

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: P257056

Luminaire Tested: **HGL-S-UF-40L840-UNV-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257056  
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-40L840-UNV-4  
Description: HUGO 4 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS WITH UPLIGHT  
Light Source: (168) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4082.3 lumens  
Efficiency: N/A  
Efficacy: 137.9 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

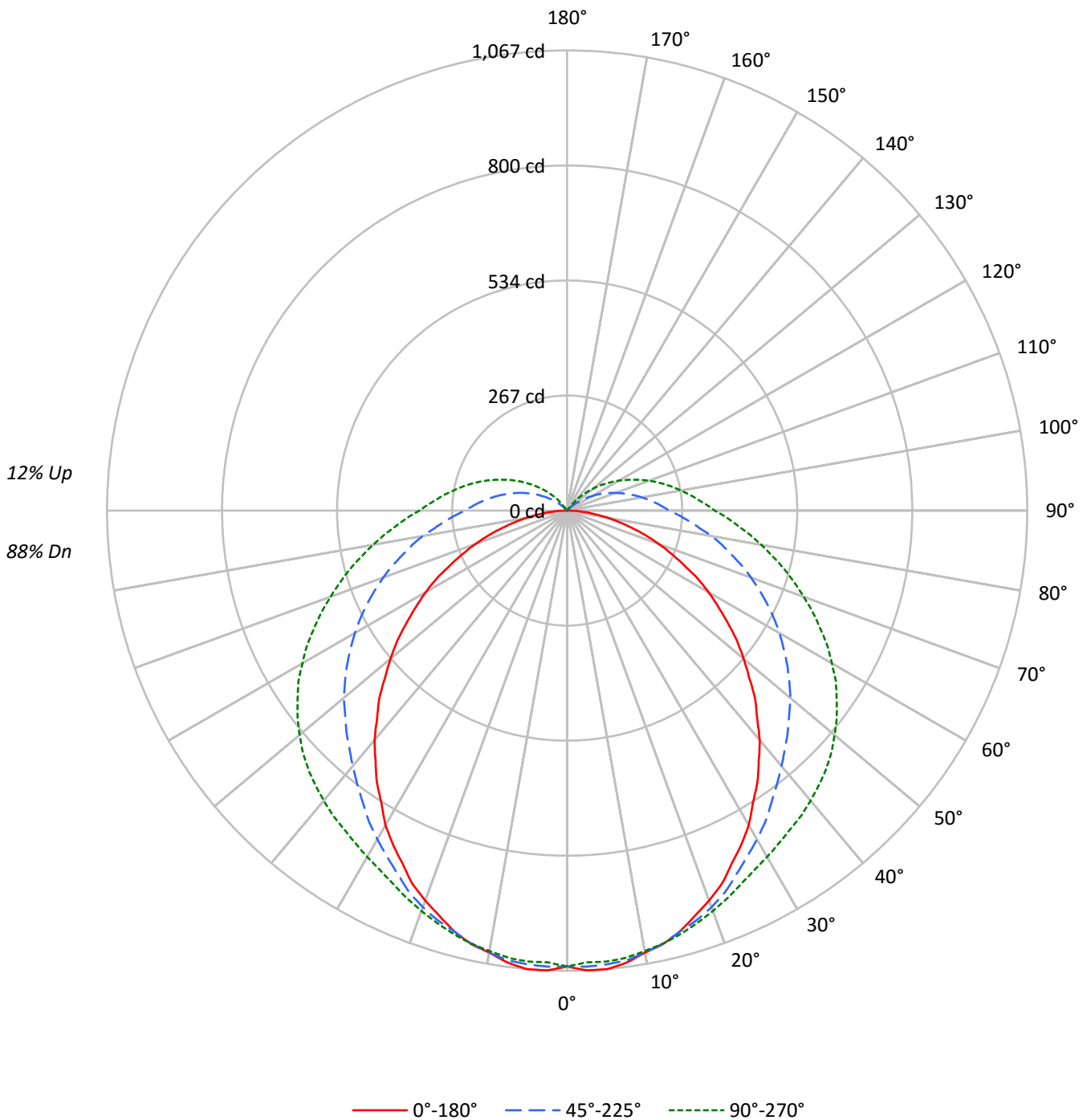
Input Watts (W): 29.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	12413	12413	12413
5°	12551	12087	11899
10°	12352	11707	11446
15°	12198	11258	11018
20°	11913	10885	10590
25°	11560	10397	10207
30°	11253	9978	9957
35°	10829	9565	9806
40°	10421	9220	9740
45°	9976	8970	9689
50°	9467	8786	9593
55°	8975	8583	9470
60°	8514	8403	9311
65°	7845	8221	9116
70°	7244	8050	8908
75°	6426	7883	8756
80°	5509	7850	8641
85°	4330	7840	8625



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.1	2.5
10°-20°	284.7	7.0
20°-30°	427.2	10.5
30°-40°	518.7	12.7
40°-50°	560.2	13.7
50°-60°	548.7	13.4
60°-70°	486.7	11.9
70°-80°	389.8	9.5
80°-90°	282.5	6.9
90°-100°	199.1	4.9
100°-110°	138.9	3.4
110°-120°	86.0	2.1
120°-130°	43.7	1.1
130°-140°	15.1	0.4
140°-150°	0.7	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	812.0	19.9
0°-40°	1330.7	32.6
0°-60°	2439.6	59.8
0°-90°	3598.7	88.2
90°-120°	424.0	10.4
90°-150°	483.6	11.8
90°-180°	484.0	11.9
0°-180°	4082.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1057	1057	1057	1057	1057	
5°	1067	1057	1056	1051	1050	101
15°	1010	1003	1010	1019	1017	284
25°	903	906	930	945	955	417
35°	769	774	826	875	902	480
45°	616	633	724	813	849	474
55°	455	493	623	725	763	408
65°	298	369	512	610	648	298
75°	155	254	394	489	520	166
85°	42	155	284	369	397	45
90°	1	114	236	314	342	3
95°	0	90	206	279	303	0
105°	0	48	148	213	235	0
115°	0	15	94	150	169	0
125°	0	0	46	92	109	0
135°	0	0	8	40	53	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°	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1067.2	1066.0	1062.2	1058.4	1057.1	1057.1	1055.9	1054.6	1054.6	1053.4	1058.4
5°	1067.2	1066.0	1062.2	1057.1	1055.9	1057.1	1055.9	1053.4	1053.4	1052.1	1055.9
7.5°	1057.1	1054.6	1052.1	1048.3	1047.0	1047.0	1045.8	1045.8	1045.8	1045.8	1052.1
10°	1040.7	1039.5	1036.9	1033.1	1033.1	1031.9	1031.9	1033.1	1033.1	1034.4	1040.7
12.5°	1029.4	1026.8	1023.0	1019.3	1018.0	1018.0	1016.7	1015.5	1016.7	1018.0	1028.1
15°	1010.4	1009.2	1006.6	1002.8	1002.8	1002.8	1002.8	1001.6	1001.6	1002.8	1010.4
17.5°	985.2	982.6	981.4	978.8	980.1	981.4	982.6	981.4	983.9	987.7	996.5
20°	962.4	959.9	957.4	953.6	953.6	954.8	956.1	956.1	962.4	967.5	978.8
22.5°	937.2	935.9	933.4	932.1	932.1	933.4	933.4	930.8	934.6	942.2	957.4
25°	903.1	901.8	900.5	900.5	903.1	905.6	906.8	908.1	911.9	917.0	929.6
27.5°	874.0	872.7	870.2	867.7	870.2	872.7	874.0	876.5	884.1	894.2	904.3
30°	842.4	841.2	839.9	839.9	842.4	843.7	845.0	843.7	853.8	869.0	880.3
32.5°	802.0	800.8	802.0	802.0	808.3	812.1	814.6	815.9	824.8	838.6	855.1
35°	769.2	769.2	767.9	770.4	771.7	774.2	776.8	783.1	795.7	809.6	826.0
37.5°	730.0	730.0	730.0	736.3	741.4	742.7	743.9	751.5	767.9	781.8	799.5
40°	694.7	694.7	694.7	697.2	701.0	704.8	709.8	718.7	735.1	755.3	773.0
42.5°	651.7	653.0	655.5	661.8	666.9	669.4	673.2	687.1	704.8	728.8	747.7
45°	616.4	615.1	617.6	622.7	627.7	632.8	639.1	654.2	675.7	702.2	723.7
47.5°	572.1	573.4	575.9	584.8	591.1	597.4	605.0	622.7	647.9	674.5	698.4
50°	534.3	535.5	541.8	546.9	553.2	560.8	569.6	592.4	620.1	646.7	675.7
52.5°	496.4	497.6	502.7	506.5	516.6	525.4	536.8	562.0	591.1	620.1	649.2
55°	454.7	457.2	461.0	469.8	482.5	492.6	505.2	533.0	562.0	593.6	622.7
57.5°	415.5	416.8	423.1	432.0	447.1	459.7	474.9	503.9	535.5	565.8	594.9
60°	378.9	381.4	385.2	396.6	416.8	429.4	444.6	474.9	507.7	538.0	568.4
62.5°	341.0	343.5	348.6	361.2	385.2	399.1	415.5	447.1	479.9	510.3	540.6
65°	298.1	300.6	308.2	324.6	353.6	368.8	385.2	418.1	449.6	481.2	511.5
67.5°	261.4	262.7	272.8	290.5	320.8	339.8	357.4	389.0	420.6	452.2	482.5
70°	226.1	228.6	236.2	260.2	293.0	308.2	327.1	361.2	392.8	424.4	453.4
72.5°	190.7	193.2	204.6	231.1	265.2	281.7	296.8	333.4	365.0	395.3	424.4
75°	155.4	159.1	174.3	204.6	237.4	253.9	270.3	303.1	337.2	366.3	394.1
77.5°	123.8	127.6	146.5	178.1	210.9	227.3	243.8	275.3	306.9	338.5	367.5
80°	93.5	98.5	121.2	152.8	185.7	202.1	217.2	250.1	280.4	309.4	339.8
82.5°	66.9	73.3	99.8	130.1	162.9	178.1	193.2	224.8	255.1	282.9	309.4
85°	41.7	53.0	79.6	108.6	140.2	155.4	170.5	202.1	231.1	258.9	284.2
87.5°	20.2	35.4	60.6	88.4	118.7	133.9	149.0	179.3	207.1	234.9	260.2
90°	1.3	20.2	42.9	69.5	99.8	113.7	128.8	157.9	185.7	212.2	236.2
92.5°	0.0	12.6	34.1	59.4	87.1	102.3	116.2	145.2	171.8	198.3	221.0
95°	0.0	6.3	26.5	50.5	77.0	89.7	103.6	131.4	157.9	183.1	205.9
97.5°	0.0	1.3	18.9	40.4	65.7	79.6	92.2	118.7	145.2	169.2	190.7
100°	0.0	0.0	12.6	32.8	55.6	68.2	80.8	106.1	131.4	154.1	175.6
102.5°	0.0	0.0	6.3	25.3	46.7	58.1	69.5	94.7	118.7	141.5	161.7
105°	0.0	0.0	1.3	17.7	37.9	48.0	59.4	82.1	106.1	127.6	147.8
107.5°	0.0	0.0	0.0	10.1	29.0	39.2	49.3	70.7	93.5	113.7	132.6
110°	0.0	0.0	0.0	5.1	21.5	30.3	40.4	60.6	80.8	101.0	120.0



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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	1.3	13.9	22.7	31.6	50.5	69.5	88.4	106.1
115°	0.0	0.0	0.0	0.0	7.6	15.2	22.7	40.4	58.1	77.0	93.5
117.5°	0.0	0.0	0.0	0.0	2.5	8.8	15.2	31.6	48.0	64.4	80.8
120°	0.0	0.0	0.0	0.0	0.0	3.8	8.8	22.7	37.9	53.0	68.2
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.5	13.9	27.8	42.9	56.8
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	18.9	32.8	45.5
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	11.4	22.7	34.1
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	13.9	24.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	7.6	15.2
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	7.6
137.5°	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
140°	1.3	1.3	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°	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1062.2	1057.1	1057.1	1055.9	1054.6	1053.4	1050.8	1049.6	1047.0	1048.3
5°	1059.7	1054.6	1054.6	1052.1	1050.8	1050.8	1049.6	1049.6	1048.3	1049.6
7.5°	1055.9	1049.6	1049.6	1047.0	1045.8	1044.5	1044.5	1044.5	1044.5	1045.8
10°	1045.8	1042.0	1042.0	1040.7	1039.5	1036.9	1035.7	1036.9	1035.7	1036.9
12.5°	1031.9	1028.1	1030.6	1030.6	1030.6	1028.1	1026.8	1028.1	1026.8	1028.1
15°	1014.2	1012.9	1016.7	1018.0	1019.3	1018.0	1016.7	1016.7	1016.7	1016.7
17.5°	996.5	995.3	1000.3	1002.8	1002.8	1002.8	1002.8	1001.6	1001.6	1002.8
20°	981.4	976.3	978.8	983.9	985.2	985.2	986.4	987.7	987.7	987.7
22.5°	959.9	957.4	958.6	962.4	964.9	966.2	970.0	970.0	971.3	972.5
25°	934.6	938.4	939.7	943.5	944.7	947.3	952.3	954.8	954.8	954.8
27.5°	908.1	915.7	920.7	923.3	925.8	928.3	934.6	939.7	939.7	939.7
30°	882.8	890.4	900.5	905.6	908.1	910.6	919.5	925.8	927.1	927.1
32.5°	856.3	866.4	881.6	889.2	890.4	894.2	905.6	913.2	914.4	914.4
35°	833.6	846.2	862.6	872.7	875.3	879.1	891.7	900.5	901.8	901.8
37.5°	813.4	826.0	843.7	857.6	860.1	865.2	877.8	889.2	890.4	891.7
40°	790.6	805.8	823.5	839.9	845.0	850.0	863.9	875.3	877.8	877.8
42.5°	767.9	786.9	804.5	823.5	829.8	834.9	850.0	861.4	863.9	863.9
45°	743.9	767.9	785.6	805.8	813.4	818.4	832.3	845.0	848.7	848.7
47.5°	722.4	747.7	765.4	785.6	793.2	800.8	813.4	826.0	829.8	831.1
50°	698.4	726.2	743.9	762.9	773.0	780.5	793.2	807.1	810.9	809.6
52.5°	674.5	701.0	719.9	740.1	750.2	757.8	769.2	784.3	788.1	788.1
55°	649.2	675.7	695.9	714.9	725.0	735.1	746.4	759.1	764.1	762.9
57.5°	623.9	647.9	669.4	689.6	698.4	708.6	719.9	732.5	736.3	738.9
60°	597.4	618.9	642.9	661.8	670.7	680.8	692.1	703.5	709.8	708.6
62.5°	568.4	592.4	615.1	632.8	641.6	651.7	663.1	673.2	678.2	680.8
65°	539.3	562.0	583.5	602.5	610.0	620.1	632.8	640.3	646.7	647.9
67.5°	509.0	531.7	553.2	573.4	581.0	589.8	601.2	608.8	615.1	616.4
70°	478.7	502.7	524.2	543.1	550.7	558.3	569.6	577.2	583.5	583.5
72.5°	449.6	473.6	493.8	512.8	520.4	526.7	538.0	545.6	550.7	551.9
75°	420.6	443.3	463.5	482.5	488.8	496.4	506.5	514.0	519.1	520.4
77.5°	391.5	415.5	434.5	452.2	458.5	464.8	476.2	482.5	487.5	487.5
80°	363.7	386.5	405.4	421.8	426.9	434.5	444.6	450.9	454.7	457.2
82.5°	337.2	358.7	376.4	391.5	399.1	404.2	414.3	420.6	424.4	426.9
85°	308.2	330.9	348.6	363.7	368.8	376.4	385.2	391.5	395.3	396.6
87.5°	281.7	301.9	319.5	337.2	343.5	348.6	357.4	363.7	367.5	370.1
90°	258.9	277.9	294.3	308.2	314.5	320.8	330.9	337.2	341.0	342.3
92.5°	242.5	261.4	276.6	290.5	296.8	301.9	310.7	317.0	320.8	322.1
95°	227.3	245.0	260.2	274.1	279.1	284.2	293.0	298.1	300.6	303.1
97.5°	210.9	229.9	243.8	256.4	262.7	266.5	275.3	280.4	284.2	285.4
100°	195.8	213.4	227.3	241.2	246.3	250.1	258.9	264.0	266.5	267.8
102.5°	180.6	198.3	212.2	224.8	229.9	233.7	241.2	246.3	250.1	251.3
105°	165.5	181.9	195.8	208.4	213.4	217.2	224.8	229.9	233.7	234.9
107.5°	151.6	166.7	180.6	192.0	197.0	200.8	208.4	213.4	217.2	218.5
110°	137.7	151.6	165.5	176.8	181.9	185.7	193.2	197.0	200.8	202.1





TEST NUMBER: P257056

CATALOG NUMBER: HGL-S-UF-40L840-UNV-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	122.5	137.7	150.3	161.7	165.5	170.5	176.8	181.9	184.4	185.7
115°	109.9	123.8	135.1	146.5	150.3	154.1	161.7	165.5	169.2	169.2
117.5°	96.0	108.6	121.2	131.4	135.1	138.9	146.5	150.3	152.8	154.1
120°	83.4	94.7	106.1	116.2	121.2	123.8	131.4	135.1	137.7	138.9
122.5°	70.7	82.1	93.5	102.3	106.1	109.9	116.2	120.0	122.5	123.8
125°	58.1	69.5	79.6	88.4	92.2	96.0	101.0	104.8	107.4	108.6
127.5°	46.7	56.8	66.9	74.5	78.3	82.1	87.1	90.9	93.5	94.7
130°	35.4	44.2	54.3	61.9	65.7	68.2	73.3	77.0	79.6	80.8
132.5°	24.0	32.8	41.7	49.3	53.0	55.6	60.6	63.2	65.7	66.9
135°	15.2	22.7	30.3	36.6	40.4	42.9	48.0	50.5	53.0	53.0
137.5°	7.6	13.9	20.2	25.3	27.8	31.6	35.4	37.9	39.2	40.4
140°	2.5	6.3	11.4	15.2	17.7	20.2	24.0	26.5	27.8	29.0
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)