

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: P257047

Luminaire Tested: **HGL-S-UF-53L830-UNV-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257047  
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-53L830-UNV-4  
Description: HUGO 4 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS WITH UPLIGHT  
Light Source: (168) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5165.6 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.32 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

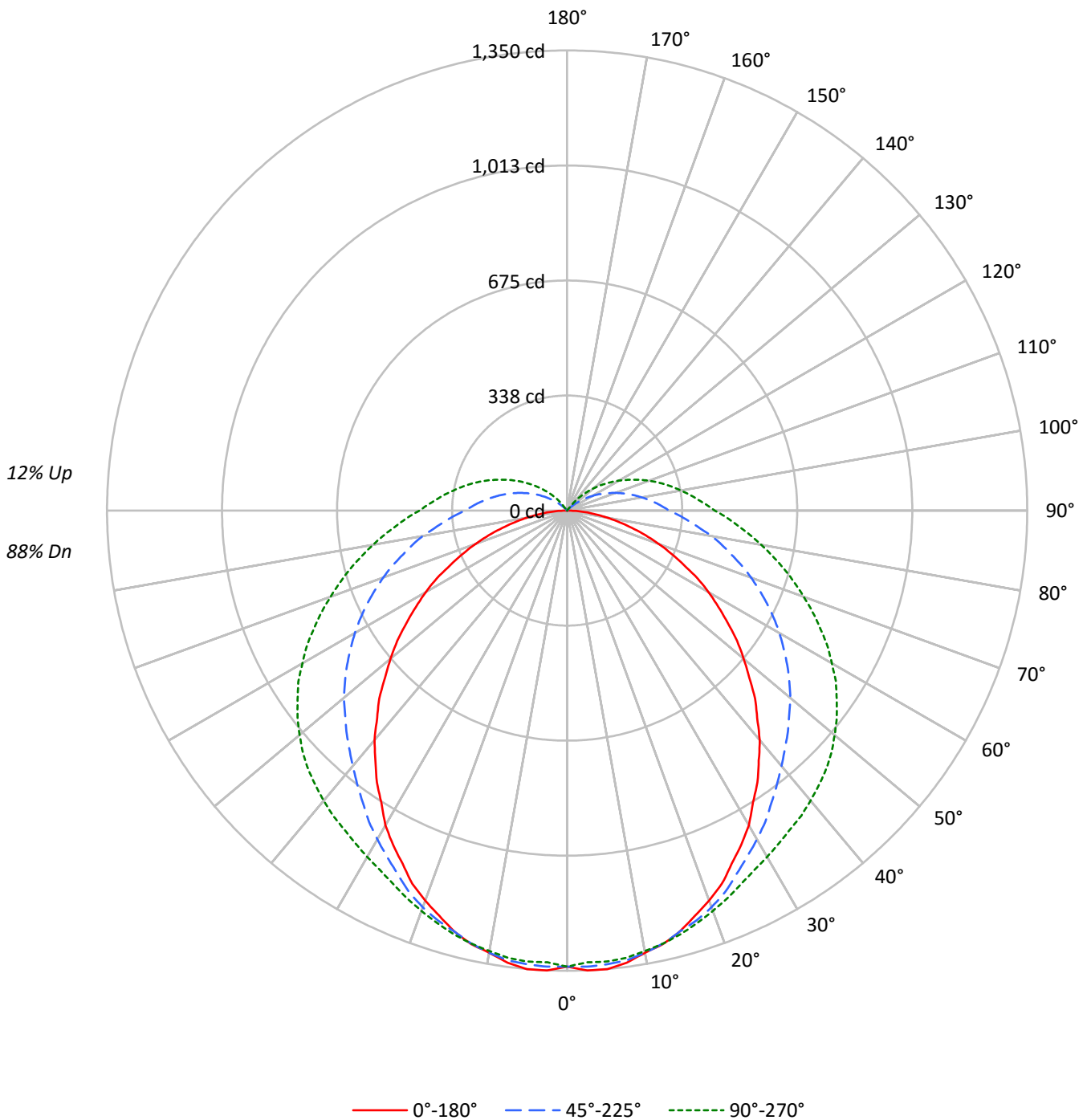
Input Watts (W): 41.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	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°	15708	15708	15708
5°	15883	15294	15056
10°	15630	14814	14484
15°	15435	14245	13942
20°	15075	13774	13401
25°	14628	13156	12916
30°	14240	12626	12600
35°	13702	12103	12408
40°	13186	11666	12325
45°	12623	11351	12262
50°	11977	11117	12138
55°	11355	10860	11983
60°	10775	10632	11781
65°	9926	10404	11536
70°	9167	10186	11273
75°	8130	9973	11078
80°	6970	9931	10934
85°	5472	9919	10912



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.7	2.5
10°-20°	360.3	7.0
20°-30°	540.6	10.5
30°-40°	656.3	12.7
40°-50°	708.9	13.7
50°-60°	694.3	13.4
60°-70°	615.8	11.9
70°-80°	493.3	9.5
80°-90°	357.5	6.9
90°-100°	252.0	4.9
100°-110°	175.8	3.4
110°-120°	108.8	2.1
120°-130°	55.3	1.1
130°-140°	19.2	0.4
140°-150°	0.9	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1027.5	19.9
0°-40°	1683.8	32.6
0°-60°	3087.0	59.8
0°-90°	4553.6	88.2
90°-120°	536.5	10.4
90°-150°	611.9	11.8
90°-180°	612.0	11.8
0°-180°	5165.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1338	1338	1338	1338	1338	
5°	1350	1338	1336	1330	1328	128
15°	1278	1269	1278	1290	1286	360
25°	1143	1146	1176	1195	1208	527
35°	973	980	1045	1108	1141	608
45°	780	801	916	1029	1074	599
55°	575	623	788	917	965	516
65°	377	467	647	772	820	377
75°	197	321	499	618	658	210
85°	53	197	360	467	502	57
90°	2	144	299	398	433	4
95°	0	114	260	353	384	0
105°	0	61	187	270	297	0
115°	0	19	118	190	214	0
125°	0	0	58	117	137	0
135°	0	0	10	51	67	1
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°	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7
2.5°	1350.5	1348.9	1344.1	1339.3	1337.7	1337.7	1336.1	1334.5	1334.5	1332.9	1339.3
5°	1350.5	1348.9	1344.1	1337.7	1336.1	1337.7	1336.1	1332.9	1332.9	1331.3	1336.1
7.5°	1337.7	1334.5	1331.3	1326.5	1324.9	1324.9	1323.3	1323.3	1323.3	1323.3	1331.3
10°	1316.9	1315.3	1312.1	1307.3	1307.3	1305.7	1305.7	1307.3	1307.3	1308.9	1316.9
12.5°	1302.5	1299.3	1294.5	1289.7	1288.1	1288.1	1286.5	1284.9	1286.5	1288.1	1300.9
15°	1278.5	1276.9	1273.7	1268.9	1268.9	1268.9	1268.9	1267.3	1267.3	1268.9	1278.5
17.5°	1246.6	1243.4	1241.8	1238.6	1240.2	1241.8	1243.4	1241.8	1245.0	1249.8	1261.0
20°	1217.8	1214.6	1211.4	1206.6	1206.6	1208.2	1209.8	1209.8	1217.8	1224.2	1238.6
22.5°	1185.8	1184.2	1181.0	1179.5	1179.5	1181.0	1181.0	1177.9	1182.6	1192.2	1211.4
25°	1142.7	1141.1	1139.5	1139.5	1142.7	1145.9	1147.5	1149.1	1153.9	1160.3	1176.3
27.5°	1105.9	1104.3	1101.1	1097.9	1101.1	1104.3	1105.9	1109.1	1118.7	1131.5	1144.3
30°	1066.0	1064.4	1062.8	1062.8	1066.0	1067.6	1069.2	1067.6	1080.4	1099.5	1113.9
32.5°	1014.8	1013.2	1014.8	1014.8	1022.8	1027.6	1030.8	1032.4	1043.6	1061.2	1082.0
35°	973.3	973.3	971.7	974.9	976.5	979.7	982.9	990.9	1006.8	1024.4	1045.2
37.5°	923.7	923.7	923.7	931.7	938.1	939.7	941.3	950.9	971.7	989.3	1011.6
40°	879.0	879.0	879.0	882.2	887.0	891.8	898.2	909.4	930.1	955.7	978.1
42.5°	824.7	826.3	829.5	837.4	843.8	847.0	851.8	869.4	891.8	922.1	946.1
45°	779.9	778.3	781.5	787.9	794.3	800.7	808.7	827.9	855.0	888.6	915.8
47.5°	724.0	725.6	728.8	740.0	747.9	755.9	765.5	787.9	819.9	853.4	883.8
50°	676.0	677.6	685.6	692.0	700.0	709.6	720.8	749.5	784.7	818.3	855.0
52.5°	628.1	629.7	636.1	640.9	653.7	664.8	679.2	711.2	747.9	784.7	821.5
55°	575.3	578.5	583.3	594.5	610.5	623.3	639.3	674.4	711.2	751.1	787.9
57.5°	525.8	527.4	535.4	546.6	565.8	581.7	600.9	637.7	677.6	716.0	752.7
60°	479.5	482.6	487.4	501.8	527.4	543.4	562.6	600.9	642.5	680.8	719.2
62.5°	431.5	434.7	441.1	457.1	487.4	505.0	525.8	565.8	607.3	645.7	684.0
65°	377.2	380.4	390.0	410.7	447.5	466.7	487.4	529.0	568.9	608.9	647.3
67.5°	330.8	332.4	345.2	367.6	405.9	429.9	452.3	492.2	532.2	572.1	610.5
70°	286.1	289.3	298.9	329.2	370.8	390.0	413.9	457.1	497.0	537.0	573.7
72.5°	241.3	244.5	258.9	292.5	335.6	356.4	375.6	421.9	461.9	500.2	537.0
75°	196.6	201.4	220.5	258.9	300.5	321.2	342.0	383.6	426.7	463.5	498.6
77.5°	156.6	161.4	185.4	225.3	266.9	287.7	308.4	348.4	388.4	428.3	465.1
80°	118.3	124.7	153.4	193.4	234.9	255.7	274.9	316.4	354.8	391.6	429.9
82.5°	84.7	92.7	126.3	164.6	206.2	225.3	244.5	284.5	322.8	358.0	391.6
85°	52.7	67.1	100.7	137.4	177.4	196.6	215.8	255.7	292.5	327.6	359.6
87.5°	25.6	44.7	76.7	111.9	150.2	169.4	188.6	226.9	262.1	297.3	329.2
90°	1.6	25.6	54.3	87.9	126.3	143.8	163.0	199.8	234.9	268.5	298.9
92.5°	0.0	16.0	43.2	75.1	110.3	129.5	147.0	183.8	217.4	250.9	279.7
95°	0.0	8.0	33.6	63.9	97.5	113.5	131.1	166.2	199.8	231.7	260.5
97.5°	0.0	1.6	24.0	51.1	83.1	100.7	116.7	150.2	183.8	214.2	241.3
100°	0.0	0.0	16.0	41.6	70.3	86.3	102.3	134.2	166.2	195.0	222.1
102.5°	0.0	0.0	8.0	32.0	59.1	73.5	87.9	119.9	150.2	179.0	204.6
105°	0.0	0.0	1.6	22.4	47.9	60.7	75.1	103.9	134.2	161.4	187.0
107.5°	0.0	0.0	0.0	12.8	36.8	49.5	62.3	89.5	118.3	143.8	167.8
110°	0.0	0.0	0.0	6.4	27.2	38.4	51.1	76.7	102.3	127.9	151.8



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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	1.6	17.6	28.8	40.0	63.9	87.9	111.9	134.2
115°	0.0	0.0	0.0	0.0	9.6	19.2	28.8	51.1	73.5	97.5	118.3
117.5°	0.0	0.0	0.0	0.0	3.2	11.2	19.2	40.0	60.7	81.5	102.3
120°	0.0	0.0	0.0	0.0	0.0	4.8	11.2	28.8	47.9	67.1	86.3
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.2	17.6	35.2	54.3	71.9
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	24.0	41.6	57.5
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	14.4	28.8	43.2
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	17.6	30.4
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	9.6	19.2
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	9.6
137.5°	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
140°	1.6	1.6	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



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7	1337.7
2.5°	1344.1	1337.7	1337.7	1336.1	1334.5	1332.9	1329.7	1328.1	1324.9	1326.5
5°	1340.9	1334.5	1334.5	1331.3	1329.7	1329.7	1328.1	1328.1	1326.5	1328.1
7.5°	1336.1	1328.1	1328.1	1324.9	1323.3	1321.7	1321.7	1321.7	1321.7	1323.3
10°	1323.3	1318.5	1318.5	1316.9	1315.3	1312.1	1310.5	1312.1	1310.5	1312.1
12.5°	1305.7	1300.9	1304.1	1304.1	1304.1	1300.9	1299.3	1300.9	1299.3	1300.9
15°	1283.3	1281.7	1286.5	1288.1	1289.7	1288.1	1286.5	1286.5	1286.5	1286.5
17.5°	1261.0	1259.4	1265.8	1268.9	1268.9	1268.9	1268.9	1267.3	1267.3	1268.9
20°	1241.8	1235.4	1238.6	1245.0	1246.6	1246.6	1248.2	1249.8	1249.8	1249.8
22.5°	1214.6	1211.4	1213.0	1217.8	1221.0	1222.6	1227.4	1227.4	1229.0	1230.6
25°	1182.6	1187.4	1189.0	1193.8	1195.4	1198.6	1205.0	1208.2	1208.2	1208.2
27.5°	1149.1	1158.7	1165.1	1168.3	1171.5	1174.7	1182.6	1189.0	1189.0	1189.0
30°	1117.1	1126.7	1139.5	1145.9	1149.1	1152.3	1163.5	1171.5	1173.1	1173.1
32.5°	1083.6	1096.3	1115.5	1125.1	1126.7	1131.5	1145.9	1155.5	1157.1	1157.1
35°	1054.8	1070.8	1091.6	1104.3	1107.5	1112.3	1128.3	1139.5	1141.1	1141.1
37.5°	1029.2	1045.2	1067.6	1085.2	1088.4	1094.7	1110.7	1125.1	1126.7	1128.3
40°	1000.5	1019.6	1042.0	1062.8	1069.2	1075.6	1093.1	1107.5	1110.7	1110.7
42.5°	971.7	995.7	1018.0	1042.0	1050.0	1056.4	1075.6	1090.0	1093.1	1093.1
45°	941.3	971.7	994.1	1019.6	1029.2	1035.6	1053.2	1069.2	1074.0	1074.0
47.5°	914.2	946.1	968.5	994.1	1003.7	1013.2	1029.2	1045.2	1050.0	1051.6
50°	883.8	918.9	941.3	965.3	978.1	987.7	1003.7	1021.2	1026.0	1024.4
52.5°	853.4	887.0	911.0	936.5	949.3	958.9	973.3	992.5	997.3	997.3
55°	821.5	855.0	880.6	904.6	917.4	930.1	944.5	960.5	966.9	965.3
57.5°	789.5	819.9	847.0	872.6	883.8	896.6	911.0	926.9	931.7	934.9
60°	755.9	783.1	813.5	837.4	848.6	861.4	875.8	890.2	898.2	896.6
62.5°	719.2	749.5	778.3	800.7	811.9	824.7	839.0	851.8	858.2	861.4
65°	682.4	711.2	738.4	762.3	771.9	784.7	800.7	810.3	818.3	819.9
67.5°	644.1	672.8	700.0	725.6	735.2	746.3	760.7	770.3	778.3	779.9
70°	605.7	636.1	663.2	687.2	696.8	706.4	720.8	730.4	738.4	738.4
72.5°	568.9	599.3	624.9	648.9	658.4	666.4	680.8	690.4	696.8	698.4
75°	532.2	561.0	586.5	610.5	618.5	628.1	640.9	650.5	656.8	658.4
77.5°	495.4	525.8	549.8	572.1	580.1	588.1	602.5	610.5	616.9	616.9
80°	460.3	489.0	513.0	533.8	540.2	549.8	562.6	570.5	575.3	578.5
82.5°	426.7	453.9	476.3	495.4	505.0	511.4	524.2	532.2	537.0	540.2
85°	390.0	418.7	441.1	460.3	466.7	476.3	487.4	495.4	500.2	501.8
87.5°	356.4	382.0	404.3	426.7	434.7	441.1	452.3	460.3	465.1	468.3
90°	327.6	351.6	372.4	390.0	397.9	405.9	418.7	426.7	431.5	433.1
92.5°	306.8	330.8	350.0	367.6	375.6	382.0	393.2	401.1	405.9	407.5
95°	287.7	310.0	329.2	346.8	353.2	359.6	370.8	377.2	380.4	383.6
97.5°	266.9	290.9	308.4	324.4	332.4	337.2	348.4	354.8	359.6	361.2
100°	247.7	270.1	287.7	305.3	311.6	316.4	327.6	334.0	337.2	338.8
102.5°	228.5	250.9	268.5	284.5	290.9	295.7	305.3	311.6	316.4	318.0
105°	209.4	230.1	247.7	263.7	270.1	274.9	284.5	290.9	295.7	297.3
107.5°	191.8	211.0	228.5	242.9	249.3	254.1	263.7	270.1	274.9	276.5
110°	174.2	191.8	209.4	223.7	230.1	234.9	244.5	249.3	254.1	255.7





TEST NUMBER: P257047

CATALOG NUMBER: HGL-S-UF-53L830-UNV-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	155.0	174.2	190.2	204.6	209.4	215.8	223.7	230.1	233.3	234.9
115°	139.0	156.6	171.0	185.4	190.2	195.0	204.6	209.4	214.2	214.2
117.5°	121.5	137.4	153.4	166.2	171.0	175.8	185.4	190.2	193.4	195.0
120°	105.5	119.9	134.2	147.0	153.4	156.6	166.2	171.0	174.2	175.8
122.5°	89.5	103.9	118.3	129.5	134.2	139.0	147.0	151.8	155.0	156.6
125°	73.5	87.9	100.7	111.9	116.7	121.5	127.9	132.6	135.8	137.4
127.5°	59.1	71.9	84.7	94.3	99.1	103.9	110.3	115.1	118.3	119.9
130°	44.7	55.9	68.7	78.3	83.1	86.3	92.7	97.5	100.7	102.3
132.5°	30.4	41.6	52.7	62.3	67.1	70.3	76.7	79.9	83.1	84.7
135°	19.2	28.8	38.4	46.3	51.1	54.3	60.7	63.9	67.1	67.1
137.5°	9.6	17.6	25.6	32.0	35.2	40.0	44.7	47.9	49.5	51.1
140°	3.2	8.0	14.4	19.2	22.4	25.6	30.4	33.6	35.2	36.8
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)