

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: P257087

Luminaire Tested: **HGL-S-UF-80L840-UNV-8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257087  
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-80L840-UNV-8  
Description: HUGO 8 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS WITH UPLIGHT  
Light Source: (336) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16686.2 lumens  
Efficiency: N/A  
Efficacy: 118.3 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

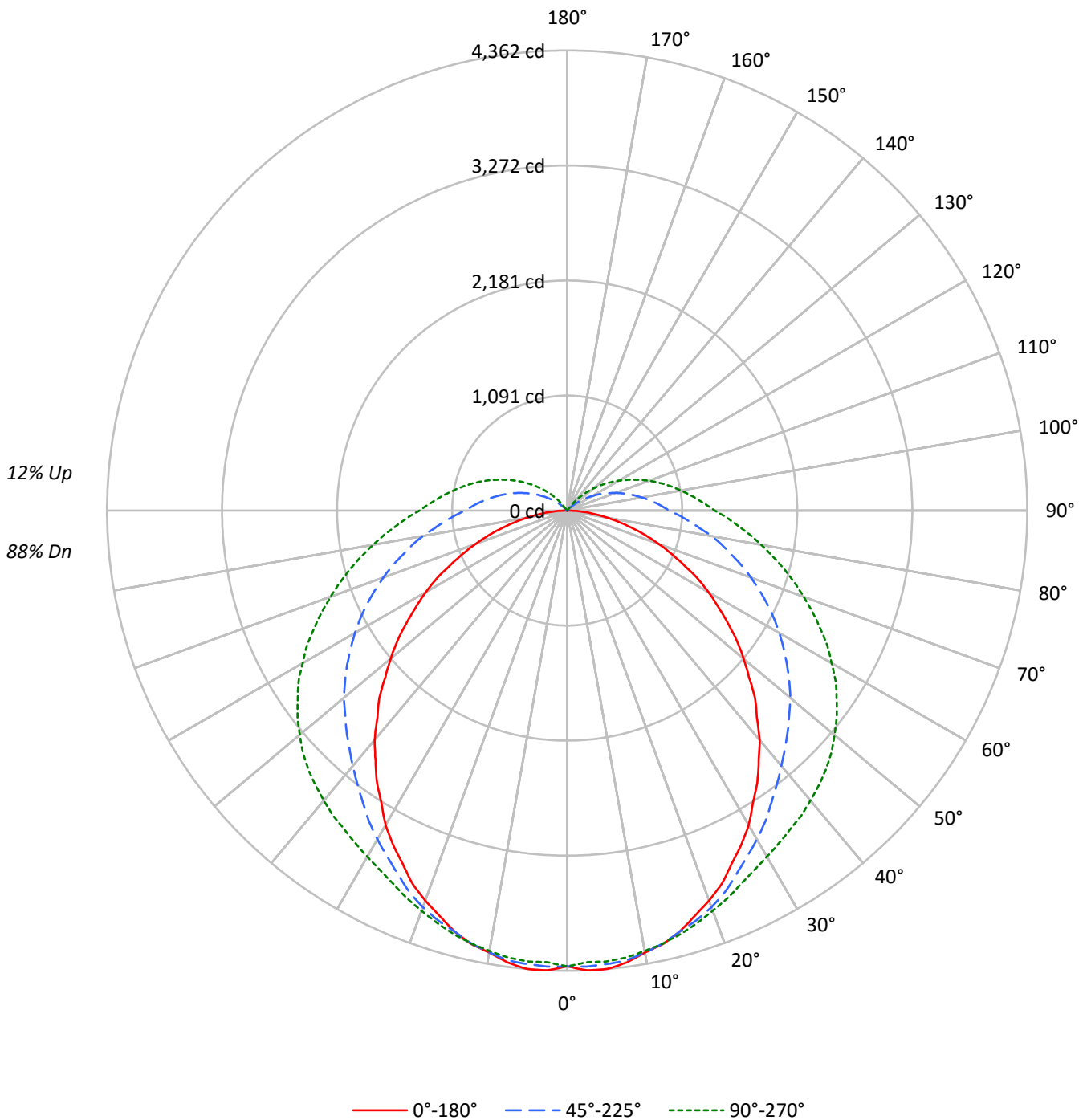
Input Watts (W): 141  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	25370	25370	25370
5°	25681	24721	24317
10°	25303	23964	23393
15°	25016	23061	22518
20°	24463	22313	21643
25°	23768	21327	20862
30°	23170	20485	20349
35°	22331	19650	20041
40°	21527	18956	19907
45°	20649	18459	19804
50°	19642	18097	19606
55°	18677	17696	19354
60°	17786	17346	19028
65°	16467	16996	18631
70°	15315	16672	18206
75°	13737	16356	17894
80°	12028	16331	17660
85°	9992	16374	17625



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	409.2	2.5
10°-20°	1163.8	7.0
20°-30°	1746.2	10.5
30°-40°	2120.1	12.7
40°-50°	2289.9	13.7
50°-60°	2242.7	13.4
60°-70°	1989.3	11.9
70°-80°	1593.4	9.5
80°-90°	1154.8	6.9
90°-100°	813.9	4.9
100°-110°	567.7	3.4
110°-120°	351.5	2.1
120°-130°	178.8	1.1
130°-140°	61.9	0.4
140°-150°	2.9	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3319.2	19.9
0°-40°	5439.3	32.6
0°-60°	9971.9	59.8
0°-90°	14709.5	88.2
90°-120°	1733.1	10.4
90°-150°	1976.7	11.8
90°-180°	1977.0	11.8
0°-180°	16686.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4321	4321	4321	4321	4321	
5°	4362	4321	4316	4295	4290	413
15°	4130	4099	4130	4166	4156	1161
25°	3691	3702	3800	3862	3903	1704
35°	3144	3165	3376	3578	3686	1963
45°	2519	2586	2958	3325	3469	1936
55°	1858	2013	2545	2963	3118	1666
65°	1218	1508	2091	2494	2648	1216
75°	635	1038	1611	1998	2127	679
85°	170	635	1162	1508	1621	184
90°	5	465	965	1286	1399	13
95°	0	366	842	1141	1239	0
105°	0	196	604	872	960	0
115°	0	62	382	614	692	0
125°	0	0	186	377	444	0
135°	0	0	31	165	217	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: P257087

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0
2.5°	4362.4	4357.2	4341.7	4326.2	4321.0	4321.0	4315.9	4310.7	4310.7	4305.6	4326.2
5°	4362.4	4357.2	4341.7	4321.0	4315.9	4321.0	4315.9	4305.6	4305.6	4300.4	4315.9
7.5°	4321.0	4310.7	4300.4	4284.9	4279.7	4279.7	4274.6	4274.6	4274.6	4274.6	4300.4
10°	4253.9	4248.8	4238.4	4223.0	4223.0	4217.8	4217.8	4223.0	4223.0	4228.1	4253.9
12.5°	4207.5	4197.1	4181.7	4166.2	4161.0	4161.0	4155.8	4150.7	4155.8	4161.0	4202.3
15°	4130.0	4124.9	4114.5	4099.1	4099.1	4099.1	4099.1	4093.9	4093.9	4099.1	4130.0
17.5°	4026.8	4016.5	4011.3	4001.0	4006.1	4011.3	4016.5	4011.3	4021.6	4037.1	4073.2
20°	3933.9	3923.5	3913.2	3897.7	3897.7	3902.9	3908.0	3908.0	3933.9	3954.5	4001.0
22.5°	3830.6	3825.4	3815.1	3810.0	3810.0	3815.1	3815.1	3804.8	3820.3	3851.3	3913.2
25°	3691.2	3686.1	3680.9	3680.9	3691.2	3701.5	3706.7	3711.9	3727.4	3748.0	3799.6
27.5°	3572.5	3567.3	3557.0	3546.7	3557.0	3567.3	3572.5	3582.8	3613.8	3655.1	3696.4
30°	3443.4	3438.3	3433.1	3433.1	3443.4	3448.6	3453.7	3448.6	3489.9	3551.8	3598.3
32.5°	3278.2	3273.1	3278.2	3278.2	3304.0	3319.5	3329.8	3335.0	3371.1	3427.9	3495.0
35°	3144.0	3144.0	3138.8	3149.2	3154.3	3164.6	3175.0	3200.8	3252.4	3309.2	3376.3
37.5°	2984.0	2984.0	2984.0	3009.8	3030.4	3035.6	3040.7	3071.7	3138.8	3195.6	3267.9
40°	2839.4	2839.4	2839.4	2849.7	2865.2	2880.7	2901.4	2937.5	3004.6	3087.2	3159.5
42.5°	2663.9	2669.0	2679.4	2705.2	2725.8	2736.1	2751.6	2808.4	2880.7	2978.8	3056.2
45°	2519.3	2514.2	2524.5	2545.1	2565.8	2586.4	2612.2	2674.2	2762.0	2870.4	2958.1
47.5°	2338.6	2343.8	2354.1	2390.3	2416.1	2441.9	2472.9	2545.1	2648.4	2756.8	2854.9
50°	2183.8	2188.9	2214.7	2235.4	2261.2	2292.2	2328.3	2421.2	2534.8	2643.2	2762.0
52.5°	2028.9	2034.0	2054.7	2070.2	2111.5	2147.6	2194.1	2297.3	2416.1	2534.8	2653.5
55°	1858.5	1868.8	1884.3	1920.5	1972.1	2013.4	2065.0	2178.6	2297.3	2426.4	2545.1
57.5°	1698.5	1703.6	1729.5	1765.6	1827.5	1879.2	1941.1	2059.9	2188.9	2312.8	2431.6
60°	1548.8	1559.1	1574.6	1621.0	1703.6	1755.3	1817.2	1941.1	2075.3	2199.2	2323.1
62.5°	1393.9	1404.2	1424.9	1476.5	1574.6	1631.4	1698.5	1827.5	1961.8	2085.7	2209.6
65°	1218.4	1228.7	1259.7	1326.8	1445.5	1507.5	1574.6	1708.8	1837.9	1966.9	2090.8
67.5°	1068.6	1073.8	1115.1	1187.4	1311.3	1388.7	1461.0	1590.1	1719.1	1848.2	1972.1
70°	924.1	934.4	965.4	1063.5	1197.7	1259.7	1337.1	1476.5	1605.6	1734.6	1853.4
72.5°	779.5	789.9	836.3	944.7	1084.1	1151.2	1213.2	1362.9	1492.0	1615.9	1734.6
75°	635.0	650.5	712.4	836.3	970.6	1037.7	1104.8	1239.0	1378.4	1497.1	1610.7
77.5°	505.9	521.4	598.9	727.9	862.1	929.3	996.4	1125.4	1254.5	1383.6	1502.3
80°	382.0	402.7	495.6	624.7	758.9	826.0	888.0	1022.2	1146.1	1264.8	1388.7
82.5°	273.6	299.4	407.8	531.7	666.0	727.9	789.9	918.9	1042.8	1156.4	1264.8
85°	170.4	216.8	325.2	444.0	573.0	635.0	696.9	826.0	944.7	1058.3	1161.6
87.5°	82.6	144.6	247.8	361.4	485.3	547.2	609.2	733.1	846.7	960.2	1063.5
90°	5.2	82.6	175.5	283.9	407.8	464.6	526.6	645.3	758.9	867.3	965.4
92.5°	0.0	51.6	139.4	242.6	356.2	418.2	475.0	593.7	702.1	810.5	903.4
95°	0.0	25.8	108.4	206.5	314.9	366.5	423.3	536.9	645.3	748.6	841.5
97.5°	0.0	5.2	77.4	165.2	268.5	325.2	376.9	485.3	593.7	691.8	779.5
100°	0.0	0.0	51.6	134.2	227.2	278.8	330.4	433.7	536.9	629.8	717.6
102.5°	0.0	0.0	25.8	103.3	191.0	237.5	283.9	387.2	485.3	578.2	660.8
105°	0.0	0.0	5.2	72.3	154.9	196.2	242.6	335.6	433.7	521.4	604.0
107.5°	0.0	0.0	0.0	41.3	118.7	160.0	201.3	289.1	382.0	464.6	542.1
110°	0.0	0.0	0.0	20.7	87.8	123.9	165.2	247.8	330.4	413.0	490.4



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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	5.2	56.8	92.9	129.1	206.5	283.9	361.4	433.7
115°	0.0	0.0	0.0	0.0	31.0	62.0	92.9	165.2	237.5	314.9	382.0
117.5°	0.0	0.0	0.0	0.0	10.3	36.1	62.0	129.1	196.2	263.3	330.4
120°	0.0	0.0	0.0	0.0	0.0	15.5	36.1	92.9	154.9	216.8	278.8
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	10.3	56.8	113.6	175.5	232.3
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	77.4	134.2	185.9
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	46.5	92.9	139.4
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7	56.8	98.1
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	31.0	62.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	31.0
137.5°	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3
140°	5.2	5.2	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°	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0	4321.0
2.5°	4341.7	4321.0	4321.0	4315.9	4310.7	4305.6	4295.2	4290.1	4279.7	4284.9
5°	4331.4	4310.7	4310.7	4300.4	4295.2	4295.2	4290.1	4290.1	4284.9	4290.1
7.5°	4315.9	4290.1	4290.1	4279.7	4274.6	4269.4	4269.4	4269.4	4269.4	4274.6
10°	4274.6	4259.1	4259.1	4253.9	4248.8	4238.4	4233.3	4238.4	4233.3	4238.4
12.5°	4217.8	4202.3	4212.6	4212.6	4212.6	4202.3	4197.1	4202.3	4197.1	4202.3
15°	4145.5	4140.4	4155.8	4161.0	4166.2	4161.0	4155.8	4155.8	4155.8	4155.8
17.5°	4073.2	4068.1	4088.7	4099.1	4099.1	4099.1	4099.1	4093.9	4093.9	4099.1
20°	4011.3	3990.6	4001.0	4021.6	4026.8	4026.8	4031.9	4037.1	4037.1	4037.1
22.5°	3923.5	3913.2	3918.4	3933.9	3944.2	3949.3	3964.8	3964.8	3970.0	3975.2
25°	3820.3	3835.8	3840.9	3856.4	3861.6	3871.9	3892.6	3902.9	3902.9	3902.9
27.5°	3711.9	3742.8	3763.5	3773.8	3784.1	3794.5	3820.3	3840.9	3840.9	3840.9
30°	3608.6	3639.6	3680.9	3701.5	3711.9	3722.2	3758.3	3784.1	3789.3	3789.3
32.5°	3500.2	3541.5	3603.5	3634.4	3639.6	3655.1	3701.5	3732.5	3737.7	3737.7
35°	3407.3	3458.9	3526.0	3567.3	3577.6	3593.1	3644.8	3680.9	3686.1	3686.1
37.5°	3324.7	3376.3	3448.6	3505.4	3515.7	3536.3	3588.0	3634.4	3639.6	3644.8
40°	3231.8	3293.7	3366.0	3433.1	3453.7	3474.4	3531.2	3577.6	3588.0	3588.0
42.5°	3138.8	3216.3	3288.5	3366.0	3391.8	3412.4	3474.4	3520.9	3531.2	3531.2
45°	3040.7	3138.8	3211.1	3293.7	3324.7	3345.3	3402.1	3453.7	3469.2	3469.2
47.5°	2953.0	3056.2	3128.5	3211.1	3242.1	3273.1	3324.7	3376.3	3391.8	3397.0
50°	2854.9	2968.5	3040.7	3118.2	3159.5	3190.5	3242.1	3298.9	3314.4	3309.2
52.5°	2756.8	2865.2	2942.7	3025.3	3066.6	3097.5	3144.0	3205.9	3221.4	3221.4
55°	2653.5	2762.0	2844.6	2922.0	2963.3	3004.6	3051.1	3102.7	3123.3	3118.2
57.5°	2550.3	2648.4	2736.1	2818.7	2854.9	2896.2	2942.7	2994.3	3009.8	3020.1
60°	2441.9	2529.6	2627.7	2705.2	2741.3	2782.6	2829.1	2875.5	2901.4	2896.2
62.5°	2323.1	2421.2	2514.2	2586.4	2622.6	2663.9	2710.3	2751.6	2772.3	2782.6
65°	2204.4	2297.3	2385.1	2462.5	2493.5	2534.8	2586.4	2617.4	2643.2	2648.4
67.5°	2080.5	2173.4	2261.2	2343.8	2374.8	2410.9	2457.4	2488.3	2514.2	2519.3
70°	1956.6	2054.7	2142.5	2219.9	2250.9	2281.8	2328.3	2359.3	2385.1	2385.1
72.5°	1837.9	1936.0	2018.6	2096.0	2127.0	2152.8	2199.2	2230.2	2250.9	2256.0
75°	1719.1	1812.1	1894.7	1972.1	1997.9	2028.9	2070.2	2101.2	2121.8	2127.0
77.5°	1600.4	1698.5	1775.9	1848.2	1874.0	1899.8	1946.3	1972.1	1992.7	1992.7
80°	1486.8	1579.7	1657.2	1724.3	1744.9	1775.9	1817.2	1843.0	1858.5	1868.8
82.5°	1378.4	1466.2	1538.4	1600.4	1631.4	1652.0	1693.3	1719.1	1734.6	1744.9
85°	1259.7	1352.6	1424.9	1486.8	1507.5	1538.4	1574.6	1600.4	1615.9	1621.0
87.5°	1151.2	1233.8	1306.1	1378.4	1404.2	1424.9	1461.0	1486.8	1502.3	1512.6
90°	1058.3	1135.8	1202.9	1259.7	1285.5	1311.3	1352.6	1378.4	1393.9	1399.0
92.5°	991.2	1068.6	1130.6	1187.4	1213.2	1233.8	1270.0	1295.8	1311.3	1316.4
95°	929.3	1001.5	1063.5	1120.3	1140.9	1161.6	1197.7	1218.4	1228.7	1239.0
97.5°	862.1	939.6	996.4	1048.0	1073.8	1089.3	1125.4	1146.1	1161.6	1166.7
100°	800.2	872.5	929.3	986.0	1006.7	1022.2	1058.3	1079.0	1089.3	1094.5
102.5°	738.2	810.5	867.3	918.9	939.6	955.1	986.0	1006.7	1022.2	1027.3
105°	676.3	743.4	800.2	851.8	872.5	888.0	918.9	939.6	955.1	960.2
107.5°	619.5	681.5	738.2	784.7	805.4	820.8	851.8	872.5	888.0	893.1
110°	562.7	619.5	676.3	722.8	743.4	758.9	789.9	805.4	820.8	826.0





TEST NUMBER: P257087

CATALOG NUMBER: HGL-S-UF-80L840-UNV-8

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	500.8	562.7	614.3	660.8	676.3	696.9	722.8	743.4	753.7	758.9
115°	449.1	505.9	552.4	598.9	614.3	629.8	660.8	676.3	691.8	691.8
117.5°	392.4	444.0	495.6	536.9	552.4	567.9	598.9	614.3	624.7	629.8
120°	340.7	387.2	433.7	475.0	495.6	505.9	536.9	552.4	562.7	567.9
122.5°	289.1	335.6	382.0	418.2	433.7	449.1	475.0	490.4	500.8	505.9
125°	237.5	283.9	325.2	361.4	376.9	392.4	413.0	428.5	438.8	444.0
127.5°	191.0	232.3	273.6	304.6	320.1	335.6	356.2	371.7	382.0	387.2
130°	144.6	180.7	222.0	253.0	268.5	278.8	299.4	314.9	325.2	330.4
132.5°	98.1	134.2	170.4	201.3	216.8	227.2	247.8	258.1	268.5	273.6
135°	62.0	92.9	123.9	149.7	165.2	175.5	196.2	206.5	216.8	216.8
137.5°	31.0	56.8	82.6	103.3	113.6	129.1	144.6	154.9	160.0	165.2
140°	10.3	25.8	46.5	62.0	72.3	82.6	98.1	108.4	113.6	118.7
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)