: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - HL6NFL - ERT702

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6
2.5°	419.3	420.7	419.3	414.9	412.0	408.3	406.9	401.8	404.7	399.6	402.5
5°	395.2	393.8	387.9	381.4	374.8	367.5	365.3	360.2	352.2	355.1	355.8
7.5°	369.0	364.6	356.6	348.5	342.0	333.2	329.6	321.6	320.8	316.5	316.5
10°	343.4	336.9	328.1	319.4	309.2	301.9	297.5	289.5	287.3	282.9	282.9
12.5°	317.2	309.2	299.7	290.9	281.5	272.7	268.3	261.0	258.1	254.5	252.3
15°	291.7	282.9	273.4	264.0	255.2	248.6	242.8	236.3	234.1	225.3	227.5
17.5°	267.6	260.3	250.1	241.4	233.3	226.0	220.9	215.1	212.2	208.5	207.8
20°	245.7	238.4	229.0	220.2	212.9	207.1	202.0	196.1	193.2	190.3	190.3
22.5°	224.6	218.0	210.0	202.0	199.8	189.6	185.2	179.4	178.6	175.0	174.3
25°	206.4	200.5	193.2	186.7	180.1	175.0	171.4	166.3	164.8	162.6	161.9
27.5°	190.3	184.5	178.6	172.8	167.0	163.3	159.0	155.3	153.9	151.7	150.9
30°	175.7	171.4	165.5	160.4	155.3	151.7	149.5	145.1	143.6	142.2	141.5
32.5°	164.1	159.7	154.6	150.9	145.8	142.9	140.7	137.1	135.6	134.2	134.2
35°	152.4	148.8	144.4	140.7	137.1	134.2	132.0	129.1	128.3	126.1	126.9
37.5°	142.2	139.3	135.6	132.7	129.1	126.9	124.7	121.8	121.0	120.3	120.3
40°	133.4	131.3	127.6	122.5	121.8	119.6	118.1	115.2	115.2	113.8	113.8
42.5°	125.4	123.2	120.3	118.1	115.2	113.8	112.3	110.1	109.4	107.9	108.6
45°	118.1	115.9	113.8	112.3	108.6	107.9	106.5	104.3	103.5	102.1	102.8
47.5°	110.8	109.4	107.9	105.7	103.5	102.1	100.6	98.4	98.4	97.0	97.7
50°	104.3	102.8	101.4	99.9	97.0	96.3	95.5	93.3	92.6	91.9	92.6
52.5°	97.7	97.0	95.5	94.1	91.9	91.1	89.7	88.2	87.5	86.8	87.5
55°	91.9	91.1	89.7	88.2	86.0	86.0	84.6	83.1	82.4	81.7	82.4
57.5°	85.3	85.3	83.9	83.1	80.9	80.2	79.5	77.3	77.3	76.6	77.3
60°	80.2	79.5	80.2	77.3	75.1	74.4	73.6	72.2	72.2	71.5	72.2
62.5°	73.6	73.6	72.9	72.2	70.0	70.0	68.5	67.1	67.1	66.4	67.1
65°	67.8	67.8	67.1	66.4	64.9	64.2	63.4	62.0	62.0	61.3	62.0
67.5°	62.7	62.0	61.3	60.5	59.1	59.1	57.6	56.9	56.1	56.1	56.9
70°	56.9	56.1	56.1	54.7	54.0	53.2	52.5	51.8	51.0	50.3	51.0
72.5°	51.0	50.3	50.3	49.6	48.1	47.4	46.7	45.9	45.9	45.2	45.9
75°	45.2	44.5	44.5	43.0	42.3	41.6	40.8	40.1	40.1	40.1	40.1
77.5°	38.6	38.6	37.9	37.2	36.5	35.7	35.7	35.0	34.3	34.3	35.0
80°	32.8	32.8	32.1	31.4	30.6	30.6	29.9	29.2	29.2	28.4	29.2
82.5°	27.0	27.0	26.3	26.3	24.8	25.5	24.8	24.1	24.1	24.1	24.1
85°	22.6	21.9	21.1	21.1	20.4	20.4	20.4	19.7	19.7	19.7	19.7
87.5°	18.2	18.2	17.5	17.5	16.8	16.8	16.8	16.8	16.0	16.0	16.8
90°	16.0	16.0	16.0	15.3	15.3	15.3	15.3	14.6	14.6	14.6	14.6
92.5°	15.3	14.6	13.9	13.1	11.7	11.7	11.7	12.4	12.4	13.1	13.9
95°	9.5	8.0	6.6	5.1	4.4	4.4	3.6	5.1	5.8	7.3	8.8
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: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - 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: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - HL6NFL - ERT702

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	442.6	442.6	442.6	442.6
2.5°	404.7	396.7	392.3	403.2
5°	355.8	348.5	342.7	355.1
7.5°	315.0	310.6	304.8	310.6
10°	281.5	270.5	269.8	277.8
12.5°	251.6	245.7	242.1	249.4
15°	226.8	221.7	218.0	223.9
17.5°	207.1	202.7	198.3	202.7
20°	188.9	184.5	180.8	187.4
22.5°	173.5	170.6	166.3	170.6
25°	161.1	158.2	154.6	159.0
27.5°	150.9	148.0	145.1	148.8
30°	141.5	139.3	136.4	140.7
32.5°	133.4	129.1	129.1	132.7
35°	126.1	124.7	121.8	125.4
37.5°	119.6	118.1	115.9	118.9
40°	113.8	112.3	110.1	113.0
42.5°	107.2	107.2	104.3	107.2
45°	102.8	101.4	99.2	102.1
47.5°	97.7	96.3	94.1	97.0
50°	92.6	91.1	89.7	91.9
52.5°	87.5	86.8	83.9	86.8
55°	82.4	81.7	79.5	81.7
57.5°	77.3	76.6	74.4	76.6
60°	72.2	71.5	70.0	71.5
62.5°	67.1	66.4	64.9	66.4
65°	62.0	61.3	59.8	61.3
67.5°	56.1	56.1	54.7	56.1
70°	51.0	51.0	49.6	51.0
72.5°	45.9	45.9	44.5	45.9
75°	40.8	40.1	38.6	40.1
77.5°	35.0	34.3	34.3	34.3
80°	29.2	29.2	28.4	29.2
82.5°	24.1	24.1	23.3	24.1
85°	19.7	19.7	19.0	20.4
87.5°	16.8	16.8	16.0	16.0
90°	14.6	14.6	14.6	14.6
92.5°	13.9	13.9	13.9	13.9
95°	9.5	10.2	9.5	9.5
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: P130230

CATALOG NUMBER: HL612ICAT - HLM6927 - 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)