

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: P257046

Luminaire Tested: **HGL-S-UF-50L830-UNV-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257046  
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-50L830-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: 4852.1 lumens  
Efficiency: N/A  
Efficacy: 126.0 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

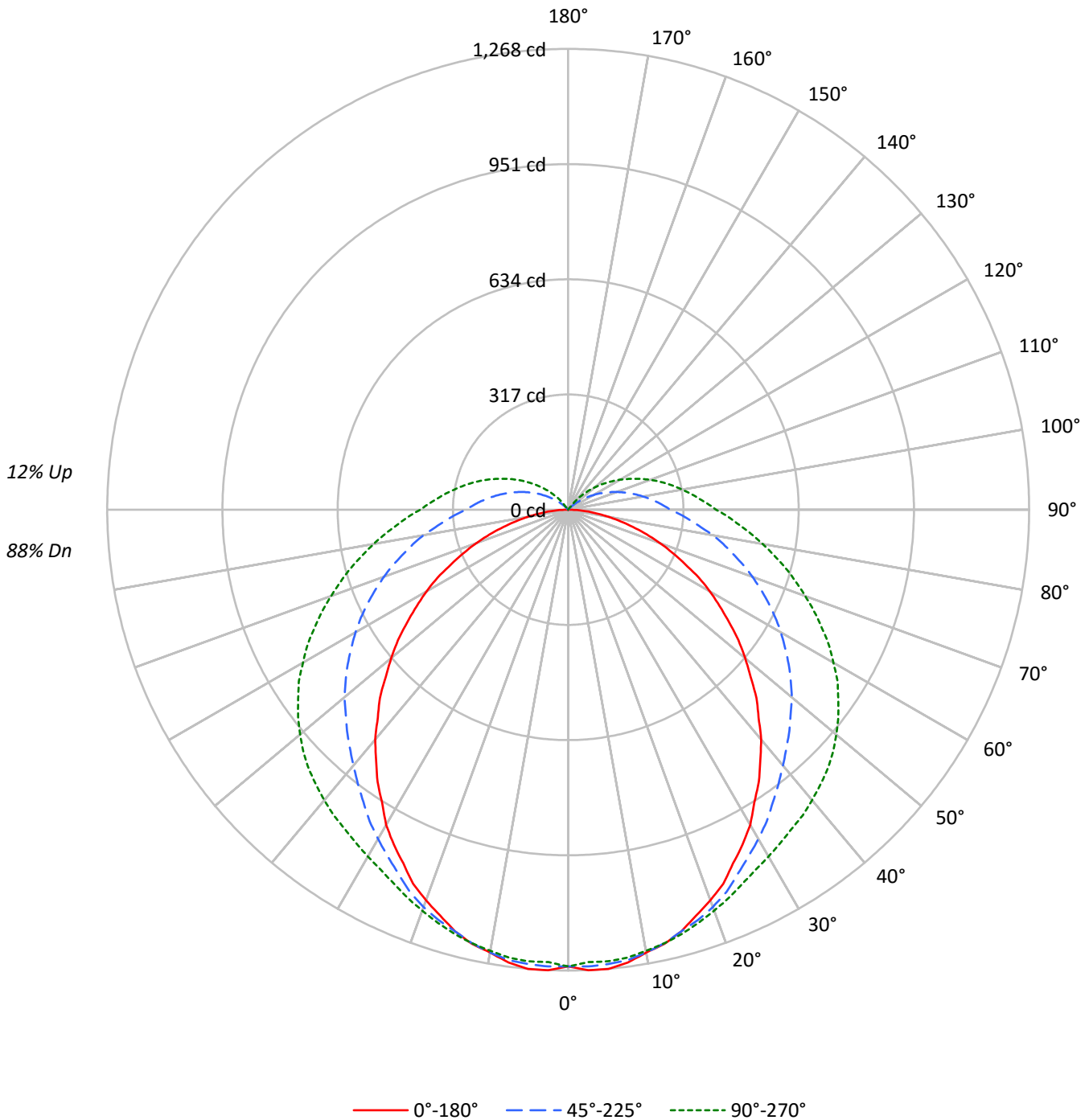
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20					20					20					20					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°	14754	14754	14754
5°	14918	14366	14142
10°	14682	13916	13605
15°	14499	13382	13096
20°	14160	12938	12587
25°	13740	12357	12133
30°	13376	11860	11835
35°	12870	11369	11656
40°	12386	10958	11577
45°	11857	10662	11517
50°	11251	10442	11402
55°	10667	10201	11256
60°	10121	9986	11066
65°	9324	9772	10835
70°	8609	9568	10589
75°	7633	9369	10407
80°	6546	9328	10270
85°	5139	9318	10251



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.0	2.5
10°-20°	338.4	7.0
20°-30°	507.8	10.5
30°-40°	616.5	12.7
40°-50°	665.9	13.7
50°-60°	652.2	13.4
60°-70°	578.5	11.9
70°-80°	463.3	9.5
80°-90°	335.8	6.9
90°-100°	236.7	4.9
100°-110°	165.1	3.4
110°-120°	102.2	2.1
120°-130°	52.0	1.1
130°-140°	18.0	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°	965.2	19.9
0°-40°	1581.7	32.6
0°-60°	2899.7	59.8
0°-90°	4277.3	88.2
90°-120°	504.0	10.4
90°-150°	574.8	11.8
90°-180°	575.0	11.9
0°-180°	4852.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1256	1256	1256	1256	1256	
5°	1268	1256	1255	1249	1248	120
15°	1201	1192	1201	1212	1208	338
25°	1073	1076	1105	1123	1135	495
35°	914	920	982	1040	1072	571
45°	733	752	860	967	1009	563
55°	540	586	740	862	907	484
65°	354	438	608	725	770	354
75°	185	302	468	581	618	197
85°	50	185	338	438	471	53
90°	2	135	281	374	407	4
95°	0	107	245	332	360	0
105°	0	57	176	254	279	0
115°	0	18	111	179	201	0
125°	0	0	54	110	129	0
135°	0	0	9	48	63	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°	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5
2.5°	1268.5	1267.0	1262.5	1258.0	1256.5	1256.5	1255.0	1253.5	1253.5	1252.0	1258.0
5°	1268.5	1267.0	1262.5	1256.5	1255.0	1256.5	1255.0	1252.0	1252.0	1250.5	1255.0
7.5°	1256.5	1253.5	1250.5	1246.0	1244.5	1244.5	1243.0	1243.0	1243.0	1243.0	1250.5
10°	1237.0	1235.5	1232.5	1228.0	1228.0	1226.5	1226.5	1228.0	1228.0	1229.5	1237.0
12.5°	1223.5	1220.5	1216.0	1211.5	1210.0	1210.0	1208.5	1207.0	1208.5	1210.0	1222.0
15°	1201.0	1199.5	1196.5	1191.9	1191.9	1191.9	1191.9	1190.4	1190.4	1191.9	1201.0
17.5°	1170.9	1167.9	1166.4	1163.4	1164.9	1166.4	1167.9	1166.4	1169.4	1173.9	1184.4
20°	1143.9	1140.9	1137.9	1133.4	1133.4	1134.9	1136.4	1136.4	1143.9	1149.9	1163.4
22.5°	1113.9	1112.4	1109.4	1107.9	1107.9	1109.4	1109.4	1106.4	1110.9	1119.9	1137.9
25°	1073.4	1071.9	1070.4	1070.4	1073.4	1076.4	1077.9	1079.4	1083.9	1089.9	1104.9
27.5°	1038.8	1037.3	1034.3	1031.3	1034.3	1037.3	1038.8	1041.8	1050.8	1062.8	1074.9
30°	1001.3	999.8	998.3	998.3	1001.3	1002.8	1004.3	1002.8	1014.8	1032.8	1046.3
32.5°	953.3	951.8	953.3	953.3	960.8	965.3	968.3	969.8	980.3	996.8	1016.3
35°	914.2	914.2	912.7	915.7	917.2	920.2	923.2	930.7	945.8	962.3	981.8
37.5°	867.7	867.7	867.7	875.2	881.2	882.7	884.2	893.2	912.7	929.2	950.3
40°	825.7	825.7	825.7	828.7	833.2	837.7	843.7	854.2	873.7	897.7	918.7
42.5°	774.6	776.1	779.1	786.6	792.6	795.6	800.1	816.7	837.7	866.2	888.7
45°	732.6	731.1	734.1	740.1	746.1	752.1	759.6	777.6	803.1	834.7	860.2
47.5°	680.0	681.5	684.5	695.1	702.6	710.1	719.1	740.1	770.1	801.6	830.2
50°	635.0	636.5	644.0	650.0	657.5	666.5	677.0	704.1	737.1	768.6	803.1
52.5°	590.0	591.5	597.5	602.0	614.0	624.5	638.0	668.0	702.6	737.1	771.6
55°	540.4	543.4	547.9	558.4	573.5	585.5	600.5	633.5	668.0	705.6	740.1
57.5°	493.9	495.4	502.9	513.4	531.4	546.4	564.4	599.0	636.5	672.5	707.1
60°	450.4	453.4	457.9	471.4	495.4	510.4	528.4	564.4	603.5	639.5	675.5
62.5°	405.3	408.3	414.3	429.3	457.9	474.4	493.9	531.4	570.5	606.5	642.5
65°	354.3	357.3	366.3	385.8	420.3	438.3	457.9	496.9	534.4	572.0	608.0
67.5°	310.7	312.2	324.3	345.3	381.3	403.8	424.8	462.4	499.9	537.4	573.5
70°	268.7	271.7	280.7	309.2	348.3	366.3	388.8	429.3	466.9	504.4	538.9
72.5°	226.7	229.7	243.2	274.7	315.3	334.8	352.8	396.3	433.8	469.9	504.4
75°	184.6	189.2	207.2	243.2	282.2	301.7	321.3	360.3	400.8	435.3	468.4
77.5°	147.1	151.6	174.1	211.7	250.7	270.2	289.7	327.3	364.8	402.3	436.8
80°	111.1	117.1	144.1	181.6	220.7	240.2	258.2	297.2	333.3	367.8	403.8
82.5°	79.6	87.1	118.6	154.6	193.7	211.7	229.7	267.2	303.2	336.3	367.8
85°	49.5	63.1	94.6	129.1	166.6	184.6	202.7	240.2	274.7	307.7	337.8
87.5°	24.0	42.0	72.1	105.1	141.1	159.1	177.1	213.2	246.2	279.2	309.2
90°	1.5	24.0	51.0	82.6	118.6	135.1	153.1	187.6	220.7	252.2	280.7
92.5°	0.0	15.0	40.5	70.6	103.6	121.6	138.1	172.6	204.2	235.7	262.7
95°	0.0	7.5	31.5	60.0	91.6	106.6	123.1	156.1	187.6	217.7	244.7
97.5°	0.0	1.5	22.5	48.0	78.1	94.6	109.6	141.1	172.6	201.2	226.7
100°	0.0	0.0	15.0	39.0	66.1	81.1	96.1	126.1	156.1	183.1	208.7
102.5°	0.0	0.0	7.5	30.0	55.5	69.1	82.6	112.6	141.1	168.1	192.2
105°	0.0	0.0	1.5	21.0	45.0	57.0	70.6	97.6	126.1	151.6	175.6
107.5°	0.0	0.0	0.0	12.0	34.5	46.5	58.5	84.1	111.1	135.1	157.6
110°	0.0	0.0	0.0	6.0	25.5	36.0	48.0	72.1	96.1	120.1	142.6



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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	1.5	16.5	27.0	37.5	60.0	82.6	105.1	126.1
115°	0.0	0.0	0.0	0.0	9.0	18.0	27.0	48.0	69.1	91.6	111.1
117.5°	0.0	0.0	0.0	0.0	3.0	10.5	18.0	37.5	57.0	76.6	96.1
120°	0.0	0.0	0.0	0.0	0.0	4.5	10.5	27.0	45.0	63.1	81.1
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	16.5	33.0	51.0	67.6
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	22.5	39.0	54.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	13.5	27.0	40.5
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	16.5	28.5
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	9.0	18.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	9.0
137.5°	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
140°	1.5	1.5	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°	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5	1256.5
2.5°	1262.5	1256.5	1256.5	1255.0	1253.5	1252.0	1249.0	1247.5	1244.5	1246.0
5°	1259.5	1253.5	1253.5	1250.5	1249.0	1249.0	1247.5	1247.5	1246.0	1247.5
7.5°	1255.0	1247.5	1247.5	1244.5	1243.0	1241.5	1241.5	1241.5	1241.5	1243.0
10°	1243.0	1238.5	1238.5	1237.0	1235.5	1232.5	1231.0	1232.5	1231.0	1232.5
12.5°	1226.5	1222.0	1225.0	1225.0	1225.0	1222.0	1220.5	1222.0	1220.5	1222.0
15°	1205.5	1204.0	1208.5	1210.0	1211.5	1210.0	1208.5	1208.5	1208.5	1208.5
17.5°	1184.4	1182.9	1188.9	1191.9	1191.9	1191.9	1191.9	1190.4	1190.4	1191.9
20°	1166.4	1160.4	1163.4	1169.4	1170.9	1170.9	1172.4	1173.9	1173.9	1173.9
22.5°	1140.9	1137.9	1139.4	1143.9	1146.9	1148.4	1152.9	1152.9	1154.4	1155.9
25°	1110.9	1115.4	1116.9	1121.4	1122.9	1125.9	1131.9	1134.9	1134.9	1134.9
27.5°	1079.4	1088.4	1094.4	1097.4	1100.4	1103.4	1110.9	1116.9	1116.9	1116.9
30°	1049.3	1058.3	1070.4	1076.4	1079.4	1082.4	1092.9	1100.4	1101.9	1101.9
32.5°	1017.8	1029.8	1047.8	1056.8	1058.3	1062.8	1076.4	1085.4	1086.9	1086.9
35°	990.8	1005.8	1025.3	1037.3	1040.3	1044.8	1059.8	1070.4	1071.9	1071.9
37.5°	966.8	981.8	1002.8	1019.3	1022.3	1028.3	1043.3	1056.8	1058.3	1059.8
40°	939.7	957.8	978.8	998.3	1004.3	1010.3	1026.8	1040.3	1043.3	1043.3
42.5°	912.7	935.2	956.3	978.8	986.3	992.3	1010.3	1023.8	1026.8	1026.8
45°	884.2	912.7	933.7	957.8	966.8	972.8	989.3	1004.3	1008.8	1008.8
47.5°	858.7	888.7	909.7	933.7	942.8	951.8	966.8	981.8	986.3	987.8
50°	830.2	863.2	884.2	906.7	918.7	927.7	942.8	959.3	963.8	962.3
52.5°	801.6	833.2	855.7	879.7	891.7	900.7	914.2	932.2	936.7	936.7
55°	771.6	803.1	827.2	849.7	861.7	873.7	887.2	902.2	908.2	906.7
57.5°	741.6	770.1	795.6	819.7	830.2	842.2	855.7	870.7	875.2	878.2
60°	710.1	735.6	764.1	786.6	797.1	809.1	822.7	836.2	843.7	842.2
62.5°	675.5	704.1	731.1	752.1	762.6	774.6	788.1	800.1	806.1	809.1
65°	641.0	668.0	693.6	716.1	725.1	737.1	752.1	761.1	768.6	770.1
67.5°	605.0	632.0	657.5	681.5	690.5	701.1	714.6	723.6	731.1	732.6
70°	569.0	597.5	623.0	645.5	654.5	663.5	677.0	686.0	693.6	693.6
72.5°	534.4	562.9	587.0	609.5	618.5	626.0	639.5	648.5	654.5	656.0
75°	499.9	526.9	550.9	573.5	581.0	590.0	602.0	611.0	617.0	618.5
77.5°	465.4	493.9	516.4	537.4	544.9	552.4	566.0	573.5	579.5	579.5
80°	432.3	459.4	481.9	501.4	507.4	516.4	528.4	535.9	540.4	543.4
82.5°	400.8	426.3	447.4	465.4	474.4	480.4	492.4	499.9	504.4	507.4
85°	366.3	393.3	414.3	432.3	438.3	447.4	457.9	465.4	469.9	471.4
87.5°	334.8	358.8	379.8	400.8	408.3	414.3	424.8	432.3	436.8	439.9
90°	307.7	330.3	349.8	366.3	373.8	381.3	393.3	400.8	405.3	406.8
92.5°	288.2	310.7	328.8	345.3	352.8	358.8	369.3	376.8	381.3	382.8
95°	270.2	291.2	309.2	325.8	331.8	337.8	348.3	354.3	357.3	360.3
97.5°	250.7	273.2	289.7	304.7	312.2	316.8	327.3	333.3	337.8	339.3
100°	232.7	253.7	270.2	286.7	292.7	297.2	307.7	313.7	316.8	318.3
102.5°	214.7	235.7	252.2	267.2	273.2	277.7	286.7	292.7	297.2	298.7
105°	196.7	216.2	232.7	247.7	253.7	258.2	267.2	273.2	277.7	279.2
107.5°	180.1	198.2	214.7	228.2	234.2	238.7	247.7	253.7	258.2	259.7
110°	163.6	180.1	196.7	210.2	216.2	220.7	229.7	234.2	238.7	240.2





TEST NUMBER: P257046

CATALOG NUMBER: HGL-S-UF-50L830-UNV-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	145.6	163.6	178.6	192.2	196.7	202.7	210.2	216.2	219.2	220.7
115°	130.6	147.1	160.6	174.1	178.6	183.1	192.2	196.7	201.2	201.2
117.5°	114.1	129.1	144.1	156.1	160.6	165.1	174.1	178.6	181.6	183.1
120°	99.1	112.6	126.1	138.1	144.1	147.1	156.1	160.6	163.6	165.1
122.5°	84.1	97.6	111.1	121.6	126.1	130.6	138.1	142.6	145.6	147.1
125°	69.1	82.6	94.6	105.1	109.6	114.1	120.1	124.6	127.6	129.1
127.5°	55.5	67.6	79.6	88.6	93.1	97.6	103.6	108.1	111.1	112.6
130°	42.0	52.5	64.6	73.6	78.1	81.1	87.1	91.6	94.6	96.1
132.5°	28.5	39.0	49.5	58.5	63.1	66.1	72.1	75.1	78.1	79.6
135°	18.0	27.0	36.0	43.5	48.0	51.0	57.0	60.0	63.1	63.1
137.5°	9.0	16.5	24.0	30.0	33.0	37.5	42.0	45.0	46.5	48.0
140°	3.0	7.5	13.5	18.0	21.0	24.0	28.5	31.5	33.0	34.5
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)