

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: P257109

Luminaire Tested: **HGL-S-UF-40L840-UNV-12**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257109
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-40L840-UNV-12
Description: HUGO 12 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS WITH UPLIGHT
Light Source: (504) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12246.8 lumens
Efficiency: N/A
Efficacy: 142.9 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

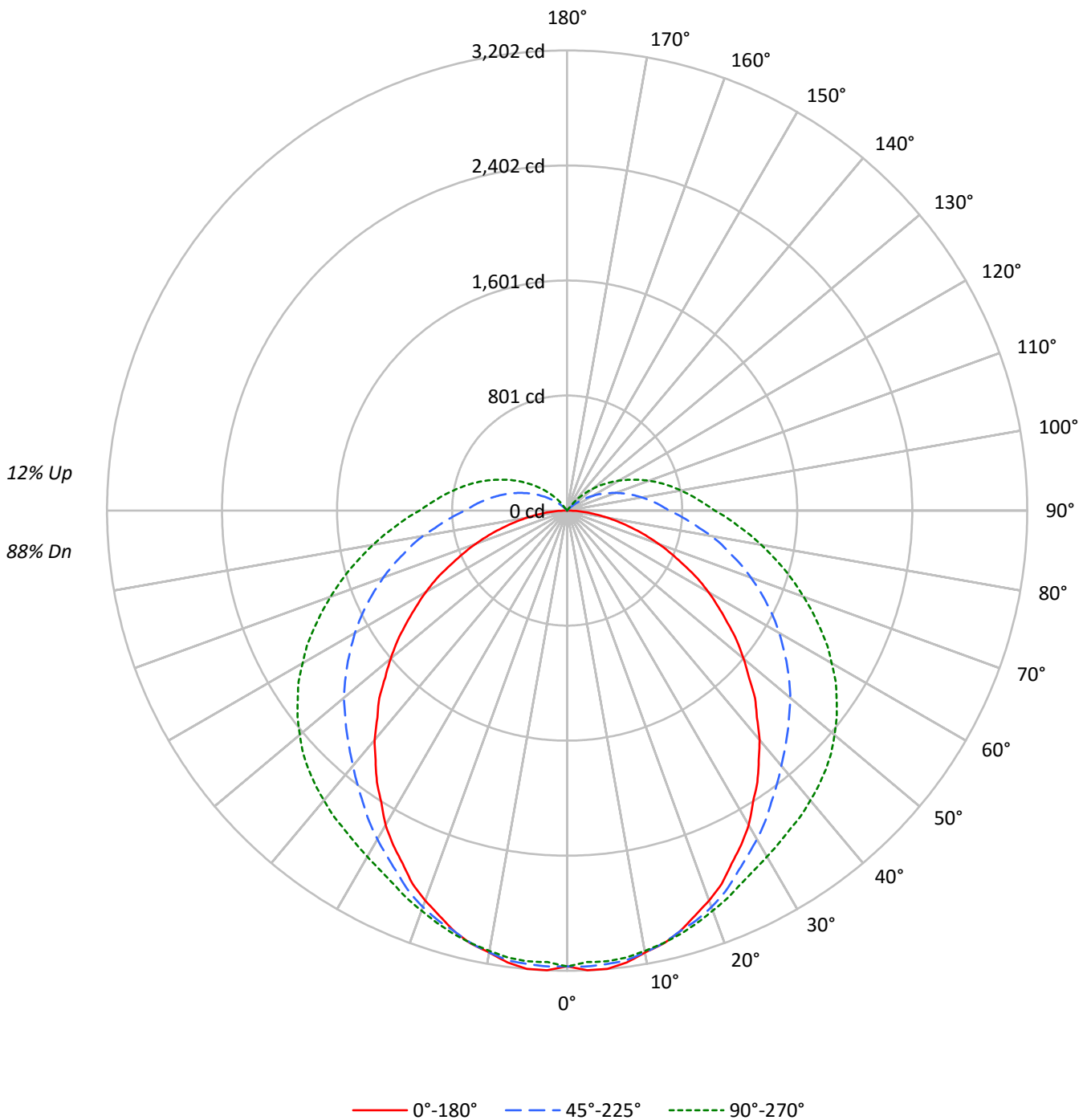
Input Watts (W): 85.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	12413	12413	12413
5°	12570	12099	11898
10°	12390	11732	11447
15°	12255	11292	11018
20°	11989	10929	10590
25°	11653	10448	10208
30°	11366	10038	9957
35°	10959	9632	9806
40°	10571	9294	9740
45°	10147	9053	9690
50°	9660	8878	9593
55°	9195	8685	9470
60°	8767	8516	9310
65°	8130	8349	9116
70°	7581	8194	8908
75°	6828	8045	8756
80°	6024	8040	8641
85°	5107	8070	8625



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.3	2.5
10°-20°	854.2	7.0
20°-30°	1281.6	10.5
30°-40°	1556.0	12.7
40°-50°	1680.7	13.7
50°-60°	1646.0	13.4
60°-70°	1460.0	11.9
70°-80°	1169.5	9.5
80°-90°	847.6	6.9
90°-100°	597.4	4.9
100°-110°	416.7	3.4
110°-120°	258.0	2.1
120°-130°	131.2	1.1
130°-140°	45.4	0.4
140°-150°	2.1	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2436.1	19.9
0°-40°	3992.2	32.6
0°-60°	7318.9	59.8
0°-90°	10796.0	88.2
90°-120°	1272.0	10.4
90°-150°	1450.8	11.8
90°-180°	1451.0	11.8
0°-180°	12246.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3171	3171	3171	3171	3171	
5°	3202	3171	3168	3152	3149	303
15°	3031	3008	3031	3058	3050	852
25°	2709	2717	2789	2834	2864	1251
35°	2308	2323	2478	2626	2705	1441
45°	1849	1898	2171	2440	2546	1421
55°	1364	1478	1868	2175	2289	1223
65°	894	1106	1535	1830	1944	893
75°	466	762	1182	1466	1561	498
85°	125	466	852	1106	1190	135
90°	4	341	709	944	1027	9
95°	0	269	618	837	909	0
105°	0	144	443	640	705	0
115°	0	46	280	451	508	0
125°	0	0	136	277	326	0
135°	0	0	23	121	159	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4
2.5°	3201.7	3198.0	3186.6	3175.2	3171.4	3171.4	3167.6	3163.9	3163.9	3160.1	3175.2
5°	3201.7	3198.0	3186.6	3171.4	3167.6	3171.4	3167.6	3160.1	3160.1	3156.3	3167.6
7.5°	3171.4	3163.9	3156.3	3144.9	3141.1	3141.1	3137.3	3137.3	3137.3	3137.3	3156.3
10°	3122.2	3118.4	3110.8	3099.4	3099.4	3095.7	3095.7	3099.4	3099.4	3103.2	3122.2
12.5°	3088.1	3080.5	3069.1	3057.8	3054.0	3054.0	3050.2	3046.4	3050.2	3054.0	3084.3
15°	3031.2	3027.5	3019.9	3008.5	3008.5	3008.5	3008.5	3004.7	3004.7	3008.5	3031.2
17.5°	2955.5	2947.9	2944.1	2936.5	2940.3	2944.1	2947.9	2944.1	2951.7	2963.0	2989.6
20°	2887.3	2879.7	2872.1	2860.7	2860.7	2864.5	2868.3	2868.3	2887.3	2902.4	2936.5
22.5°	2811.5	2807.7	2800.1	2796.3	2796.3	2800.1	2800.1	2792.5	2803.9	2826.6	2872.1
25°	2709.2	2705.4	2701.6	2701.6	2709.2	2716.7	2720.5	2724.3	2735.7	2750.9	2788.7
27.5°	2622.0	2618.2	2610.7	2603.1	2610.7	2618.2	2622.0	2629.6	2652.3	2682.6	2713.0
30°	2527.3	2523.5	2519.7	2519.7	2527.3	2531.1	2534.9	2531.1	2561.4	2606.9	2641.0
32.5°	2406.0	2402.3	2406.0	2406.0	2425.0	2436.4	2443.9	2447.7	2474.3	2515.9	2565.2
35°	2307.5	2307.5	2303.7	2311.3	2315.1	2322.7	2330.3	2349.2	2387.1	2428.8	2478.0
37.5°	2190.1	2190.1	2190.1	2209.0	2224.2	2228.0	2231.8	2254.5	2303.7	2345.4	2398.5
40°	2084.0	2084.0	2084.0	2091.6	2102.9	2114.3	2129.4	2156.0	2205.2	2265.9	2318.9
42.5°	1955.2	1958.9	1966.5	1985.5	2000.6	2008.2	2019.6	2061.2	2114.3	2186.3	2243.1
45°	1849.1	1845.3	1852.8	1868.0	1883.2	1898.3	1917.3	1962.7	2027.1	2106.7	2171.1
47.5°	1716.4	1720.2	1727.8	1754.3	1773.3	1792.2	1815.0	1868.0	1943.8	2023.4	2095.3
50°	1602.8	1606.6	1625.5	1640.7	1659.6	1682.3	1708.9	1777.1	1860.4	1940.0	2027.1
52.5°	1489.1	1492.9	1508.0	1519.4	1549.7	1576.2	1610.3	1686.1	1773.3	1860.4	1947.6
55°	1364.1	1371.6	1383.0	1409.5	1447.4	1477.7	1515.6	1599.0	1686.1	1780.9	1868.0
57.5°	1246.6	1250.4	1269.3	1295.9	1341.3	1379.2	1424.7	1511.8	1606.6	1697.5	1784.6
60°	1136.7	1144.3	1155.7	1189.8	1250.4	1288.3	1333.7	1424.7	1523.2	1614.1	1705.1
62.5°	1023.0	1030.6	1045.8	1083.7	1155.7	1197.3	1246.6	1341.3	1439.8	1530.8	1621.7
65°	894.2	901.8	924.5	973.8	1060.9	1106.4	1155.7	1254.2	1348.9	1443.6	1534.6
67.5°	784.3	788.1	818.4	871.5	962.4	1019.3	1072.3	1167.0	1261.8	1356.5	1447.4
70°	678.2	685.8	708.6	780.5	879.1	924.5	981.4	1083.7	1178.4	1273.1	1360.3
72.5°	572.1	579.7	613.8	693.4	795.7	845.0	890.4	1000.3	1095.0	1186.0	1273.1
75°	466.1	477.4	522.9	613.8	712.3	761.6	810.9	909.4	1011.7	1098.8	1182.2
77.5°	371.3	382.7	439.5	534.3	632.8	682.0	731.3	826.0	920.7	1015.5	1102.6
80°	280.4	295.5	363.7	458.5	557.0	606.2	651.7	750.2	841.2	928.3	1019.3
82.5°	200.8	219.8	299.3	390.3	488.8	534.3	579.7	674.5	765.4	848.7	928.3
85°	125.0	159.1	238.7	325.9	420.6	466.1	511.5	606.2	693.4	776.8	852.5
87.5°	60.6	106.1	181.9	265.2	356.2	401.6	447.1	538.0	621.4	704.8	780.5
90°	3.8	60.6	128.8	208.4	299.3	341.0	386.5	473.6	557.0	636.6	708.6
92.5°	0.0	37.9	102.3	178.1	261.4	306.9	348.6	435.7	515.3	594.9	663.1
95°	0.0	18.9	79.6	151.6	231.1	269.0	310.7	394.1	473.6	549.4	617.6
97.5°	0.0	3.8	56.8	121.2	197.0	238.7	276.6	356.2	435.7	507.7	572.1
100°	0.0	0.0	37.9	98.5	166.7	204.6	242.5	318.3	394.1	462.3	526.7
102.5°	0.0	0.0	18.9	75.8	140.2	174.3	208.4	284.2	356.2	424.4	485.0
105°	0.0	0.0	3.8	53.0	113.7	144.0	178.1	246.3	318.3	382.7	443.3
107.5°	0.0	0.0	0.0	30.3	87.1	117.5	147.8	212.2	280.4	341.0	397.9
110°	0.0	0.0	0.0	15.2	64.4	90.9	121.2	181.9	242.5	303.1	360.0



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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	3.8	41.7	68.2	94.7	151.6	208.4	265.2	318.3
115°	0.0	0.0	0.0	0.0	22.7	45.5	68.2	121.2	174.3	231.1	280.4
117.5°	0.0	0.0	0.0	0.0	7.6	26.5	45.5	94.7	144.0	193.2	242.5
120°	0.0	0.0	0.0	0.0	0.0	11.4	26.5	68.2	113.7	159.1	204.6
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	7.6	41.7	83.4	128.8	170.5
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7	56.8	98.5	136.4
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	34.1	68.2	102.3
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	41.7	72.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	22.7	45.5
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	22.7
137.5°	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
140°	3.8	3.8	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°	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4
2.5°	3186.6	3171.4	3171.4	3167.6	3163.9	3160.1	3152.5	3148.7	3141.1	3144.9
5°	3179.0	3163.9	3163.9	3156.3	3152.5	3152.5	3148.7	3148.7	3144.9	3148.7
7.5°	3167.6	3148.7	3148.7	3141.1	3137.3	3133.5	3133.5	3133.5	3133.5	3137.3
10°	3137.3	3126.0	3126.0	3122.2	3118.4	3110.8	3107.0	3110.8	3107.0	3110.8
12.5°	3095.7	3084.3	3091.9	3091.9	3091.9	3084.3	3080.5	3084.3	3080.5	3084.3
15°	3042.6	3038.8	3050.2	3054.0	3057.8	3054.0	3050.2	3050.2	3050.2	3050.2
17.5°	2989.6	2985.8	3000.9	3008.5	3008.5	3008.5	3008.5	3004.7	3004.7	3008.5
20°	2944.1	2928.9	2936.5	2951.7	2955.5	2955.5	2959.2	2963.0	2963.0	2963.0
22.5°	2879.7	2872.1	2875.9	2887.3	2894.8	2898.6	2910.0	2910.0	2913.8	2917.6
25°	2803.9	2815.3	2819.1	2830.4	2834.2	2841.8	2856.9	2864.5	2864.5	2864.5
27.5°	2724.3	2747.1	2762.2	2769.8	2777.4	2785.0	2803.9	2819.1	2819.1	2819.1
30°	2648.5	2671.3	2701.6	2716.7	2724.3	2731.9	2758.4	2777.4	2781.2	2781.2
32.5°	2569.0	2599.3	2644.8	2667.5	2671.3	2682.6	2716.7	2739.5	2743.3	2743.3
35°	2500.8	2538.7	2587.9	2618.2	2625.8	2637.2	2675.1	2701.6	2705.4	2705.4
37.5°	2440.1	2478.0	2531.1	2572.8	2580.3	2595.5	2633.4	2667.5	2671.3	2675.1
40°	2371.9	2417.4	2470.5	2519.7	2534.9	2550.0	2591.7	2625.8	2633.4	2633.4
42.5°	2303.7	2360.6	2413.6	2470.5	2489.4	2504.6	2550.0	2584.1	2591.7	2591.7
45°	2231.8	2303.7	2356.8	2417.4	2440.1	2455.3	2497.0	2534.9	2546.2	2546.2
47.5°	2167.3	2243.1	2296.2	2356.8	2379.5	2402.3	2440.1	2478.0	2489.4	2493.2
50°	2095.3	2178.7	2231.8	2288.6	2318.9	2341.6	2379.5	2421.2	2432.6	2428.8
52.5°	2023.4	2102.9	2159.8	2220.4	2250.7	2273.4	2307.5	2353.0	2364.4	2364.4
55°	1947.6	2027.1	2087.8	2144.6	2174.9	2205.2	2239.3	2277.2	2292.4	2288.6
57.5°	1871.8	1943.8	2008.2	2068.8	2095.3	2125.7	2159.8	2197.6	2209.0	2216.6
60°	1792.2	1856.6	1928.6	1985.5	2012.0	2042.3	2076.4	2110.5	2129.4	2125.7
62.5°	1705.1	1777.1	1845.3	1898.3	1924.8	1955.2	1989.3	2019.6	2034.7	2042.3
65°	1617.9	1686.1	1750.5	1807.4	1830.1	1860.4	1898.3	1921.0	1940.0	1943.8
67.5°	1527.0	1595.2	1659.6	1720.2	1743.0	1769.5	1803.6	1826.3	1845.3	1849.1
70°	1436.1	1508.0	1572.5	1629.3	1652.0	1674.8	1708.9	1731.6	1750.5	1750.5
72.5°	1348.9	1420.9	1481.5	1538.4	1561.1	1580.0	1614.1	1636.9	1652.0	1655.8
75°	1261.8	1330.0	1390.6	1447.4	1466.4	1489.1	1519.4	1542.1	1557.3	1561.1
77.5°	1174.6	1246.6	1303.4	1356.5	1375.4	1394.4	1428.5	1447.4	1462.6	1462.6
80°	1091.2	1159.4	1216.3	1265.5	1280.7	1303.4	1333.7	1352.7	1364.1	1371.6
82.5°	1011.7	1076.1	1129.1	1174.6	1197.3	1212.5	1242.8	1261.8	1273.1	1280.7
85°	924.5	992.7	1045.8	1091.2	1106.4	1129.1	1155.7	1174.6	1186.0	1189.8
87.5°	845.0	905.6	958.6	1011.7	1030.6	1045.8	1072.3	1091.2	1102.6	1110.2
90°	776.8	833.6	882.8	924.5	943.5	962.4	992.7	1011.7	1023.0	1026.8
92.5°	727.5	784.3	829.8	871.5	890.4	905.6	932.1	951.1	962.4	966.2
95°	682.0	735.1	780.5	822.2	837.4	852.5	879.1	894.2	901.8	909.4
97.5°	632.8	689.6	731.3	769.2	788.1	799.5	826.0	841.2	852.5	856.3
100°	587.3	640.3	682.0	723.7	738.9	750.2	776.8	791.9	799.5	803.3
102.5°	541.8	594.9	636.6	674.5	689.6	701.0	723.7	738.9	750.2	754.0
105°	496.4	545.6	587.3	625.2	640.3	651.7	674.5	689.6	701.0	704.8
107.5°	454.7	500.2	541.8	575.9	591.1	602.5	625.2	640.3	651.7	655.5
110°	413.0	454.7	496.4	530.5	545.6	557.0	579.7	591.1	602.5	606.2



TEST NUMBER: P257109

CATALOG NUMBER: HGL-S-UF-40L840-UNV-12

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	367.5	413.0	450.9	485.0	496.4	511.5	530.5	545.6	553.2	557.0
115°	329.6	371.3	405.4	439.5	450.9	462.3	485.0	496.4	507.7	507.7
117.5°	288.0	325.9	363.7	394.1	405.4	416.8	439.5	450.9	458.5	462.3
120°	250.1	284.2	318.3	348.6	363.7	371.3	394.1	405.4	413.0	416.8
122.5°	212.2	246.3	280.4	306.9	318.3	329.6	348.6	360.0	367.5	371.3
125°	174.3	208.4	238.7	265.2	276.6	288.0	303.1	314.5	322.1	325.9
127.5°	140.2	170.5	200.8	223.6	234.9	246.3	261.4	272.8	280.4	284.2
130°	106.1	132.6	162.9	185.7	197.0	204.6	219.8	231.1	238.7	242.5
132.5°	72.0	98.5	125.0	147.8	159.1	166.7	181.9	189.5	197.0	200.8
135°	45.5	68.2	90.9	109.9	121.2	128.8	144.0	151.6	159.1	159.1
137.5°	22.7	41.7	60.6	75.8	83.4	94.7	106.1	113.7	117.5	121.2
140°	7.6	18.9	34.1	45.5	53.0	60.6	72.0	79.6	83.4	87.1
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)