

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P256909

Luminaire Tested: **HGL-S-BA-40L830-UNV-12**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256909
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1803-682-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: HGL-S-BA-40L830-UNV-12
Description: HUGO 12 FOOT LINEAR LED LUMINAIRE WITH BAFFLE WITH AISLE OPTIC
Light Source: (504) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

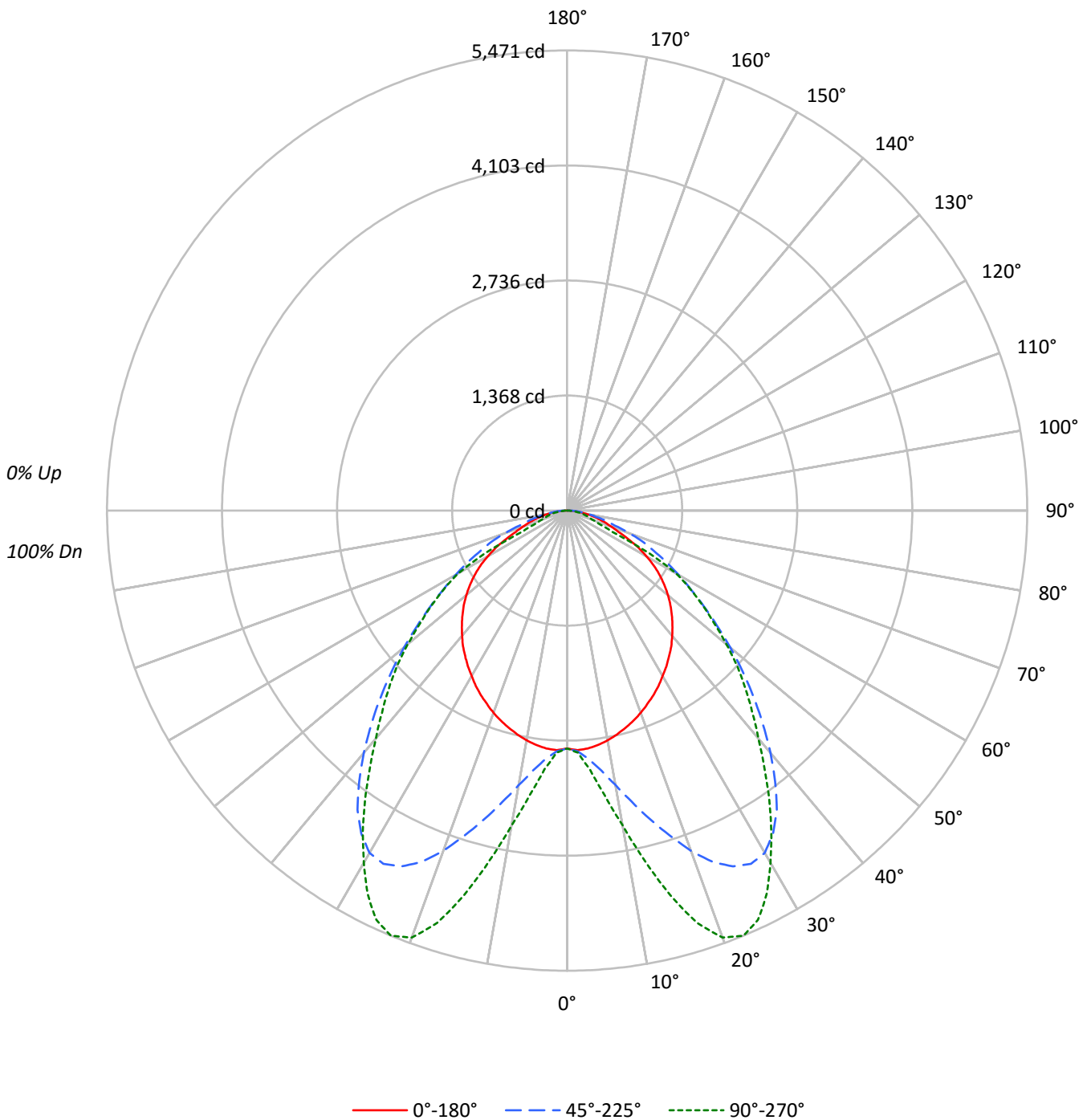
Lumens per Lamp: N/A
Luminaire Lumens: 11047.2 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.77 / 1.65
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 12' x H: 0.01')
CIE Type: Direct

Input Watts (W): 85.7
Input Voltage (V): 120
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: P256909
CATALOG NUMBER: HGL-S-BA-40L830-UNV-12

Luminous Intensity Polar Plot





TEST NUMBER: P256909

CATALOG NUMBER: HGL-S-BA-40L830-UNV-12

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	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	55	50	61	54	50	59	53	49	47
6	72	59	51	44	70	58	50	44	57	49	44	55	48	44	53	48	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	45	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11070	11070	11070
5°	11157	11614	12088
10°	11021	13099	14998
15°	10837	15246	18961
20°	10657	17720	22149
25°	10462	19866	22729
30°	10255	20860	21316
35°	10095	20320	19414
40°	9922	18729	17446
45°	9740	16822	15920
50°	9517	14851	14311
55°	9165	12955	12650
60°	8545	11378	10902
65°	7405	9861	4874
70°	6372	8316	3369
75°	5842	6457	3046
80°	5254	5255	2665
85°	4373	4585	1819



TEST NUMBER: P256909

CATALOG NUMBER: HGL-S-BA-40L830-UNV-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.1	2.7
10°-20°	1069.4	9.7
20°-30°	1935.6	17.5
30°-40°	2322.9	21.0
40°-50°	2200.5	19.9
50°-60°	1724.2	15.6
60°-70°	962.3	8.7
70°-80°	407.8	3.7
80°-90°	126.9	1.1
90°-100°	4.6	0.0
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°	3298.1	29.9
0°-40°	5621.0	50.9
0°-60°	9545.7	86.4
0°-90°	11042.6	100.0
90°-120°	4.6	0.0
90°-150°	4.6	0.0
90°-180°	5.0	0.0
0°-180°	11047.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2828	2828	2828	2828	2828	
5°	2840	2851	2964	3062	3088	269
15°	2675	2996	3794	4491	4734	754
25°	2423	3184	4667	5237	5370	1116
35°	2114	3256	4346	4164	4187	1323
45°	1761	2981	3135	2915	3002	1358
55°	1345	2166	1984	1920	1969	1198
65°	801	1000	1136	914	576	801
75°	388	402	477	338	234	413
85°	98	113	139	107	61	109
90°	0	23	43	29	0	6
95°	0	0	0	0	0	0
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: P256909

CATALOG NUMBER: HGL-S-BA-40L830-UNV-12

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1
2.5°	2851.3	2848.4	2839.7	2828.1	2831.0	2833.9	2833.9	2836.8	2839.7	2848.4	2865.7
5°	2839.7	2833.9	2831.0	2828.1	2842.6	2851.3	2859.9	2877.3	2897.5	2929.3	2964.0
7.5°	2810.8	2810.8	2816.6	2828.1	2859.9	2880.2	2897.5	2940.9	2990.1	3050.8	3117.3
10°	2773.2	2779.0	2796.3	2822.3	2880.2	2912.0	2946.7	3019.0	3102.8	3204.0	3313.9
12.5°	2726.9	2738.5	2767.4	2816.6	2903.3	2952.5	3004.5	3114.4	3238.7	3383.3	3545.3
15°	2674.9	2689.3	2735.6	2807.9	2926.4	2995.8	3068.1	3218.5	3389.1	3582.9	3794.0
17.5°	2619.9	2640.2	2703.8	2805.0	2958.2	3045.0	3137.5	3334.2	3553.9	3788.2	4048.4
20°	2559.2	2588.1	2669.1	2799.2	2987.2	3094.2	3206.9	3452.7	3721.7	3999.3	4302.9
22.5°	2489.8	2527.4	2628.6	2787.6	3016.1	3143.3	3276.3	3562.6	3874.9	4190.1	4519.8
25°	2423.3	2463.8	2582.3	2773.2	3039.2	3183.8	3337.1	3663.8	4013.7	4346.3	4667.3
27.5°	2351.0	2397.3	2538.9	2758.7	3056.6	3218.5	3389.1	3747.7	4114.9	4444.6	4733.8
30°	2270.0	2330.7	2489.8	2735.6	3065.2	3244.5	3429.6	3814.2	4178.6	4467.7	4699.1
32.5°	2194.8	2261.3	2434.8	2709.6	3068.1	3259.0	3455.6	3834.4	4178.6	4415.7	4554.5
35°	2113.9	2186.2	2379.9	2677.8	3056.6	3256.1	3452.7	3828.7	4117.8	4279.8	4346.3
37.5°	2032.9	2111.0	2322.1	2634.4	3030.5	3235.9	3432.5	3770.8	3993.5	4080.2	4062.9
40°	1943.2	2030.0	2246.9	2579.4	2984.3	3183.8	3371.8	3669.6	3811.3	3825.8	3762.2
42.5°	1853.6	1943.2	2171.7	2507.1	2906.2	3097.1	3270.6	3507.7	3574.2	3542.4	3444.1
45°	1761.1	1853.6	2082.1	2420.4	2807.9	2981.4	3126.0	3296.6	3296.6	3238.7	3134.6
47.5°	1665.6	1755.3	1986.6	2319.2	2680.6	2831.0	2949.6	3050.8	3004.5	2932.2	2828.1
50°	1564.4	1654.1	1879.6	2197.7	2515.8	2640.2	2738.5	2776.1	2703.8	2622.8	2530.3
52.5°	1457.4	1547.1	1752.4	2044.5	2322.1	2414.6	2486.9	2484.0	2397.3	2325.0	2244.0
55°	1344.7	1425.6	1610.7	1862.3	2090.7	2165.9	2209.3	2174.6	2093.6	2027.1	1983.7
57.5°	1226.1	1292.6	1451.7	1657.0	1827.6	1885.4	1911.4	1865.2	1807.3	1766.9	1743.7
60°	1093.1	1148.0	1260.8	1419.8	1544.2	1584.7	1602.0	1570.2	1550.0	1538.4	1532.6
62.5°	954.3	980.3	1052.6	1156.7	1260.8	1289.7	1310.0	1315.7	1312.8	1318.6	1333.1
65°	801.0	809.7	832.8	884.9	965.8	1000.5	1038.1	1078.6	1101.8	1124.9	1136.5
67.5°	659.3	662.2	673.8	691.1	722.9	760.5	792.3	853.1	905.1	948.5	977.4
70°	558.1	555.2	558.1	566.8	584.1	598.6	613.0	656.4	711.4	783.7	789.4
72.5°	471.4	468.5	471.4	477.1	482.9	488.7	497.4	514.7	546.5	589.9	598.6
75°	387.5	387.5	387.5	393.3	399.1	402.0	407.7	413.5	425.1	456.9	477.1
77.5°	309.4	306.5	312.3	315.2	318.1	323.9	326.8	332.6	338.3	349.9	364.4
80°	234.2	231.3	234.2	240.0	242.9	248.7	248.7	257.4	260.3	268.9	274.7
82.5°	164.8	161.9	164.8	170.6	170.6	176.4	179.3	185.1	190.9	196.6	202.4
85°	98.3	98.3	101.2	104.1	107.0	112.8	115.7	124.3	130.1	135.9	138.8
87.5°	43.4	43.4	46.3	49.2	54.9	60.7	63.6	69.4	75.2	83.9	83.9
90°	0.0	2.9	8.7	14.5	17.4	23.1	23.1	31.8	34.7	40.5	43.4
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	5.8	8.7	11.6
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P256909

CATALOG NUMBER: HGL-S-BA-40L830-UNV-12

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
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: P256909

CATALOG NUMBER: HGL-S-BA-40L830-UNV-12

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1	2828.1
2.5°	2891.7	2874.4	2886.0	2888.8	2891.7	2886.0	2880.2	2886.0	2880.2	2880.2
5°	3007.4	3004.5	3033.4	3053.7	3062.4	3062.4	3079.7	3091.3	3094.2	3088.4
7.5°	3189.6	3206.9	3264.8	3305.3	3328.4	3340.0	3371.8	3389.1	3412.3	3409.4
10°	3429.6	3484.5	3571.3	3629.1	3669.6	3689.9	3736.1	3767.9	3805.5	3802.6
12.5°	3692.8	3794.0	3915.4	4008.0	4068.7	4106.3	4167.0	4224.8	4259.5	4262.4
15°	3990.6	4129.4	4294.2	4412.8	4490.9	4540.0	4623.9	4681.7	4739.6	4733.8
17.5°	4282.7	4450.4	4649.9	4806.1	4878.4	4924.6	5025.8	5086.6	5141.5	5141.5
20°	4542.9	4736.7	4939.1	5083.7	5153.1	5199.3	5286.1	5346.8	5387.3	5401.8
22.5°	4751.1	4930.4	5101.0	5225.4	5268.8	5306.3	5372.9	5422.0	5448.0	5471.2
25°	4866.8	5011.4	5127.1	5213.8	5236.9	5257.2	5294.8	5332.4	5338.2	5370.0
27.5°	4869.7	4976.7	5040.3	5072.1	5075.0	5075.0	5101.0	5115.5	5127.1	5138.6
30°	4765.6	4814.7	4826.3	4829.2	4814.7	4806.1	4823.4	4826.3	4835.0	4835.0
32.5°	4557.4	4568.9	4548.7	4516.9	4508.2	4490.9	4502.4	4496.7	4511.1	4519.8
35°	4291.3	4271.1	4219.0	4195.9	4164.1	4155.4	4164.1	4158.3	4167.0	4187.2
37.5°	3987.7	3944.3	3901.0	3860.5	3837.3	3814.2	3822.9	3831.6	3843.1	3848.9
40°	3675.4	3617.6	3571.3	3530.8	3507.7	3490.3	3504.8	3513.5	3539.5	3539.5
42.5°	3360.2	3296.6	3250.3	3224.3	3206.9	3192.5	3215.6	3221.4	3253.2	3259.0
45°	3047.9	2993.0	2955.4	2929.3	2914.9	2920.7	2943.8	2958.2	2987.2	3001.6
47.5°	2761.6	2715.3	2674.9	2663.3	2663.3	2669.1	2692.2	2706.7	2729.8	2747.2
50°	2481.1	2446.4	2420.4	2405.9	2408.8	2417.5	2437.7	2449.3	2472.4	2472.4
52.5°	2206.4	2183.3	2171.7	2154.3	2154.3	2151.5	2171.7	2183.3	2200.6	2203.5
55°	1966.4	1946.1	1934.6	1923.0	1920.1	1925.9	1937.5	1946.1	1966.4	1969.3
57.5°	1737.9	1729.3	1720.6	1711.9	1709.0	1711.9	1717.7	1723.5	1735.0	1737.9
60°	1529.7	1526.8	1515.3	1506.6	1503.7	1500.8	1497.9	1495.0	1500.8	1497.9
62.5°	1338.9	1330.2	1321.5	1304.2	1295.5	1272.4	1243.4	1179.8	1127.8	1098.9
65°	1150.9	1145.1	1104.6	986.1	913.8	821.3	722.9	627.5	595.7	575.5
67.5°	968.7	873.3	728.7	624.6	587.0	552.3	500.3	448.2	419.3	402.0
70°	696.9	615.9	549.4	491.6	465.6	445.3	404.8	367.3	341.2	329.7
72.5°	563.9	511.8	468.5	425.1	404.8	381.7	341.2	303.6	280.5	268.9
75°	471.4	439.5	396.2	355.7	338.3	321.0	292.1	263.1	242.9	234.2
77.5°	373.0	355.7	329.7	297.8	283.4	271.8	245.8	225.6	205.3	196.6
80°	274.7	268.9	251.6	228.4	216.9	208.2	188.0	170.6	153.3	147.5
82.5°	202.4	196.6	182.2	164.8	159.0	150.4	135.9	121.5	109.9	104.1
85°	138.8	135.9	124.3	112.8	107.0	101.2	86.8	75.2	66.5	60.7
87.5°	86.8	83.9	78.1	66.5	60.7	54.9	43.4	34.7	26.0	23.1
90°	43.4	43.4	40.5	31.8	28.9	26.0	17.4	8.7	2.9	0.0
92.5°	11.6	11.6	11.6	8.7	8.7	5.8	2.9	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	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
102.5°	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
107.5°	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



TEST NUMBER: P256909

CATALOG NUMBER: HGL-S-BA-40L830-UNV-12

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	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
117.5°	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
122.5°	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
127.5°	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
132.5°	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
137.5°	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
142.5°	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
147.5°	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
152.5°	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
157.5°	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
162.5°	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
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)