

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: P257065

Luminaire Tested: **HGL-S-UF-60L930-UNV-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257065
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-60L930-UNV-4
Description: HUGO 4 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS WITH UPLIGHT
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4504.7 lumens
Efficiency: N/A
Efficacy: 94.6 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

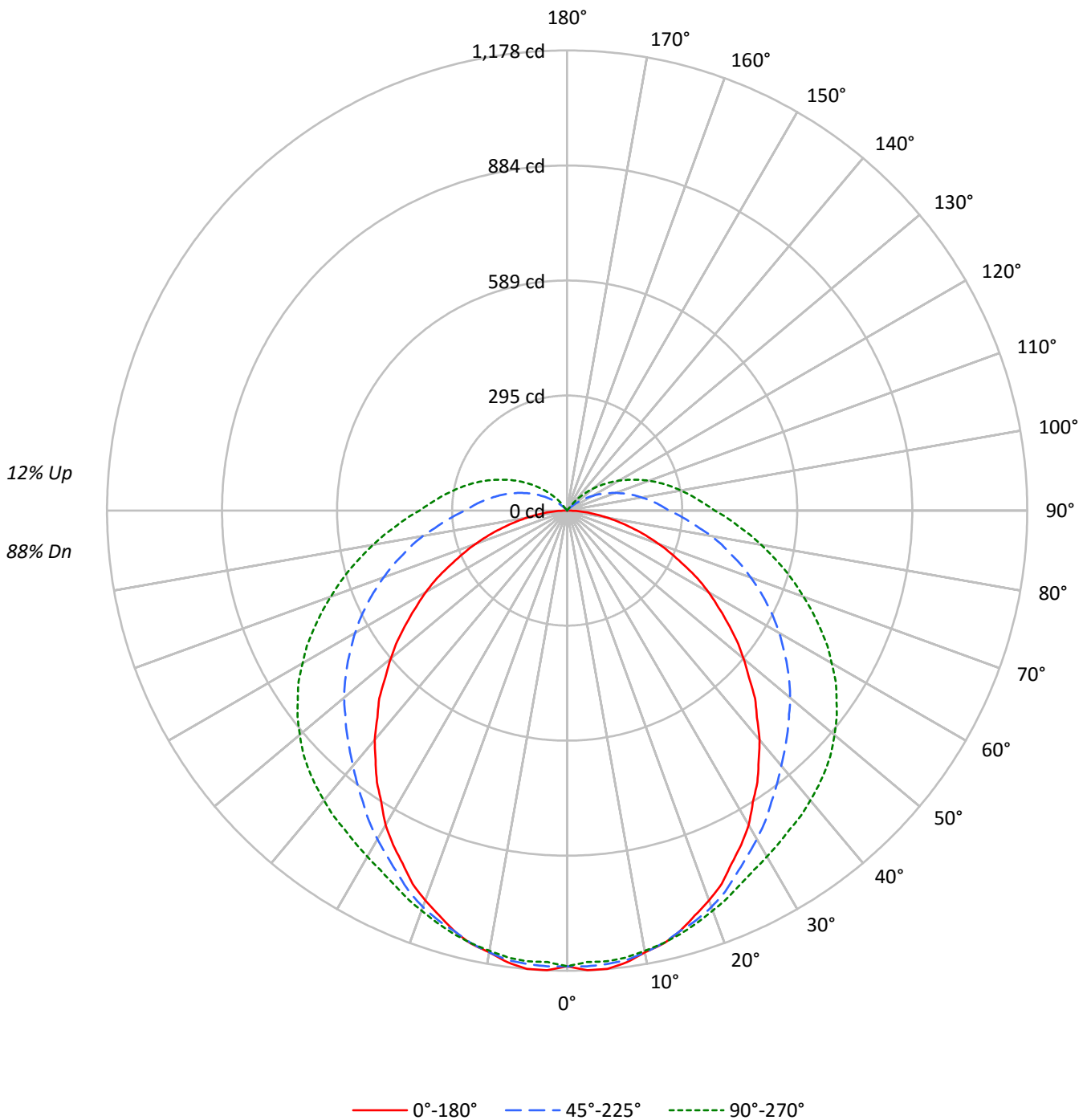
Input Watts (W): 47.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	13698	13698	13698
5°	13850	13338	13130
10°	13630	12919	12631
15°	13461	12423	12158
20°	13146	12011	11686
25°	12756	11473	11264
30°	12418	11011	10987
35°	11950	10555	10821
40°	11498	10174	10748
45°	11007	9898	10693
50°	10445	9694	10586
55°	9903	9470	10450
60°	9395	9272	10274
65°	8655	9073	10060
70°	7994	8883	9830
75°	7087	8697	9661
80°	6075	8660	9535
85°	4776	8650	9516



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.5	2.5
10°-20°	314.2	7.0
20°-30°	471.4	10.5
30°-40°	572.4	12.7
40°-50°	618.2	13.7
50°-60°	605.5	13.4
60°-70°	537.0	11.9
70°-80°	430.2	9.5
80°-90°	311.8	6.9
90°-100°	219.7	4.9
100°-110°	153.3	3.4
110°-120°	94.9	2.1
120°-130°	48.3	1.1
130°-140°	16.7	0.4
140°-150°	0.8	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	896.1	19.9
0°-40°	1468.4	32.6
0°-60°	2692.1	59.8
0°-90°	3971.1	88.2
90°-120°	467.9	10.4
90°-150°	533.7	11.8
90°-180°	534.0	11.9
0°-180°	4504.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1166	1166	1166	1166	1166	
5°	1178	1166	1165	1160	1158	111
15°	1115	1107	1115	1125	1122	314
25°	996	999	1026	1042	1054	460
35°	849	854	912	966	995	530
45°	680	698	799	898	937	523
55°	502	544	687	800	842	450
65°	329	407	564	673	715	328
75°	171	280	435	539	574	183
85°	46	171	314	407	438	50
90°	1	125	261	347	378	3
95°	0	99	227	308	334	0
105°	0	53	163	236	259	0
115°	0	17	103	166	187	0
125°	0	0	50	102	120	0
135°	0	0	8	45	58	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°	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5
2.5°	1177.7	1176.3	1172.1	1167.9	1166.5	1166.5	1165.2	1163.8	1163.8	1162.4	1167.9
5°	1177.7	1176.3	1172.1	1166.5	1165.2	1166.5	1165.2	1162.4	1162.4	1161.0	1165.2
7.5°	1166.5	1163.8	1161.0	1156.8	1155.4	1155.4	1154.0	1154.0	1154.0	1154.0	1161.0
10°	1148.4	1147.0	1144.2	1140.1	1140.1	1138.7	1138.7	1140.1	1140.1	1141.5	1148.4
12.5°	1135.9	1133.1	1128.9	1124.7	1123.3	1123.3	1121.9	1120.6	1121.9	1123.3	1134.5
15°	1115.0	1113.6	1110.8	1106.6	1106.6	1106.6	1106.6	1105.2	1105.2	1106.6	1115.0
17.5°	1087.1	1084.3	1082.9	1080.1	1081.5	1082.9	1084.3	1082.9	1085.7	1089.9	1099.6
20°	1062.0	1059.2	1056.4	1052.3	1052.3	1053.7	1055.0	1055.0	1062.0	1067.6	1080.1
22.5°	1034.1	1032.8	1030.0	1028.6	1028.6	1030.0	1030.0	1027.2	1031.4	1039.7	1056.4
25°	996.5	995.1	993.7	993.7	996.5	999.3	1000.7	1002.1	1006.3	1011.8	1025.8
27.5°	964.5	963.1	960.3	957.5	960.3	963.1	964.5	967.2	975.6	986.8	997.9
30°	929.6	928.2	926.8	926.8	929.6	931.0	932.4	931.0	942.2	958.9	971.4
32.5°	885.0	883.6	885.0	885.0	892.0	896.2	899.0	900.3	910.1	925.4	943.6
35°	848.8	848.8	847.4	850.2	851.6	854.4	857.1	864.1	878.0	893.4	911.5
37.5°	805.6	805.6	805.6	812.5	818.1	819.5	820.9	829.3	847.4	862.7	882.2
40°	766.5	766.5	766.5	769.3	773.5	777.7	783.3	793.0	811.1	833.4	853.0
42.5°	719.2	720.6	723.3	730.3	735.9	738.7	742.9	758.2	777.7	804.2	825.1
45°	680.1	678.7	681.5	687.1	692.7	698.3	705.2	721.9	745.6	774.9	798.6
47.5°	631.4	632.8	635.5	645.3	652.3	659.2	667.6	687.1	715.0	744.2	770.7
50°	589.5	590.9	597.9	603.5	610.5	618.8	628.6	653.7	684.3	713.6	745.6
52.5°	547.7	549.1	554.7	558.9	570.0	579.8	592.3	620.2	652.3	684.3	716.4
55°	501.7	504.5	508.7	518.5	532.4	543.6	557.5	588.2	620.2	655.1	687.1
57.5°	458.5	459.9	466.9	476.7	493.4	507.3	524.0	556.1	590.9	624.4	656.4
60°	418.1	420.9	425.1	437.6	459.9	473.9	490.6	524.0	560.3	593.7	627.2
62.5°	376.3	379.1	384.7	398.6	425.1	440.4	458.5	493.4	529.6	563.1	596.5
65°	328.9	331.7	340.1	358.2	390.2	407.0	425.1	461.3	496.2	531.0	564.5
67.5°	288.5	289.9	301.0	320.6	354.0	374.9	394.4	429.3	464.1	499.0	532.4
70°	249.5	252.3	260.6	287.1	323.3	340.1	361.0	398.6	433.4	468.3	500.3
72.5°	210.5	213.2	225.8	255.1	292.7	310.8	327.5	367.9	402.8	436.2	468.3
75°	171.4	175.6	192.3	225.8	262.0	280.1	298.3	334.5	372.1	404.2	434.8
77.5°	136.6	140.8	161.7	196.5	232.8	250.9	269.0	303.8	338.7	373.5	405.6
80°	103.1	108.7	133.8	168.6	204.9	223.0	239.7	276.0	309.4	341.5	374.9
82.5°	73.9	80.8	110.1	143.6	179.8	196.5	213.2	248.1	281.5	312.2	341.5
85°	46.0	58.5	87.8	119.9	154.7	171.4	188.2	223.0	255.1	285.7	313.6
87.5°	22.3	39.0	66.9	97.6	131.0	147.7	164.5	197.9	228.6	259.2	287.1
90°	1.4	22.3	47.4	76.7	110.1	125.4	142.2	174.2	204.9	234.1	260.6
92.5°	0.0	13.9	37.6	65.5	96.2	112.9	128.2	160.3	189.5	218.8	243.9
95°	0.0	7.0	29.3	55.7	85.0	99.0	114.3	144.9	174.2	202.1	227.2
97.5°	0.0	1.4	20.9	44.6	72.5	87.8	101.7	131.0	160.3	186.8	210.5
100°	0.0	0.0	13.9	36.2	61.3	75.3	89.2	117.1	144.9	170.0	193.7
102.5°	0.0	0.0	7.0	27.9	51.6	64.1	76.7	104.5	131.0	156.1	178.4
105°	0.0	0.0	1.4	19.5	41.8	53.0	65.5	90.6	117.1	140.8	163.1
107.5°	0.0	0.0	0.0	11.1	32.1	43.2	54.4	78.0	103.1	125.4	146.3
110°	0.0	0.0	0.0	5.6	23.7	33.4	44.6	66.9	89.2	111.5	132.4



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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	1.4	15.3	25.1	34.8	55.7	76.7	97.6	117.1
115°	0.0	0.0	0.0	0.0	8.4	16.7	25.1	44.6	64.1	85.0	103.1
117.5°	0.0	0.0	0.0	0.0	2.8	9.8	16.7	34.8	53.0	71.1	89.2
120°	0.0	0.0	0.0	0.0	0.0	4.2	9.8	25.1	41.8	58.5	75.3
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	15.3	30.7	47.4	62.7
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	20.9	36.2	50.2
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	12.5	25.1	37.6
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	15.3	26.5
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	8.4	16.7
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	8.4
137.5°	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
140°	1.4	1.4	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°	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5	1166.5
2.5°	1172.1	1166.5	1166.5	1165.2	1163.8	1162.4	1159.6	1158.2	1155.4	1156.8
5°	1169.3	1163.8	1163.8	1161.0	1159.6	1159.6	1158.2	1158.2	1156.8	1158.2
7.5°	1165.2	1158.2	1158.2	1155.4	1154.0	1152.6	1152.6	1152.6	1152.6	1154.0
10°	1154.0	1149.8	1149.8	1148.4	1147.0	1144.2	1142.9	1144.2	1142.9	1144.2
12.5°	1138.7	1134.5	1137.3	1137.3	1137.3	1134.5	1133.1	1134.5	1133.1	1134.5
15°	1119.2	1117.8	1121.9	1123.3	1124.7	1123.3	1121.9	1121.9	1121.9	1121.9
17.5°	1099.6	1098.3	1103.8	1106.6	1106.6	1106.6	1106.6	1105.2	1105.2	1106.6
20°	1082.9	1077.3	1080.1	1085.7	1087.1	1087.1	1088.5	1089.9	1089.9	1089.9
22.5°	1059.2	1056.4	1057.8	1062.0	1064.8	1066.2	1070.4	1070.4	1071.8	1073.2
25°	1031.4	1035.5	1036.9	1041.1	1042.5	1045.3	1050.9	1053.7	1053.7	1053.7
27.5°	1002.1	1010.5	1016.0	1018.8	1021.6	1024.4	1031.4	1036.9	1036.9	1036.9
30°	974.2	982.6	993.7	999.3	1002.1	1004.9	1014.6	1021.6	1023.0	1023.0
32.5°	944.9	956.1	972.8	981.2	982.6	986.8	999.3	1007.7	1009.1	1009.1
35°	919.9	933.8	951.9	963.1	965.9	970.0	984.0	993.7	995.1	995.1
37.5°	897.6	911.5	931.0	946.3	949.1	954.7	968.6	981.2	982.6	984.0
40°	872.5	889.2	908.7	926.8	932.4	938.0	953.3	965.9	968.6	968.6
42.5°	847.4	868.3	887.8	908.7	915.7	921.3	938.0	950.5	953.3	953.3
45°	820.9	847.4	866.9	889.2	897.6	903.1	918.5	932.4	936.6	936.6
47.5°	797.2	825.1	844.6	866.9	875.3	883.6	897.6	911.5	915.7	917.1
50°	770.7	801.4	820.9	841.8	853.0	861.3	875.3	890.6	894.8	893.4
52.5°	744.2	773.5	794.4	816.7	827.9	836.2	848.8	865.5	869.7	869.7
55°	716.4	745.6	767.9	788.8	800.0	811.1	823.7	837.6	843.2	841.8
57.5°	688.5	715.0	738.7	761.0	770.7	781.9	794.4	808.4	812.5	815.3
60°	659.2	682.9	709.4	730.3	740.1	751.2	763.8	776.3	783.3	781.9
62.5°	627.2	653.7	678.7	698.3	708.0	719.2	731.7	742.9	748.4	751.2
65°	595.1	620.2	643.9	664.8	673.2	684.3	698.3	706.6	713.6	715.0
67.5°	561.7	586.8	610.5	632.8	641.1	650.9	663.4	671.8	678.7	680.1
70°	528.2	554.7	578.4	599.3	607.7	616.0	628.6	636.9	643.9	643.9
72.5°	496.2	522.6	544.9	565.9	574.2	581.2	593.7	602.1	607.7	609.1
75°	464.1	489.2	511.5	532.4	539.4	547.7	558.9	567.2	572.8	574.2
77.5°	432.1	458.5	479.4	499.0	505.9	512.9	525.4	532.4	538.0	538.0
80°	401.4	426.5	447.4	465.5	471.1	479.4	490.6	497.6	501.7	504.5
82.5°	372.1	395.8	415.3	432.1	440.4	446.0	457.1	464.1	468.3	471.1
85°	340.1	365.2	384.7	401.4	407.0	415.3	425.1	432.1	436.2	437.6
87.5°	310.8	333.1	352.6	372.1	379.1	384.7	394.4	401.4	405.6	408.4
90°	285.7	306.6	324.7	340.1	347.0	354.0	365.2	372.1	376.3	377.7
92.5°	267.6	288.5	305.2	320.6	327.5	333.1	342.9	349.8	354.0	355.4
95°	250.9	270.4	287.1	302.4	308.0	313.6	323.3	328.9	331.7	334.5
97.5°	232.8	253.7	269.0	282.9	289.9	294.1	303.8	309.4	313.6	315.0
100°	216.0	235.5	250.9	266.2	271.8	276.0	285.7	291.3	294.1	295.5
102.5°	199.3	218.8	234.1	248.1	253.7	257.8	266.2	271.8	276.0	277.4
105°	182.6	200.7	216.0	230.0	235.5	239.7	248.1	253.7	257.8	259.2
107.5°	167.2	184.0	199.3	211.8	217.4	221.6	230.0	235.5	239.7	241.1
110°	151.9	167.2	182.6	195.1	200.7	204.9	213.2	217.4	221.6	223.0



TEST NUMBER: P257065

CATALOG NUMBER: HGL-S-UF-60L930-UNV-4

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	135.2	151.9	165.9	178.4	182.6	188.2	195.1	200.7	203.5	204.9
115°	121.3	136.6	149.1	161.7	165.9	170.0	178.4	182.6	186.8	186.8
117.5°	105.9	119.9	133.8	144.9	149.1	153.3	161.7	165.9	168.6	170.0
120°	92.0	104.5	117.1	128.2	133.8	136.6	144.9	149.1	151.9	153.3
122.5°	78.0	90.6	103.1	112.9	117.1	121.3	128.2	132.4	135.2	136.6
125°	64.1	76.7	87.8	97.6	101.7	105.9	111.5	115.7	118.5	119.9
127.5°	51.6	62.7	73.9	82.2	86.4	90.6	96.2	100.3	103.1	104.5
130°	39.0	48.8	59.9	68.3	72.5	75.3	80.8	85.0	87.8	89.2
132.5°	26.5	36.2	46.0	54.4	58.5	61.3	66.9	69.7	72.5	73.9
135°	16.7	25.1	33.4	40.4	44.6	47.4	53.0	55.7	58.5	58.5
137.5°	8.4	15.3	22.3	27.9	30.7	34.8	39.0	41.8	43.2	44.6
140°	2.8	7.0	12.5	16.7	19.5	22.3	26.5	29.3	30.7	32.1
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)