

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: P257102

Luminaire Tested: **HGL-S-UF-80L830-UNV-12**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257102  
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-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: 23772.1 lumens  
Efficiency: N/A  
Efficacy: 112.1 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

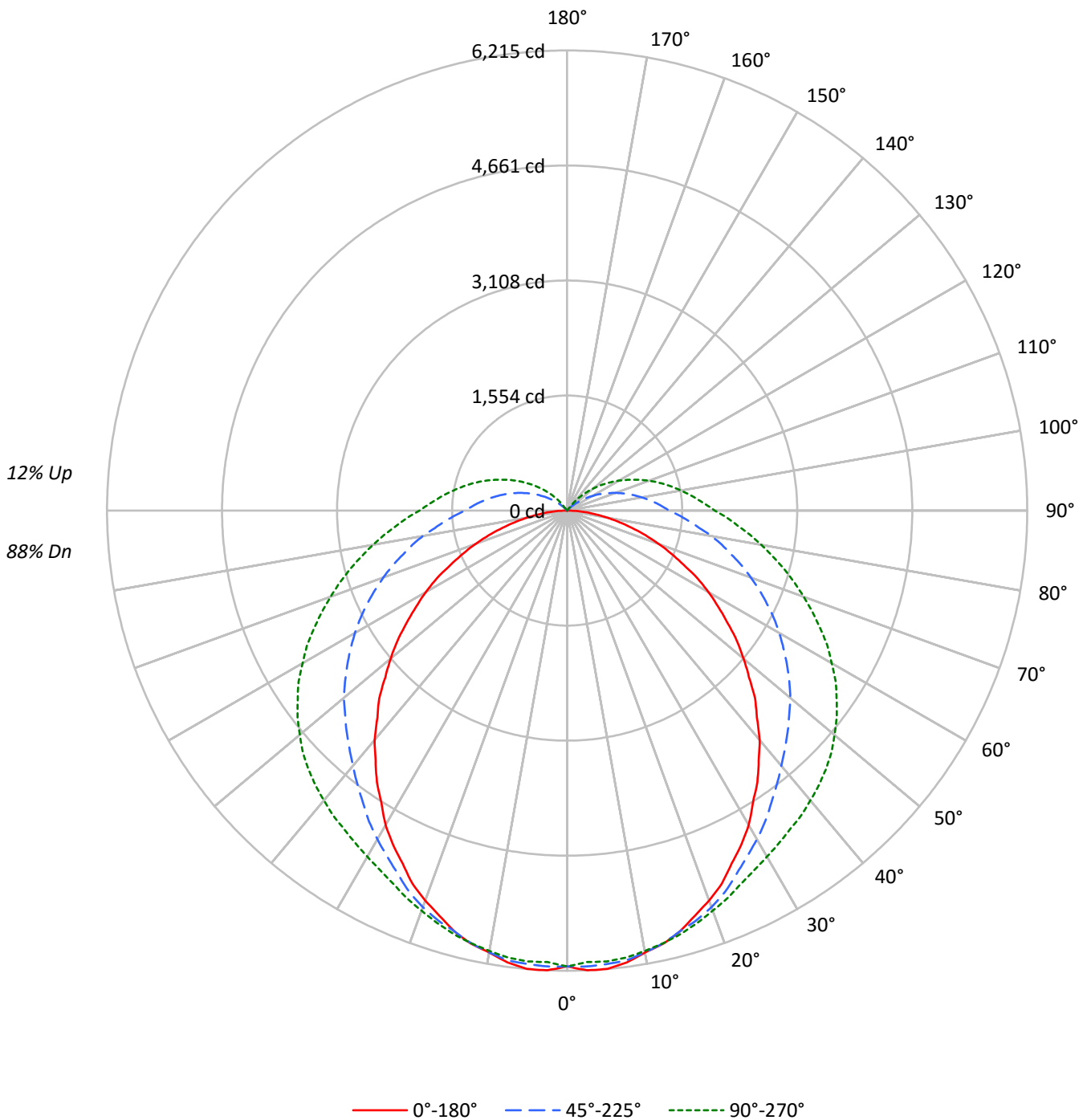
Input Watts (W): 212  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	24095	24095	24095
5°	24400	23486	23096
10°	24050	22772	22219
15°	23788	21919	21387
20°	23271	21213	20556
25°	22620	20281	19814
30°	22062	19484	19327
35°	21273	18696	19034
40°	20520	18041	18907
45°	19697	17572	18809
50°	18751	17233	18621
55°	17847	16858	18382
60°	17017	16531	18072
65°	15782	16205	17695
70°	14715	15904	17292
75°	13251	15615	16995
80°	11693	15606	16774
85°	9916	15666	16740



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	583.0	2.5
10°-20°	1658.0	7.0
20°-30°	2487.7	10.5
30°-40°	3020.4	12.7
40°-50°	3262.3	13.7
50°-60°	3195.1	13.4
60°-70°	2834.0	11.9
70°-80°	2270.1	9.5
80°-90°	1645.2	6.9
90°-100°	1159.5	4.9
100°-110°	808.8	3.4
110°-120°	500.7	2.1
120°-130°	254.7	1.1
130°-140°	88.2	0.4
140°-150°	4.2	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	4728.7	19.9
0°-40°	7749.2	32.6
0°-60°	14206.6	59.8
0°-90°	20955.9	88.2
90°-120°	2469.1	10.4
90°-150°	2816.1	11.8
90°-180°	2816.0	11.8
0°-180°	23772.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6156	6156	6156	6156	6156	
5°	6215	6156	6149	6119	6112	588
15°	5884	5840	5884	5935	5921	1655
25°	5259	5273	5413	5501	5560	2427
35°	4479	4508	4810	5097	5251	2797
45°	3589	3685	4214	4736	4942	2758
55°	2648	2868	3626	4222	4442	2373
65°	1736	2148	2979	3552	3773	1733
75°	905	1478	2295	2846	3030	967
85°	243	905	1655	2148	2309	262
90°	7	662	1375	1831	1993	18
95°	0	522	1199	1625	1765	0
105°	0	280	860	1243	1368	0
115°	0	88	544	875	986	0
125°	0	0	265	537	632	0
135°	0	0	44	235	309	4
145°	0	0	0	0	0	1
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°	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0
2.5°	6214.8	6207.5	6185.4	6163.4	6156.0	6156.0	6148.7	6141.3	6141.3	6133.9	6163.4
5°	6214.8	6207.5	6185.4	6156.0	6148.7	6156.0	6148.7	6133.9	6133.9	6126.6	6148.7
7.5°	6156.0	6141.3	6126.6	6104.5	6097.2	6097.2	6089.8	6089.8	6089.8	6089.8	6126.6
10°	6060.4	6053.0	6038.3	6016.3	6016.3	6008.9	6008.9	6016.3	6016.3	6023.6	6060.4
12.5°	5994.2	5979.5	5957.4	5935.4	5928.0	5928.0	5920.7	5913.3	5920.7	5928.0	5986.8
15°	5883.9	5876.5	5861.8	5839.7	5839.7	5839.7	5839.7	5832.4	5832.4	5839.7	5883.9
17.5°	5736.8	5722.1	5714.7	5700.0	5707.4	5714.7	5722.1	5714.7	5729.4	5751.5	5803.0
20°	5604.4	5589.7	5575.0	5552.9	5552.9	5560.3	5567.6	5567.6	5604.4	5633.8	5700.0
22.5°	5457.3	5449.9	5435.2	5427.9	5427.9	5435.2	5435.2	5420.5	5442.6	5486.7	5575.0
25°	5258.7	5251.4	5244.0	5244.0	5258.7	5273.4	5280.8	5288.1	5310.2	5339.6	5413.2
27.5°	5089.6	5082.2	5067.5	5052.8	5067.5	5082.2	5089.6	5104.3	5148.4	5207.2	5266.1
30°	4905.7	4898.3	4891.0	4891.0	4905.7	4913.0	4920.4	4913.0	4971.9	5060.1	5126.3
32.5°	4670.3	4663.0	4670.3	4670.3	4707.1	4729.2	4743.9	4751.2	4802.7	4883.6	4979.2
35°	4479.1	4479.1	4471.7	4486.5	4493.8	4508.5	4523.2	4560.0	4633.6	4714.5	4810.1
37.5°	4251.1	4251.1	4251.1	4287.9	4317.3	4324.7	4332.0	4376.1	4471.7	4552.7	4655.6
40°	4045.2	4045.2	4045.2	4059.9	4081.9	4104.0	4133.4	4184.9	4280.5	4398.2	4501.2
42.5°	3795.1	3802.5	3817.2	3853.9	3883.4	3898.1	3920.1	4001.0	4104.0	4243.7	4354.1
45°	3589.2	3581.8	3596.5	3625.9	3655.4	3684.8	3721.6	3809.8	3934.8	4089.3	4214.3
47.5°	3331.7	3339.1	3353.8	3405.3	3442.1	3478.8	3523.0	3625.9	3773.0	3927.5	4067.2
50°	3111.1	3118.5	3155.2	3184.6	3221.4	3265.6	3317.0	3449.4	3611.2	3765.7	3934.8
52.5°	2890.5	2897.8	2927.2	2949.3	3008.1	3059.6	3125.8	3272.9	3442.1	3611.2	3780.4
55°	2647.7	2662.5	2684.5	2736.0	2809.6	2868.4	2941.9	3103.7	3272.9	3456.8	3625.9
57.5°	2419.7	2427.1	2463.9	2515.4	2603.6	2677.2	2765.4	2934.6	3118.5	3295.0	3464.1
60°	2206.5	2221.2	2243.2	2309.4	2427.1	2500.6	2588.9	2765.4	2956.6	3133.2	3309.7
62.5°	1985.8	2000.5	2029.9	2103.5	2243.2	2324.1	2419.7	2603.6	2794.8	2971.4	3147.9
65°	1735.7	1750.5	1794.6	1890.2	2059.4	2147.6	2243.2	2434.5	2618.3	2802.2	2978.7
67.5°	1522.5	1529.8	1588.6	1691.6	1868.1	1978.5	2081.4	2265.3	2449.2	2633.0	2809.6
70°	1316.5	1331.2	1375.4	1515.1	1706.3	1794.6	1904.9	2103.5	2287.4	2471.2	2640.4
72.5°	1110.6	1125.3	1191.5	1345.9	1544.5	1640.1	1728.4	1941.7	2125.6	2302.1	2471.2
75°	904.6	926.7	1015.0	1191.5	1382.7	1478.3	1573.9	1765.2	1963.7	2132.9	2294.7
77.5°	720.8	742.8	853.2	1037.0	1228.3	1323.9	1419.5	1603.4	1787.2	1971.1	2140.3
80°	544.3	573.7	706.1	889.9	1081.2	1176.8	1265.0	1456.3	1632.8	1801.9	1978.5
82.5°	389.8	426.6	581.0	757.5	948.8	1037.0	1125.3	1309.2	1485.7	1647.5	1801.9
85°	242.7	308.9	463.4	632.5	816.4	904.6	992.9	1176.8	1345.9	1507.7	1654.8
87.5°	117.7	205.9	353.0	514.8	691.4	779.6	867.9	1044.4	1206.2	1368.0	1515.1
90°	7.4	117.7	250.1	404.5	581.0	661.9	750.2	919.4	1081.2	1235.6	1375.4
92.5°	0.0	73.5	198.6	345.7	507.5	595.7	676.6	845.8	1000.3	1154.7	1287.1
95°	0.0	36.8	154.5	294.2	448.6	522.2	603.1	764.9	919.4	1066.5	1198.8
97.5°	0.0	7.4	110.3	235.4	382.5	463.4	536.9	691.4	845.8	985.5	1110.6
100°	0.0	0.0	73.5	191.2	323.6	397.2	470.7	617.8	764.9	897.3	1022.3
102.5°	0.0	0.0	36.8	147.1	272.1	338.3	404.5	551.6	691.4	823.7	941.4
105°	0.0	0.0	7.4	103.0	220.6	279.5	345.7	478.1	617.8	742.8	860.5
107.5°	0.0	0.0	0.0	58.8	169.2	228.0	286.8	411.9	544.3	661.9	772.3
110°	0.0	0.0	0.0	29.4	125.0	176.5	235.4	353.0	470.7	588.4	698.7



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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	7.4	80.9	132.4	183.9	294.2	404.5	514.8	617.8
115°	0.0	0.0	0.0	0.0	44.1	88.3	132.4	235.4	338.3	448.6	544.3
117.5°	0.0	0.0	0.0	0.0	14.7	51.5	88.3	183.9	279.5	375.1	470.7
120°	0.0	0.0	0.0	0.0	0.0	22.1	51.5	132.4	220.6	308.9	397.2
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	14.7	80.9	161.8	250.1	331.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.1	110.3	191.2	264.8
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.7	66.2	132.4	198.6
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.4	80.9	139.7
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	44.1	88.3
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.7	44.1
137.5°	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.7
140°	7.4	7.4	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°	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0	6156.0
2.5°	6185.4	6156.0	6156.0	6148.7	6141.3	6133.9	6119.2	6111.9	6097.2	6104.5
5°	6170.7	6141.3	6141.3	6126.6	6119.2	6119.2	6111.9	6111.9	6104.5	6111.9
7.5°	6148.7	6111.9	6111.9	6097.2	6089.8	6082.5	6082.5	6082.5	6082.5	6089.8
10°	6089.8	6067.7	6067.7	6060.4	6053.0	6038.3	6031.0	6038.3	6031.0	6038.3
12.5°	6008.9	5986.8	6001.6	6001.6	6001.6	5986.8	5979.5	5986.8	5979.5	5986.8
15°	5905.9	5898.6	5920.7	5928.0	5935.4	5928.0	5920.7	5920.7	5920.7	5920.7
17.5°	5803.0	5795.6	5825.0	5839.7	5839.7	5839.7	5839.7	5832.4	5832.4	5839.7
20°	5714.7	5685.3	5700.0	5729.4	5736.8	5736.8	5744.1	5751.5	5751.5	5751.5
22.5°	5589.7	5575.0	5582.3	5604.4	5619.1	5626.5	5648.5	5648.5	5655.9	5663.2
25°	5442.6	5464.7	5472.0	5494.1	5501.4	5516.1	5545.6	5560.3	5560.3	5560.3
27.5°	5288.1	5332.3	5361.7	5376.4	5391.1	5405.8	5442.6	5472.0	5472.0	5472.0
30°	5141.0	5185.2	5244.0	5273.4	5288.1	5302.8	5354.3	5391.1	5398.5	5398.5
32.5°	4986.6	5045.4	5133.7	5177.8	5185.2	5207.2	5273.4	5317.6	5324.9	5324.9
35°	4854.2	4927.7	5023.4	5082.2	5096.9	5119.0	5192.5	5244.0	5251.4	5251.4
37.5°	4736.5	4810.1	4913.0	4993.9	5008.7	5038.1	5111.6	5177.8	5185.2	5192.5
40°	4604.1	4692.4	4795.4	4891.0	4920.4	4949.8	5030.7	5096.9	5111.6	5111.6
42.5°	4471.7	4582.1	4685.0	4795.4	4832.1	4861.6	4949.8	5016.0	5030.7	5030.7
45°	4332.0	4471.7	4574.7	4692.4	4736.5	4765.9	4846.8	4920.4	4942.5	4942.5
47.5°	4207.0	4354.1	4457.0	4574.7	4618.8	4663.0	4736.5	4810.1	4832.1	4839.5
50°	4067.2	4229.0	4332.0	4442.3	4501.2	4545.3	4618.8	4699.7	4721.8	4714.5
52.5°	3927.5	4081.9	4192.3	4309.9	4368.8	4412.9	4479.1	4567.4	4589.4	4589.4
55°	3780.4	3934.8	4052.5	4162.8	4221.7	4280.5	4346.7	4420.3	4449.7	4442.3
57.5°	3633.3	3773.0	3898.1	4015.7	4067.2	4126.1	4192.3	4265.8	4287.9	4302.6
60°	3478.8	3603.9	3743.6	3853.9	3905.4	3964.3	4030.5	4096.6	4133.4	4126.1
62.5°	3309.7	3449.4	3581.8	3684.8	3736.3	3795.1	3861.3	3920.1	3949.6	3964.3
65°	3140.5	3272.9	3397.9	3508.3	3552.4	3611.2	3684.8	3728.9	3765.7	3773.0
67.5°	2964.0	3096.4	3221.4	3339.1	3383.2	3434.7	3500.9	3545.0	3581.8	3589.2
70°	2787.5	2927.2	3052.3	3162.6	3206.7	3250.8	3317.0	3361.2	3397.9	3397.9
72.5°	2618.3	2758.1	2875.7	2986.1	3030.2	3067.0	3133.2	3177.3	3206.7	3214.1
75°	2449.2	2581.6	2699.2	2809.6	2846.3	2890.5	2949.3	2993.4	3022.8	3030.2
77.5°	2280.0	2419.7	2530.1	2633.0	2669.8	2706.6	2772.8	2809.6	2839.0	2839.0
80°	2118.2	2250.6	2360.9	2456.5	2485.9	2530.1	2588.9	2625.7	2647.7	2662.5
82.5°	1963.7	2088.8	2191.7	2280.0	2324.1	2353.6	2412.4	2449.2	2471.2	2485.9
85°	1794.6	1927.0	2029.9	2118.2	2147.6	2191.7	2243.2	2280.0	2302.1	2309.4
87.5°	1640.1	1757.8	1860.8	1963.7	2000.5	2029.9	2081.4	2118.2	2140.3	2155.0
90°	1507.7	1618.1	1713.7	1794.6	1831.4	1868.1	1927.0	1963.7	1985.8	1993.2
92.5°	1412.1	1522.5	1610.7	1691.6	1728.4	1757.8	1809.3	1846.1	1868.1	1875.5
95°	1323.9	1426.8	1515.1	1596.0	1625.4	1654.8	1706.3	1735.7	1750.5	1765.2
97.5°	1228.3	1338.6	1419.5	1493.0	1529.8	1551.9	1603.4	1632.8	1654.8	1662.2
100°	1140.0	1243.0	1323.9	1404.8	1434.2	1456.3	1507.7	1537.2	1551.9	1559.2
102.5°	1051.7	1154.7	1235.6	1309.2	1338.6	1360.6	1404.8	1434.2	1456.3	1463.6
105°	963.5	1059.1	1140.0	1213.5	1243.0	1265.0	1309.2	1338.6	1360.6	1368.0
107.5°	882.6	970.8	1051.7	1117.9	1147.4	1169.4	1213.5	1243.0	1265.0	1272.4
110°	801.7	882.6	963.5	1029.7	1059.1	1081.2	1125.3	1147.4	1169.4	1176.8





TEST NUMBER: P257102

CATALOG NUMBER: HGL-S-UF-80L830-UNV-12

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	713.4	801.7	875.2	941.4	963.5	992.9	1029.7	1059.1	1073.8	1081.2
115°	639.9	720.8	787.0	853.2	875.2	897.3	941.4	963.5	985.5	985.5
117.5°	559.0	632.5	706.1	764.9	787.0	809.0	853.2	875.2	889.9	897.3
120°	485.4	551.6	617.8	676.6	706.1	720.8	764.9	787.0	801.7	809.0
122.5°	411.9	478.1	544.3	595.7	617.8	639.9	676.6	698.7	713.4	720.8
125°	338.3	404.5	463.4	514.8	536.9	559.0	588.4	610.5	625.2	632.5
127.5°	272.1	331.0	389.8	433.9	456.0	478.1	507.5	529.5	544.3	551.6
130°	205.9	257.4	316.3	360.4	382.5	397.2	426.6	448.6	463.4	470.7
132.5°	139.7	191.2	242.7	286.8	308.9	323.6	353.0	367.7	382.5	389.8
135°	88.3	132.4	176.5	213.3	235.4	250.1	279.5	294.2	308.9	308.9
137.5°	44.1	80.9	117.7	147.1	161.8	183.9	205.9	220.6	228.0	235.4
140°	14.7	36.8	66.2	88.3	103.0	117.7	139.7	154.5	161.8	169.2
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)