

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: P257077

Luminaire Tested: **HGL-S-UF-80L830-UNV-8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257077
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-80L830-UNV-8
Description: HUGO 8 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS WITH UPLIGHT
Light Source: (336) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15848.1 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.32 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

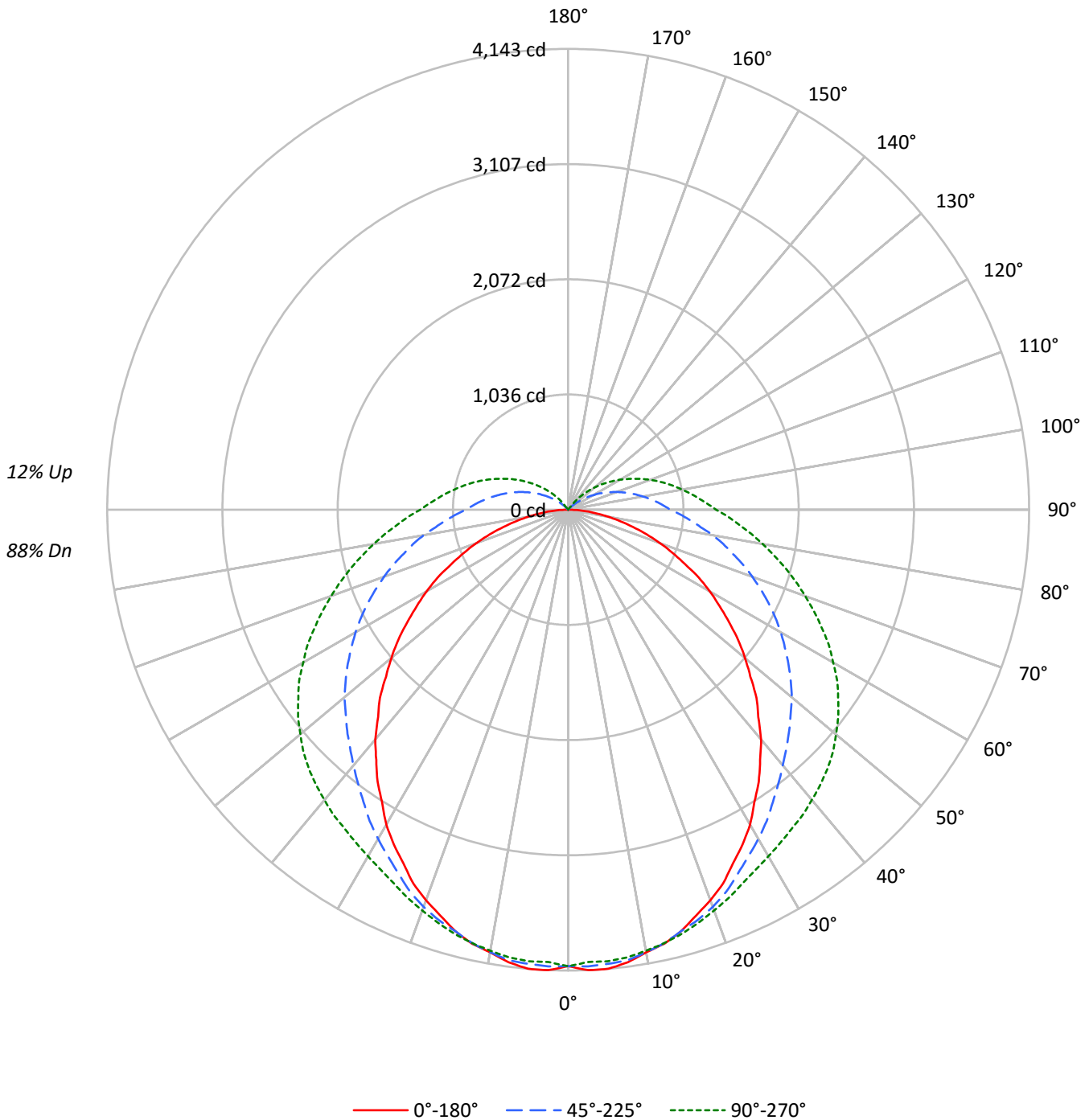
Input Watts (W): 141
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P257077

CATALOG NUMBER: HGL-S-UF-80L830-UNV-8

Luminous Intensity Polar Plot





TEST NUMBER: P257077

CATALOG NUMBER: HGL-S-UF-80L830-UNV-8

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									70									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	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°	24095	24095	24095
5°	24391	23479	23096
10°	24032	22761	22219
15°	23760	21903	21387
20°	23234	21192	20556
25°	22574	20256	19814
30°	22007	19456	19327
35°	21209	18663	19034
40°	20446	18004	18907
45°	19612	17532	18809
50°	18655	17188	18621
55°	17739	16808	18382
60°	16892	16475	18072
65°	15640	16142	17696
70°	14546	15834	17292
75°	13047	15535	16995
80°	11423	15512	16774
85°	9488	15551	16740



TEST NUMBER: P257077

CATALOG NUMBER: HGL-S-UF-80L830-UNV-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.7	2.5
10°-20°	1105.3	7.0
20°-30°	1658.5	10.5
30°-40°	2013.6	12.7
40°-50°	2174.9	13.7
50°-60°	2130.1	13.4
60°-70°	1889.4	11.9
70°-80°	1513.4	9.5
80°-90°	1096.8	6.9
90°-100°	773.0	4.9
100°-110°	539.2	3.4
110°-120°	333.8	2.1
120°-130°	169.8	1.1
130°-140°	58.8	0.4
140°-150°	2.8	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3152.5	19.9
0°-40°	5166.1	32.6
0°-60°	9471.1	59.8
0°-90°	13970.6	88.2
90°-120°	1646.1	10.4
90°-150°	1877.4	11.8
90°-180°	1877.0	11.8
0°-180°	15848.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4104	4104	4104	4104	4104	
5°	4143	4104	4099	4080	4075	392
15°	3923	3893	3923	3957	3947	1103
25°	3506	3516	3609	3668	3707	1618
35°	2986	3006	3207	3398	3501	1865
45°	2393	2456	2810	3158	3295	1838
55°	1765	1912	2417	2814	2962	1582
65°	1157	1432	1986	2368	2515	1155
75°	603	986	1530	1898	2020	644
85°	162	603	1103	1432	1540	175
90°	5	441	917	1221	1329	12
95°	0	348	799	1084	1177	0
105°	0	186	574	829	912	0
115°	0	59	363	584	657	0
125°	0	0	176	358	422	0
135°	0	0	29	157	206	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: P257077

CATALOG NUMBER: HGL-S-UF-80L830-UNV-8

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0
2.5°	4143.2	4138.3	4123.6	4108.9	4104.0	4104.0	4099.1	4094.2	4094.2	4089.3	4108.9
5°	4143.2	4138.3	4123.6	4104.0	4099.1	4104.0	4099.1	4089.3	4089.3	4084.4	4099.1
7.5°	4104.0	4094.2	4084.4	4069.7	4064.8	4064.8	4059.9	4059.9	4059.9	4059.9	4084.4
10°	4040.3	4035.4	4025.6	4010.8	4010.8	4005.9	4005.9	4010.8	4010.8	4015.7	4040.3
12.5°	3996.1	3986.3	3971.6	3956.9	3952.0	3952.0	3947.1	3942.2	3947.1	3952.0	3991.2
15°	3922.6	3917.7	3907.9	3893.2	3893.2	3893.2	3893.2	3888.3	3888.3	3893.2	3922.6
17.5°	3824.5	3814.7	3809.8	3800.0	3804.9	3809.8	3814.7	3809.8	3819.6	3834.3	3868.6
20°	3736.3	3726.5	3716.6	3701.9	3701.9	3706.8	3711.7	3711.7	3736.3	3755.9	3800.0
22.5°	3638.2	3633.3	3623.5	3618.6	3618.6	3623.5	3623.5	3613.7	3628.4	3657.8	3716.6
25°	3505.8	3500.9	3496.0	3496.0	3505.8	3515.6	3520.5	3525.4	3540.1	3559.7	3608.8
27.5°	3393.0	3388.1	3378.3	3368.5	3378.3	3388.1	3393.0	3402.8	3432.3	3471.5	3510.7
30°	3270.5	3265.6	3260.6	3260.6	3270.5	3275.4	3280.3	3275.4	3314.6	3373.4	3417.6
32.5°	3113.6	3108.6	3113.6	3113.6	3138.1	3152.8	3162.6	3167.5	3201.8	3255.7	3319.5
35°	2986.1	2986.1	2981.2	2991.0	2995.9	3005.7	3015.5	3040.0	3089.0	3143.0	3206.7
37.5°	2834.1	2834.1	2834.1	2858.6	2878.2	2883.1	2888.0	2917.4	2981.2	3035.1	3103.7
40°	2696.8	2696.8	2696.8	2706.6	2721.3	2736.0	2755.6	2789.9	2853.7	2932.1	3000.8
42.5°	2530.1	2535.0	2544.8	2569.3	2588.9	2598.7	2613.4	2667.4	2736.0	2829.2	2902.7
45°	2392.8	2387.9	2397.7	2417.3	2436.9	2456.5	2481.0	2539.9	2623.2	2726.2	2809.6
47.5°	2221.2	2226.1	2235.9	2270.2	2294.7	2319.2	2348.6	2417.3	2515.4	2618.3	2711.5
50°	2074.1	2079.0	2103.5	2123.1	2147.6	2177.0	2211.4	2299.6	2407.5	2510.5	2623.2
52.5°	1927.0	1931.9	1951.5	1966.2	2005.4	2039.7	2083.9	2181.9	2294.7	2407.5	2520.3
55°	1765.2	1775.0	1789.7	1824.0	1873.0	1912.3	1961.3	2069.2	2181.9	2304.5	2417.3
57.5°	1613.2	1618.1	1642.6	1676.9	1735.7	1784.8	1843.6	1956.4	2079.0	2196.6	2309.4
60°	1471.0	1480.8	1495.5	1539.6	1618.1	1667.1	1725.9	1843.6	1971.1	2088.8	2206.5
62.5°	1323.9	1333.7	1353.3	1402.3	1495.5	1549.4	1613.2	1735.7	1863.2	1980.9	2098.6
65°	1157.2	1167.0	1196.4	1260.1	1372.9	1431.7	1495.5	1623.0	1745.6	1868.1	1985.8
67.5°	1015.0	1019.9	1059.1	1127.7	1245.4	1319.0	1387.6	1510.2	1632.8	1755.4	1873.0
70°	877.7	887.5	916.9	1010.1	1137.5	1196.4	1269.9	1402.3	1524.9	1647.5	1760.3
72.5°	740.4	750.2	794.3	897.3	1029.7	1093.4	1152.3	1294.5	1417.0	1534.7	1647.5
75°	603.1	617.8	676.6	794.3	921.8	985.5	1049.3	1176.8	1309.2	1421.9	1529.8
77.5°	480.5	495.2	568.8	691.4	818.8	882.6	946.3	1068.9	1191.5	1314.1	1426.8
80°	362.8	382.5	470.7	593.3	720.8	784.5	843.4	970.8	1088.5	1201.3	1319.0
82.5°	259.9	284.4	387.4	505.0	632.5	691.4	750.2	872.8	990.5	1098.3	1201.3
85°	161.8	205.9	308.9	421.7	544.3	603.1	661.9	784.5	897.3	1005.2	1103.2
87.5°	78.5	137.3	235.4	343.2	460.9	519.7	578.6	696.3	804.1	912.0	1010.1
90°	4.9	78.5	166.7	269.7	387.4	441.3	500.1	612.9	720.8	823.7	916.9
92.5°	0.0	49.0	132.4	230.5	338.3	397.2	451.1	563.9	666.8	769.8	858.1
95°	0.0	24.5	103.0	196.1	299.1	348.1	402.1	509.9	612.9	711.0	799.2
97.5°	0.0	4.9	73.5	156.9	255.0	308.9	357.9	460.9	563.9	657.0	740.4
100°	0.0	0.0	49.0	127.5	215.7	264.8	313.8	411.9	509.9	598.2	681.5
102.5°	0.0	0.0	24.5	98.1	181.4	225.5	269.7	367.7	460.9	549.2	627.6
105°	0.0	0.0	4.9	68.6	147.1	186.3	230.5	318.7	411.9	495.2	573.7
107.5°	0.0	0.0	0.0	39.2	112.8	152.0	191.2	274.6	362.8	441.3	514.8
110°	0.0	0.0	0.0	19.6	83.4	117.7	156.9	235.4	313.8	392.3	465.8



TEST NUMBER: P257077

CATALOG NUMBER: HGL-S-UF-80L830-UNV-8

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.0	0.0	4.9	53.9	88.3	122.6	196.1	269.7	343.2	411.9
115°	0.0	0.0	0.0	0.0	29.4	58.8	88.3	156.9	225.5	299.1	362.8
117.5°	0.0	0.0	0.0	0.0	9.8	34.3	58.8	122.6	186.3	250.1	313.8
120°	0.0	0.0	0.0	0.0	0.0	14.7	34.3	88.3	147.1	205.9	264.8
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	9.8	53.9	107.9	166.7	220.6
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.4	73.5	127.5	176.5
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8	44.1	88.3	132.4
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.6	53.9	93.2
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	29.4	58.8
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8	29.4
137.5°	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8
140°	4.9	4.9	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: P257077

CATALOG NUMBER: HGL-S-UF-80L830-UNV-8

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0	4104.0
2.5°	4123.6	4104.0	4104.0	4099.1	4094.2	4089.3	4079.5	4074.6	4064.8	4069.7
5°	4113.8	4094.2	4094.2	4084.4	4079.5	4079.5	4074.6	4074.6	4069.7	4074.6
7.5°	4099.1	4074.6	4074.6	4064.8	4059.9	4055.0	4055.0	4055.0	4055.0	4059.9
10°	4059.9	4045.2	4045.2	4040.3	4035.4	4025.6	4020.6	4025.6	4020.6	4025.6
12.5°	4005.9	3991.2	4001.0	4001.0	4001.0	3991.2	3986.3	3991.2	3986.3	3991.2
15°	3937.3	3932.4	3947.1	3952.0	3956.9	3952.0	3947.1	3947.1	3947.1	3947.1
17.5°	3868.6	3863.7	3883.4	3893.2	3893.2	3893.2	3893.2	3888.3	3888.3	3893.2
20°	3809.8	3790.2	3800.0	3819.6	3824.5	3824.5	3829.4	3834.3	3834.3	3834.3
22.5°	3726.5	3716.6	3721.6	3736.3	3746.1	3751.0	3765.7	3765.7	3770.6	3775.5
25°	3628.4	3643.1	3648.0	3662.7	3667.6	3677.4	3697.0	3706.8	3706.8	3706.8
27.5°	3525.4	3554.8	3574.5	3584.3	3594.1	3603.9	3628.4	3648.0	3648.0	3648.0
30°	3427.4	3456.8	3496.0	3515.6	3525.4	3535.2	3569.6	3594.1	3599.0	3599.0
32.5°	3324.4	3363.6	3422.5	3451.9	3456.8	3471.5	3515.6	3545.0	3549.9	3549.9
35°	3236.1	3285.2	3348.9	3388.1	3397.9	3412.6	3461.7	3496.0	3500.9	3500.9
37.5°	3157.7	3206.7	3275.4	3329.3	3339.1	3358.7	3407.7	3451.9	3456.8	3461.7
40°	3069.4	3128.3	3196.9	3260.6	3280.3	3299.9	3353.8	3397.9	3407.7	3407.7
42.5°	2981.2	3054.7	3123.4	3196.9	3221.4	3241.0	3299.9	3344.0	3353.8	3353.8
45°	2888.0	2981.2	3049.8	3128.3	3157.7	3177.3	3231.2	3280.3	3295.0	3295.0
47.5°	2804.6	2902.7	2971.4	3049.8	3079.2	3108.6	3157.7	3206.7	3221.4	3226.3
50°	2711.5	2819.4	2888.0	2961.6	3000.8	3030.2	3079.2	3133.2	3147.9	3143.0
52.5°	2618.3	2721.3	2794.8	2873.3	2912.5	2941.9	2986.1	3044.9	3059.6	3059.6
55°	2520.3	2623.2	2701.7	2775.2	2814.5	2853.7	2897.8	2946.8	2966.5	2961.6
57.5°	2422.2	2515.4	2598.7	2677.2	2711.5	2750.7	2794.8	2843.9	2858.6	2868.4
60°	2319.2	2402.6	2495.7	2569.3	2603.6	2642.8	2687.0	2731.1	2755.6	2750.7
62.5°	2206.5	2299.6	2387.9	2456.5	2490.8	2530.1	2574.2	2613.4	2633.0	2642.8
65°	2093.7	2181.9	2265.3	2338.8	2368.3	2407.5	2456.5	2485.9	2510.5	2515.4
67.5°	1976.0	2064.3	2147.6	2226.1	2255.5	2289.8	2333.9	2363.4	2387.9	2392.8
70°	1858.3	1951.5	2034.8	2108.4	2137.8	2167.2	2211.4	2240.8	2265.3	2265.3
72.5°	1745.6	1838.7	1917.2	1990.7	2020.1	2044.6	2088.8	2118.2	2137.8	2142.7
75°	1632.8	1721.0	1799.5	1873.0	1897.6	1927.0	1966.2	1995.6	2015.2	2020.1
77.5°	1520.0	1613.2	1686.7	1755.4	1779.9	1804.4	1848.5	1873.0	1892.6	1892.6
80°	1412.1	1500.4	1573.9	1637.7	1657.3	1686.7	1725.9	1750.5	1765.2	1775.0
82.5°	1309.2	1392.5	1461.2	1520.0	1549.4	1569.0	1608.3	1632.8	1647.5	1657.3
85°	1196.4	1284.6	1353.3	1412.1	1431.7	1461.2	1495.5	1520.0	1534.7	1539.6
87.5°	1093.4	1171.9	1240.5	1309.2	1333.7	1353.3	1387.6	1412.1	1426.8	1436.6
90°	1005.2	1078.7	1142.5	1196.4	1220.9	1245.4	1284.6	1309.2	1323.9	1328.8
92.5°	941.4	1015.0	1073.8	1127.7	1152.3	1171.9	1206.2	1230.7	1245.4	1250.3
95°	882.6	951.2	1010.1	1064.0	1083.6	1103.2	1137.5	1157.2	1167.0	1176.8
97.5°	818.8	892.4	946.3	995.4	1019.9	1034.6	1068.9	1088.5	1103.2	1108.1
100°	760.0	828.6	882.6	936.5	956.1	970.8	1005.2	1024.8	1034.6	1039.5
102.5°	701.2	769.8	823.7	872.8	892.4	907.1	936.5	956.1	970.8	975.7
105°	642.3	706.1	760.0	809.0	828.6	843.4	872.8	892.4	907.1	912.0
107.5°	588.4	647.2	701.2	745.3	764.9	779.6	809.0	828.6	843.4	848.3
110°	534.5	588.4	642.3	686.5	706.1	720.8	750.2	764.9	779.6	784.5



TEST NUMBER: P257077

CATALOG NUMBER: HGL-S-UF-80L830-UNV-8

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	475.6	534.5	583.5	627.6	642.3	661.9	686.5	706.1	715.9	720.8
115°	426.6	480.5	524.6	568.8	583.5	598.2	627.6	642.3	657.0	657.0
117.5°	372.6	421.7	470.7	509.9	524.6	539.4	568.8	583.5	593.3	598.2
120°	323.6	367.7	411.9	451.1	470.7	480.5	509.9	524.6	534.5	539.4
122.5°	274.6	318.7	362.8	397.2	411.9	426.6	451.1	465.8	475.6	480.5
125°	225.5	269.7	308.9	343.2	357.9	372.6	392.3	407.0	416.8	421.7
127.5°	181.4	220.6	259.9	289.3	304.0	318.7	338.3	353.0	362.8	367.7
130°	137.3	171.6	210.8	240.3	255.0	264.8	284.4	299.1	308.9	313.8
132.5°	93.2	127.5	161.8	191.2	205.9	215.7	235.4	245.2	255.0	259.9
135°	58.8	88.3	117.7	142.2	156.9	166.7	186.3	196.1	205.9	205.9
137.5°	29.4	53.9	78.5	98.1	107.9	122.6	137.3	147.1	152.0	156.9
140°	9.8	24.5	44.1	58.8	68.6	78.5	93.2	103.0	107.9	112.8
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)