

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: P257099

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-204-13)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: HGL-S-UF-40L830-UNV-12
Description: HUGO 12 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS WITH UPLIGHT
Light Source: (504) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11631.7 lumens
Efficiency: N/A
Efficacy: 135.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.32 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

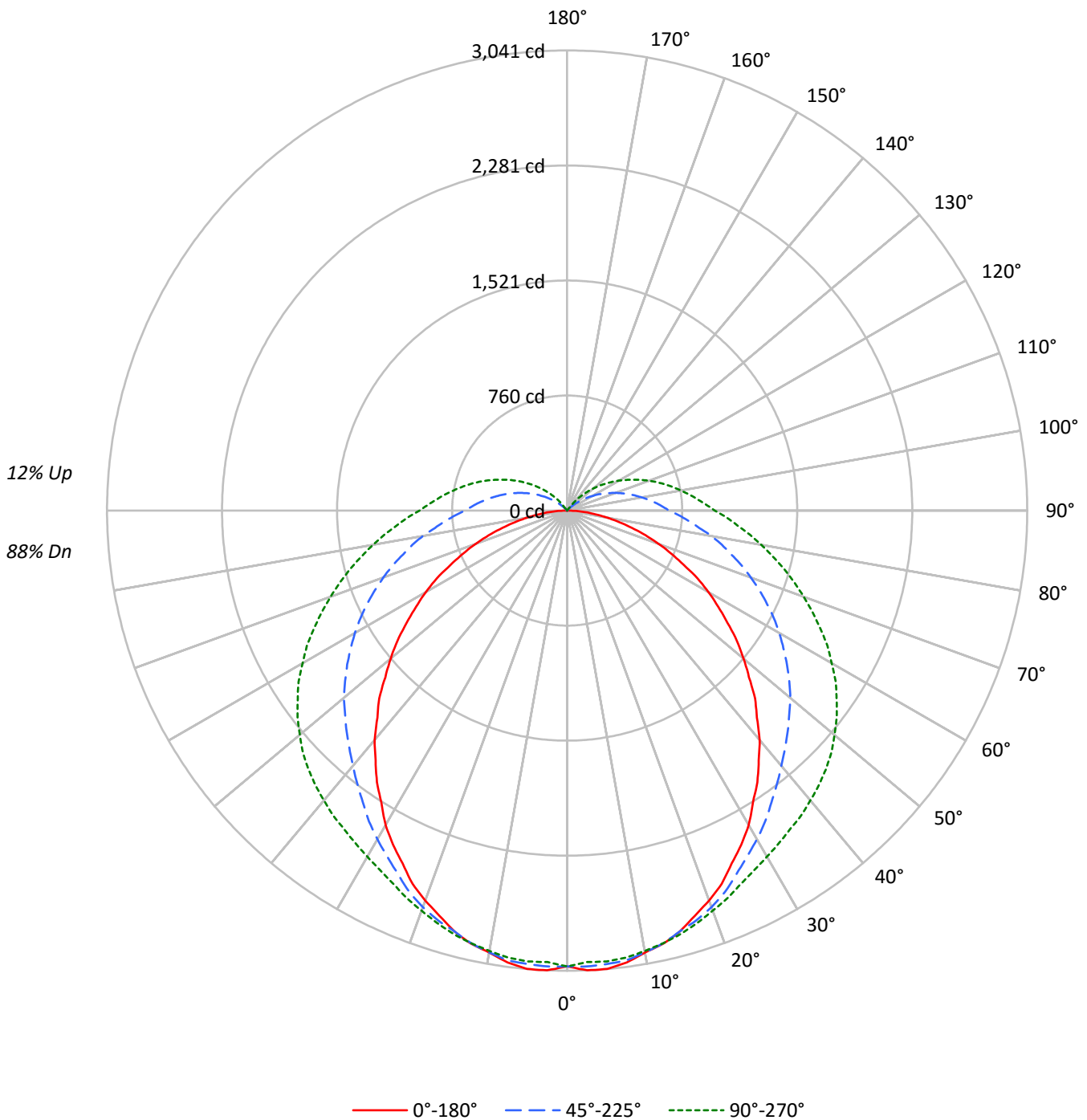
Input Watts (W): 85.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P257099

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

Luminous Intensity Polar Plot





TEST NUMBER: P257099

CATALOG NUMBER: HGL-S-UF-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	50	30	10	0	
RCR																						
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	91	91	91	88				
1	103	97	92	87	99	94	89	85	87	84	80	81	78	75	76	73	71	68				
2	93	84	76	69	89	81	73	67	75	69	64	70	65	61	65	61	58	55				
3	84	73	64	56	81	70	62	55	65	58	53	61	55	50	57	52	48	45				
4	77	64	54	47	73	62	53	46	58	50	44	54	48	42	50	45	41	38				
5	70	57	47	40	67	55	46	39	51	44	38	48	42	36	45	39	35	32				
6	65	51	42	35	62	49	41	34	46	39	33	43	37	32	41	35	31	28				
7	60	46	37	31	58	45	36	30	42	34	29	39	33	28	37	31	27	25				
8	56	42	33	27	54	41	32	27	38	31	26	36	30	25	34	28	24	22				
9	52	38	30	24	50	37	29	24	35	28	23	33	27	22	31	26	22	20				
10	49	35	27	22	47	34	27	22	33	26	21	31	25	20	29	24	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11790	11790	11790
5°	11939	11491	11301
10°	11768	11143	10872
15°	11639	10725	10465
20°	11386	10380	10058
25°	11068	9923	9695
30°	10795	9534	9457
35°	10409	9148	9314
40°	10040	8827	9251
45°	9638	8598	9203
50°	9175	8432	9111
55°	8732	8249	8994
60°	8326	8088	8843
65°	7722	7929	8658
70°	7201	7782	8461
75°	6483	7640	8316
80°	5721	7636	8207
85°	4854	7665	8191



TEST NUMBER: P257099

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.3	2.5
10°-20°	811.3	7.0
20°-30°	1217.2	10.5
30°-40°	1477.9	12.7
40°-50°	1596.3	13.7
50°-60°	1563.4	13.4
60°-70°	1386.7	11.9
70°-80°	1110.8	9.5
80°-90°	805.0	6.9
90°-100°	567.4	4.9
100°-110°	395.8	3.4
110°-120°	245.0	2.1
120°-130°	124.6	1.1
130°-140°	43.2	0.4
140°-150°	2.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2313.8	19.9
0°-40°	3791.7	32.6
0°-60°	6951.3	59.8
0°-90°	10253.7	88.2
90°-120°	1208.1	10.4
90°-150°	1377.9	11.8
90°-180°	1378.0	11.8
0°-180°	11631.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3012	3012	3012	3012	3012	
5°	3041	3012	3008	2994	2990	288
15°	2879	2857	2879	2904	2897	810
25°	2573	2580	2649	2692	2721	1188
35°	2192	2206	2354	2494	2570	1369
45°	1756	1803	2062	2318	2418	1349
55°	1296	1404	1774	2066	2174	1161
65°	849	1051	1458	1738	1846	848
75°	443	723	1123	1393	1483	473
85°	119	443	810	1051	1130	128
90°	4	324	673	896	975	9
95°	0	256	587	795	864	0
105°	0	137	421	608	669	0
115°	0	43	266	428	482	0
125°	0	0	130	263	310	0
135°	0	0	22	115	151	2
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: P257099

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1
2.5°	3040.9	3037.3	3026.5	3015.7	3012.1	3012.1	3008.5	3004.9	3004.9	3001.3	3015.7
5°	3040.9	3037.3	3026.5	3012.1	3008.5	3012.1	3008.5	3001.3	3001.3	2997.7	3008.5
7.5°	3012.1	3004.9	2997.7	2986.9	2983.3	2983.3	2979.7	2979.7	2979.7	2979.7	2997.7
10°	2965.4	2961.8	2954.6	2943.8	2943.8	2940.2	2940.2	2943.8	2943.8	2947.4	2965.4
12.5°	2933.0	2925.8	2915.0	2904.2	2900.6	2900.6	2897.0	2893.4	2897.0	2900.6	2929.4
15°	2879.0	2875.4	2868.2	2857.4	2857.4	2857.4	2857.4	2853.8	2853.8	2857.4	2879.0
17.5°	2807.0	2799.8	2796.2	2789.0	2792.6	2796.2	2799.8	2796.2	2803.4	2814.2	2839.4
20°	2742.2	2735.0	2727.8	2717.0	2717.0	2720.6	2724.2	2724.2	2742.2	2756.6	2789.0
22.5°	2670.3	2666.7	2659.5	2655.9	2655.9	2659.5	2659.5	2652.3	2663.1	2684.7	2727.8
25°	2573.1	2569.5	2565.9	2565.9	2573.1	2580.3	2583.9	2587.5	2598.3	2612.7	2648.7
27.5°	2490.3	2486.7	2479.5	2472.3	2479.5	2486.7	2490.3	2497.5	2519.1	2547.9	2576.7
30°	2400.4	2396.8	2393.2	2393.2	2400.4	2404.0	2407.5	2404.0	2432.7	2475.9	2508.3
32.5°	2285.2	2281.6	2285.2	2285.2	2303.2	2314.0	2321.2	2324.8	2350.0	2389.6	2436.3
35°	2191.6	2191.6	2188.0	2195.2	2198.8	2206.0	2213.2	2231.2	2267.2	2306.8	2353.6
37.5°	2080.1	2080.1	2080.1	2098.1	2112.5	2116.1	2119.7	2141.2	2188.0	2227.6	2278.0
40°	1979.3	1979.3	1979.3	1986.5	1997.3	2008.1	2022.5	2047.7	2094.5	2152.0	2202.4
42.5°	1856.9	1860.5	1867.7	1885.7	1900.1	1907.3	1918.1	1957.7	2008.1	2076.5	2130.4
45°	1756.2	1752.6	1759.8	1774.2	1788.6	1803.0	1821.0	1864.1	1925.3	2000.9	2062.1
47.5°	1630.2	1633.8	1641.0	1666.2	1684.2	1702.2	1723.8	1774.2	1846.1	1921.7	1990.1
50°	1522.3	1525.9	1543.9	1558.2	1576.2	1597.8	1623.0	1687.8	1767.0	1842.5	1925.3
52.5°	1414.3	1417.9	1432.3	1443.1	1471.9	1497.1	1529.5	1601.4	1684.2	1767.0	1849.7
55°	1295.5	1302.7	1313.5	1338.7	1374.7	1403.5	1439.5	1518.7	1601.4	1691.4	1774.2
57.5°	1184.0	1187.6	1205.6	1230.8	1273.9	1309.9	1353.1	1435.9	1525.9	1612.2	1695.0
60°	1079.6	1086.8	1097.6	1130.0	1187.6	1223.6	1266.8	1353.1	1446.7	1533.1	1619.4
62.5°	971.7	978.9	993.2	1029.2	1097.6	1137.2	1184.0	1273.9	1367.5	1453.9	1540.3
65°	849.3	856.5	878.1	924.9	1007.6	1050.8	1097.6	1191.2	1281.1	1371.1	1457.5
67.5°	744.9	748.5	777.3	827.7	914.1	968.1	1018.4	1108.4	1198.4	1288.3	1374.7
70°	644.2	651.4	673.0	741.3	834.9	878.1	932.1	1029.2	1119.2	1209.2	1291.9
72.5°	543.4	550.6	583.0	658.6	755.7	802.5	845.7	950.1	1040.0	1126.4	1209.2
75°	442.6	453.4	496.6	583.0	676.6	723.3	770.1	863.7	960.9	1043.6	1122.8
77.5°	352.7	363.5	417.5	507.4	601.0	647.8	694.6	784.5	874.5	964.5	1047.2
80°	266.3	280.7	345.5	435.4	529.0	575.8	619.0	712.5	798.9	881.7	968.1
82.5°	190.7	208.7	284.3	370.7	464.2	507.4	550.6	640.6	726.9	806.1	881.7
85°	118.8	151.1	226.7	309.5	399.5	442.6	485.8	575.8	658.6	737.7	809.7
87.5°	57.6	100.8	172.7	251.9	338.3	381.5	424.6	511.0	590.2	669.4	741.3
90°	3.6	57.6	122.4	197.9	284.3	323.9	367.1	449.8	529.0	604.6	673.0
92.5°	0.0	36.0	97.2	169.1	248.3	291.5	331.1	413.9	489.4	565.0	629.8
95°	0.0	18.0	75.6	143.9	219.5	255.5	295.1	374.3	449.8	521.8	586.6
97.5°	0.0	3.6	54.0	115.2	187.1	226.7	262.7	338.3	413.9	482.2	543.4
100°	0.0	0.0	36.0	93.6	158.3	194.3	230.3	302.3	374.3	439.0	500.2
102.5°	0.0	0.0	18.0	72.0	133.2	165.5	197.9	269.9	338.3	403.1	460.6
105°	0.0	0.0	3.6	50.4	108.0	136.8	169.1	233.9	302.3	363.5	421.1
107.5°	0.0	0.0	0.0	28.8	82.8	111.6	140.4	201.5	266.3	323.9	377.9
110°	0.0	0.0	0.0	14.4	61.2	86.4	115.2	172.7	230.3	287.9	341.9



TEST NUMBER: P257099

CATALOG NUMBER: HGL-S-UF-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	3.6	39.6	64.8	90.0	143.9	197.9	251.9	302.3
115°	0.0	0.0	0.0	0.0	21.6	43.2	64.8	115.2	165.5	219.5	266.3
117.5°	0.0	0.0	0.0	0.0	7.2	25.2	43.2	90.0	136.8	183.5	230.3
120°	0.0	0.0	0.0	0.0	0.0	10.8	25.2	64.8	108.0	151.1	194.3
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	7.2	39.6	79.2	122.4	161.9
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	54.0	93.6	129.6
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	32.4	64.8	97.2
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4	39.6	68.4
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	21.6	43.2
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	21.6
137.5°	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2
140°	3.6	3.6	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: P257099

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1	3012.1
2.5°	3026.5	3012.1	3012.1	3008.5	3004.9	3001.3	2994.1	2990.5	2983.3	2986.9
5°	3019.3	3004.9	3004.9	2997.7	2994.1	2994.1	2990.5	2990.5	2986.9	2990.5
7.5°	3008.5	2990.5	2990.5	2983.3	2979.7	2976.1	2976.1	2976.1	2976.1	2979.7
10°	2979.7	2969.0	2969.0	2965.4	2961.8	2954.6	2951.0	2954.6	2951.0	2954.6
12.5°	2940.2	2929.4	2936.6	2936.6	2936.6	2929.4	2925.8	2929.4	2925.8	2929.4
15°	2889.8	2886.2	2897.0	2900.6	2904.2	2900.6	2897.0	2897.0	2897.0	2897.0
17.5°	2839.4	2835.8	2850.2	2857.4	2857.4	2857.4	2857.4	2853.8	2853.8	2857.4
20°	2796.2	2781.8	2789.0	2803.4	2807.0	2807.0	2810.6	2814.2	2814.2	2814.2
22.5°	2735.0	2727.8	2731.4	2742.2	2749.4	2753.0	2763.8	2763.8	2767.4	2771.0
25°	2663.1	2673.9	2677.5	2688.3	2691.8	2699.0	2713.4	2720.6	2720.6	2720.6
27.5°	2587.5	2609.1	2623.5	2630.7	2637.9	2645.1	2663.1	2677.5	2677.5	2677.5
30°	2515.5	2537.1	2565.9	2580.3	2587.5	2594.7	2619.9	2637.9	2641.5	2641.5
32.5°	2439.9	2468.7	2511.9	2533.5	2537.1	2547.9	2580.3	2601.9	2605.5	2605.5
35°	2375.2	2411.1	2457.9	2486.7	2493.9	2504.7	2540.7	2565.9	2569.5	2569.5
37.5°	2317.6	2353.6	2404.0	2443.5	2450.7	2465.1	2501.1	2533.5	2537.1	2540.7
40°	2252.8	2296.0	2346.4	2393.2	2407.5	2421.9	2461.5	2493.9	2501.1	2501.1
42.5°	2188.0	2242.0	2292.4	2346.4	2364.4	2378.8	2421.9	2454.3	2461.5	2461.5
45°	2119.7	2188.0	2238.4	2296.0	2317.6	2332.0	2371.6	2407.5	2418.3	2418.3
47.5°	2058.5	2130.4	2180.8	2238.4	2260.0	2281.6	2317.6	2353.6	2364.4	2368.0
50°	1990.1	2069.3	2119.7	2173.6	2202.4	2224.0	2260.0	2299.6	2310.4	2306.8
52.5°	1921.7	1997.3	2051.3	2108.9	2137.6	2159.2	2191.6	2234.8	2245.6	2245.6
55°	1849.7	1925.3	1982.9	2036.9	2065.7	2094.5	2126.8	2162.8	2177.2	2173.6
57.5°	1777.8	1846.1	1907.3	1964.9	1990.1	2018.9	2051.3	2087.3	2098.1	2105.3
60°	1702.2	1763.4	1831.8	1885.7	1910.9	1939.7	1972.1	2004.5	2022.5	2018.9
62.5°	1619.4	1687.8	1752.6	1803.0	1828.2	1856.9	1889.3	1918.1	1932.5	1939.7
65°	1536.7	1601.4	1662.6	1716.6	1738.2	1767.0	1803.0	1824.6	1842.5	1846.1
67.5°	1450.3	1515.1	1576.2	1633.8	1655.4	1680.6	1713.0	1734.6	1752.6	1756.2
70°	1363.9	1432.3	1493.5	1547.5	1569.0	1590.6	1623.0	1644.6	1662.6	1662.6
72.5°	1281.1	1349.5	1407.1	1461.1	1482.7	1500.7	1533.1	1554.7	1569.0	1572.6
75°	1198.4	1263.2	1320.7	1374.7	1392.7	1414.3	1443.1	1464.7	1479.1	1482.7
77.5°	1115.6	1184.0	1238.0	1288.3	1306.3	1324.3	1356.7	1374.7	1389.1	1389.1
80°	1036.4	1101.2	1155.2	1202.0	1216.4	1238.0	1266.8	1284.7	1295.5	1302.7
82.5°	960.9	1022.0	1072.4	1115.6	1137.2	1151.6	1180.4	1198.4	1209.2	1216.4
85°	878.1	942.9	993.2	1036.4	1050.8	1072.4	1097.6	1115.6	1126.4	1130.0
87.5°	802.5	860.1	910.5	960.9	978.9	993.2	1018.4	1036.4	1047.2	1054.4
90°	737.7	791.7	838.5	878.1	896.1	914.1	942.9	960.9	971.7	975.3
92.5°	691.0	744.9	788.1	827.7	845.7	860.1	885.3	903.3	914.1	917.7
95°	647.8	698.2	741.3	780.9	795.3	809.7	834.9	849.3	856.5	863.7
97.5°	601.0	655.0	694.6	730.5	748.5	759.3	784.5	798.9	809.7	813.3
100°	557.8	608.2	647.8	687.4	701.8	712.5	737.7	752.1	759.3	762.9
102.5°	514.6	565.0	604.6	640.6	655.0	665.8	687.4	701.8	712.5	716.1
105°	471.4	518.2	557.8	593.8	608.2	619.0	640.6	655.0	665.8	669.4
107.5°	431.8	475.0	514.6	547.0	561.4	572.2	593.8	608.2	619.0	622.6
110°	392.3	431.8	471.4	503.8	518.2	529.0	550.6	561.4	572.2	575.8



TEST NUMBER: P257099

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	349.1	392.3	428.2	460.6	471.4	485.8	503.8	518.2	525.4	529.0
115°	313.1	352.7	385.1	417.5	428.2	439.0	460.6	471.4	482.2	482.2
117.5°	273.5	309.5	345.5	374.3	385.1	395.9	417.5	428.2	435.4	439.0
120°	237.5	269.9	302.3	331.1	345.5	352.7	374.3	385.1	392.3	395.9
122.5°	201.5	233.9	266.3	291.5	302.3	313.1	331.1	341.9	349.1	352.7
125°	165.5	197.9	226.7	251.9	262.7	273.5	287.9	298.7	305.9	309.5
127.5°	133.2	161.9	190.7	212.3	223.1	233.9	248.3	259.1	266.3	269.9
130°	100.8	126.0	154.7	176.3	187.1	194.3	208.7	219.5	226.7	230.3
132.5°	68.4	93.6	118.8	140.4	151.1	158.3	172.7	179.9	187.1	190.7
135°	43.2	64.8	86.4	104.4	115.2	122.4	136.8	143.9	151.1	151.1
137.5°	21.6	39.6	57.6	72.0	79.2	90.0	100.8	108.0	111.6	115.2
140°	7.2	18.0	32.4	43.2	50.4	57.6	68.4	75.6	79.2	82.8
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)