

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: P256870

Luminaire Tested: **HGL-S-BA-80L840-UNV-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P256870  
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-80L840-UNV-4  
Description: HUGO 4 FOOT LINEAR LED LUMINAIRE WITH BAFFLE WITH AISLE OPTIC  
Light Source: (168) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

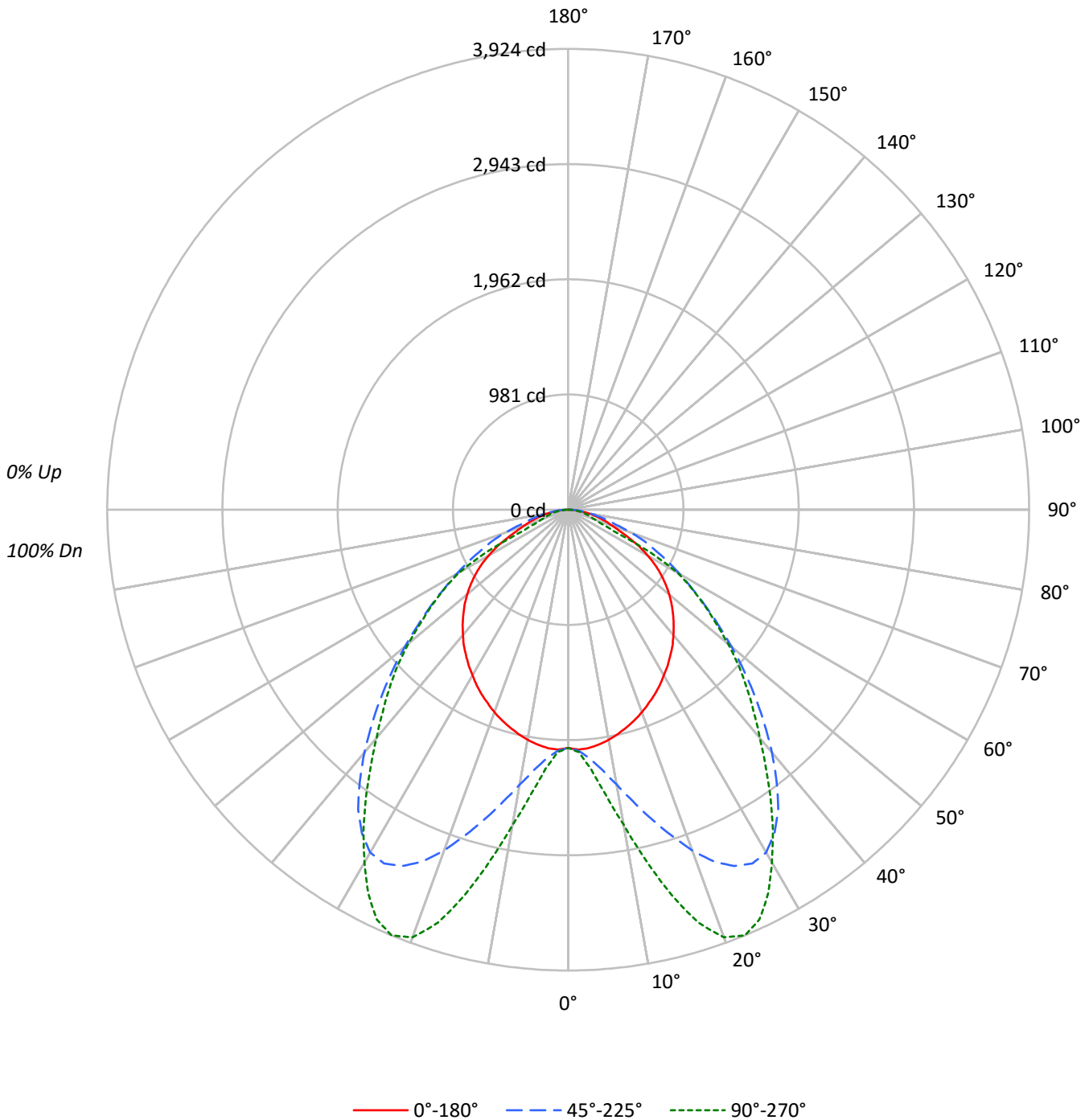
Lumens per Lamp: N/A  
Luminaire Lumens: 7923.9 lumens  
Efficiency: N/A  
Efficacy: 111.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.77 / 1.65  
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 4' x H: 0.01')  
CIE Type: Direct

Input Watts (W): 70.9  
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



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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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					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°	23820	23820	23820
5°	24003	24988	26012
10°	23707	28180	32273
15°	23308	32795	40800
20°	22917	38115	47659
25°	22494	42724	48909
30°	22045	44856	45867
35°	21697	43691	41777
40°	21320	40262	37542
45°	20925	36158	34258
50°	20438	31914	30795
55°	19675	27833	27221
60°	18333	24436	23459
65°	15877	21167	10488
70°	13650	17840	7250
75°	12492	13840	6555
80°	11202	11242	5735
85°	9235	9774	3919



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.2	2.7
10°-20°	767.1	9.7
20°-30°	1388.3	17.5
30°-40°	1666.1	21.0
40°-50°	1578.4	19.9
50°-60°	1236.7	15.6
60°-70°	690.2	8.7
70°-80°	292.5	3.7
80°-90°	91.0	1.1
90°-100°	3.3	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°	2365.6	29.9
0°-40°	4031.8	50.9
0°-60°	6846.9	86.4
0°-90°	7920.6	100.0
90°-120°	3.3	0.0
90°-150°	3.3	0.0
90°-180°	3.0	0.0
0°-180°	7923.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2028	2028	2028	2028	2028	
5°	2037	2045	2126	2196	2215	193
15°	1919	2149	2721	3221	3395	541
25°	1738	2284	3348	3756	3852	801
35°	1516	2336	3118	2987	3003	949
45°	1263	2138	2248	2091	2153	974
55°	964	1554	1423	1377	1412	859
65°	574	718	815	655	413	574
75°	278	288	342	243	168	296
85°	70	81	100	77	44	78
90°	0	17	31	21	0	4
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: P256870

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5
2.5°	2045.1	2043.1	2036.8	2028.5	2030.6	2032.7	2032.7	2034.8	2036.8	2043.1	2055.5
5°	2036.8	2032.7	2030.6	2028.5	2038.9	2045.1	2051.4	2063.8	2078.3	2101.1	2126.0
7.5°	2016.1	2016.1	2020.2	2028.5	2051.4	2065.9	2078.3	2109.4	2144.7	2188.2	2236.0
10°	1989.1	1993.3	2005.7	2024.4	2065.9	2088.7	2113.6	2165.4	2225.6	2298.2	2377.0
12.5°	1955.9	1964.2	1985.0	2020.2	2082.5	2117.7	2155.1	2233.9	2323.1	2426.8	2542.9
15°	1918.6	1929.0	1962.2	2014.0	2099.1	2148.8	2200.7	2308.5	2430.9	2569.9	2721.3
17.5°	1879.2	1893.7	1939.3	2011.9	2121.9	2184.1	2250.5	2391.5	2549.2	2717.2	2903.8
20°	1835.6	1856.4	1914.5	2007.8	2142.6	2219.4	2300.3	2476.6	2669.5	2868.6	3086.4
22.5°	1785.9	1812.8	1885.4	1999.5	2163.4	2254.6	2350.0	2555.4	2779.4	3005.5	3241.9
25°	1738.2	1767.2	1852.2	1989.1	2180.0	2283.7	2393.6	2628.0	2878.9	3117.5	3347.7
27.5°	1686.3	1719.5	1821.1	1978.8	2192.4	2308.5	2430.9	2688.1	2951.5	3188.0	3395.4
30°	1628.2	1671.8	1785.9	1962.2	2198.6	2327.2	2460.0	2735.8	2997.2	3204.6	3370.5
32.5°	1574.3	1622.0	1746.4	1943.5	2200.7	2337.6	2478.6	2750.3	2997.2	3167.3	3266.8
35°	1516.2	1568.1	1707.0	1920.7	2192.4	2335.5	2476.6	2746.2	2953.6	3069.8	3117.5
37.5°	1458.1	1514.1	1665.6	1889.6	2173.7	2321.0	2462.0	2704.7	2864.4	2926.7	2914.2
40°	1393.8	1456.1	1611.6	1850.2	2140.5	2283.7	2418.5	2632.1	2733.8	2744.1	2698.5
42.5°	1329.5	1393.8	1557.7	1798.3	2084.5	2221.4	2345.9	2516.0	2563.7	2540.9	2470.3
45°	1263.2	1329.5	1493.4	1736.1	2014.0	2138.5	2242.2	2364.6	2364.6	2323.1	2248.4
47.5°	1194.7	1259.0	1425.0	1663.5	1922.8	2030.6	2115.7	2188.2	2155.1	2103.2	2028.5
50°	1122.1	1186.4	1348.2	1576.4	1804.5	1893.7	1964.2	1991.2	1939.3	1881.3	1814.9
52.5°	1045.4	1109.7	1256.9	1466.4	1665.6	1731.9	1783.8	1781.7	1719.5	1667.6	1609.6
55°	964.5	1022.6	1155.3	1335.8	1499.6	1553.6	1584.7	1559.8	1501.7	1454.0	1422.9
57.5°	879.4	927.2	1041.2	1188.5	1310.9	1352.4	1371.0	1337.8	1296.4	1267.3	1250.7
60°	784.0	823.4	904.3	1018.4	1107.6	1136.6	1149.1	1126.3	1111.8	1103.5	1099.3
62.5°	684.5	703.1	755.0	829.7	904.3	925.1	939.6	943.7	941.7	945.8	956.2
65°	574.5	580.8	597.4	634.7	692.8	717.7	744.6	773.7	790.3	806.9	815.1
67.5°	472.9	475.0	483.3	495.7	518.5	545.5	568.3	611.9	649.2	680.3	701.1
70°	400.3	398.2	400.3	406.5	419.0	429.4	439.7	470.8	510.2	562.1	566.2
72.5°	338.1	336.0	338.1	342.2	346.4	350.5	356.8	369.2	392.0	423.1	429.4
75°	277.9	277.9	277.9	282.1	286.2	288.3	292.5	296.6	304.9	327.7	342.2
77.5°	221.9	219.9	224.0	226.1	228.2	232.3	234.4	238.5	242.7	251.0	261.3
80°	168.0	165.9	168.0	172.2	174.2	178.4	178.4	184.6	186.7	192.9	197.0
82.5°	118.2	116.2	118.2	122.4	122.4	126.5	128.6	132.7	136.9	141.0	145.2
85°	70.5	70.5	72.6	74.7	76.7	80.9	83.0	89.2	93.3	97.5	99.6
87.5°	31.1	31.1	33.2	35.3	39.4	43.6	45.6	49.8	53.9	60.2	60.2
90°	0.0	2.1	6.2	10.4	12.4	16.6	16.6	22.8	24.9	29.0	31.1
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	4.1	6.2	8.3
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



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**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



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5	2028.5
2.5°	2074.2	2061.7	2070.0	2072.1	2074.2	2070.0	2065.9	2070.0	2065.9	2065.9
5°	2157.1	2155.1	2175.8	2190.3	2196.5	2196.5	2209.0	2217.3	2219.4	2215.2
7.5°	2287.8	2300.3	2341.7	2370.8	2387.4	2395.7	2418.5	2430.9	2447.5	2445.4
10°	2460.0	2499.4	2561.6	2603.1	2632.1	2646.6	2679.8	2702.6	2729.6	2727.5
12.5°	2648.7	2721.3	2808.4	2874.8	2918.4	2945.3	2988.9	3030.4	3055.2	3057.3
15°	2862.4	2961.9	3080.1	3165.2	3221.2	3256.4	3316.6	3358.1	3399.6	3395.4
17.5°	3071.8	3192.1	3335.3	3447.3	3499.1	3532.3	3604.9	3648.5	3687.9	3687.9
20°	3258.5	3397.5	3542.7	3646.4	3696.2	3729.4	3791.6	3835.1	3864.2	3874.5
22.5°	3407.9	3536.5	3658.8	3748.0	3779.1	3806.1	3853.8	3889.1	3907.7	3924.3
25°	3490.8	3594.5	3677.5	3739.7	3756.3	3770.8	3797.8	3824.8	3828.9	3851.7
27.5°	3492.9	3569.6	3615.3	3638.1	3640.2	3640.2	3658.8	3669.2	3677.5	3685.8
30°	3418.2	3453.5	3461.8	3463.9	3453.5	3447.3	3459.7	3461.8	3468.0	3468.0
32.5°	3268.9	3277.2	3262.7	3239.9	3233.6	3221.2	3229.5	3225.3	3235.7	3241.9
35°	3078.1	3063.5	3026.2	3009.6	2986.8	2980.6	2986.8	2982.7	2988.9	3003.4
37.5°	2860.3	2829.2	2798.1	2769.0	2752.4	2735.8	2742.1	2748.3	2756.6	2760.7
40°	2636.3	2594.8	2561.6	2532.6	2516.0	2503.5	2513.9	2520.1	2538.8	2538.8
42.5°	2410.2	2364.6	2331.4	2312.7	2300.3	2289.9	2306.5	2310.6	2333.4	2337.6
45°	2186.2	2146.8	2119.8	2101.1	2090.8	2094.9	2111.5	2121.9	2142.6	2153.0
47.5°	1980.8	1947.6	1918.6	1910.3	1910.3	1914.5	1931.1	1941.4	1958.0	1970.5
50°	1779.6	1754.7	1736.1	1725.7	1727.8	1734.0	1748.5	1756.8	1773.4	1773.4
52.5°	1582.6	1566.0	1557.7	1545.3	1545.3	1543.2	1557.7	1566.0	1578.4	1580.5
55°	1410.4	1395.9	1387.6	1379.3	1377.2	1381.4	1389.7	1395.9	1410.4	1412.5
57.5°	1246.6	1240.4	1234.1	1227.9	1225.8	1227.9	1232.1	1236.2	1244.5	1246.6
60°	1097.2	1095.2	1086.9	1080.6	1078.6	1076.5	1074.4	1072.3	1076.5	1074.4
62.5°	960.3	954.1	947.9	935.4	929.2	912.6	891.9	846.3	808.9	788.2
65°	825.5	821.4	792.3	707.3	655.4	589.1	518.5	450.1	427.3	412.8
67.5°	694.8	626.4	522.7	448.0	421.1	396.2	358.8	321.5	300.8	288.3
70°	499.9	441.8	394.1	352.6	333.9	319.4	290.4	263.4	244.8	236.5
72.5°	404.5	367.1	336.0	304.9	290.4	273.8	244.8	217.8	201.2	192.9
75°	338.1	315.3	284.2	255.1	242.7	230.2	209.5	188.7	174.2	168.0
77.5°	267.6	255.1	236.5	213.6	203.3	195.0	176.3	161.8	147.3	141.0
80°	197.0	192.9	180.5	163.9	155.6	149.3	134.8	122.4	109.9	105.8
82.5°	145.2	141.0	130.7	118.2	114.1	107.9	97.5	87.1	78.8	74.7
85°	99.6	97.5	89.2	80.9	76.7	72.6	62.2	53.9	47.7	43.6
87.5°	62.2	60.2	56.0	47.7	43.6	39.4	31.1	24.9	18.7	16.6
90°	31.1	31.1	29.0	22.8	20.7	18.7	12.4	6.2	2.1	0.0
92.5°	8.3	8.3	8.3	6.2	6.2	4.1	2.1	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: P256870

CATALOG NUMBER: HGL-S-BA-80L840-UNV-4

**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)