

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: P257069

Luminaire Tested: **HGL-S-UF-50L940-UNV-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257069
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-50L940-UNV-4
Description: HUGO 4 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS WITH UPLIGHT
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3856.0 lumens
Efficiency: N/A
Efficacy: 100.2 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

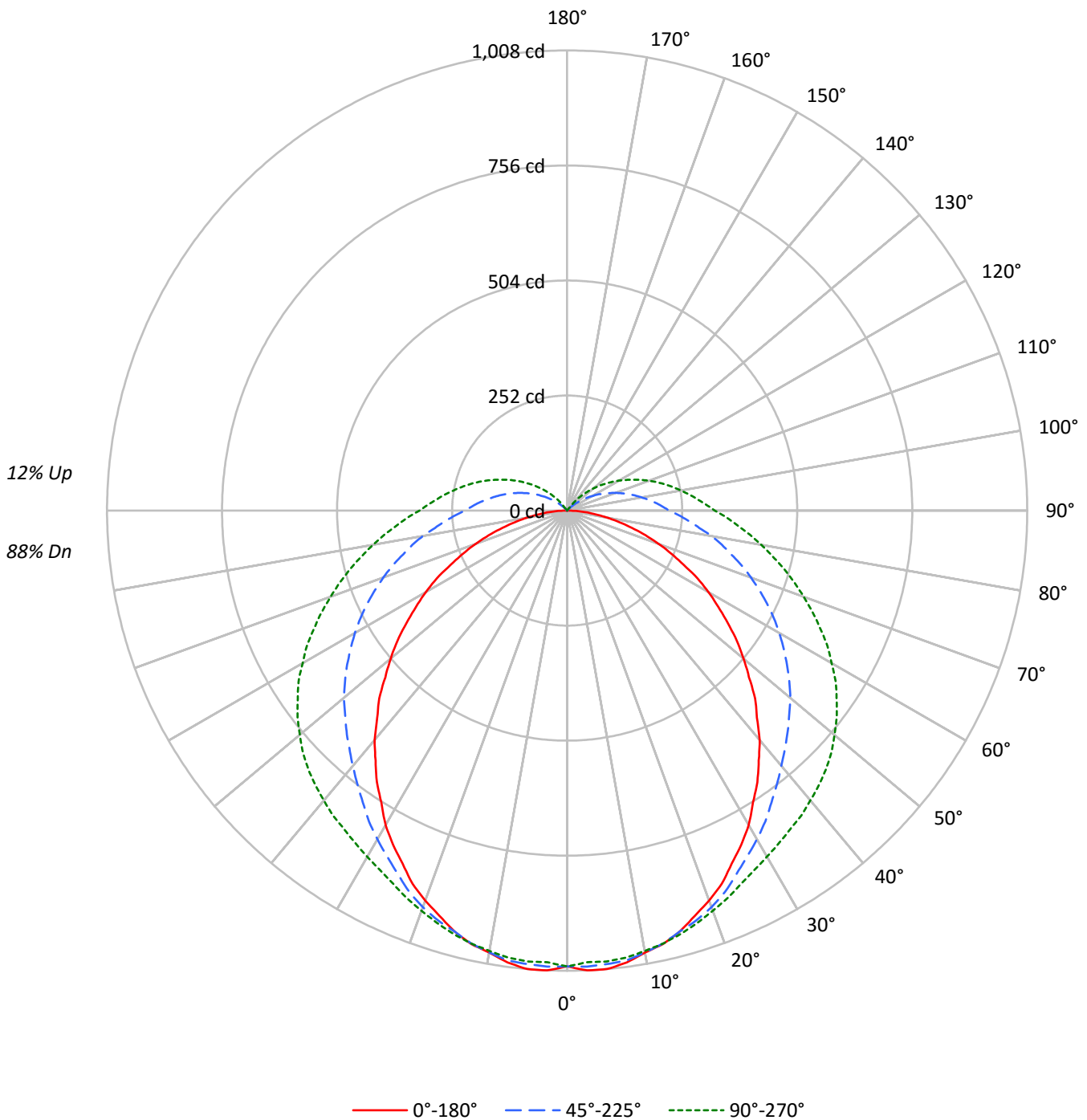
Input Watts (W): 38.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									70									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°	11725	11725	11725
5°	11856	11416	11239
10°	11667	11058	10811
15°	11522	10634	10408
20°	11253	10282	10003
25°	10919	9820	9642
30°	10629	9425	9405
35°	10228	9034	9262
40°	9842	8708	9200
45°	9423	8473	9153
50°	8941	8299	9061
55°	8478	8106	8945
60°	8042	7936	8795
65°	7408	7766	8611
70°	6841	7605	8415
75°	6066	7445	8270
80°	5203	7413	8163
85°	4091	7404	8146



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	2.5
10°-20°	268.9	7.0
20°-30°	403.5	10.5
30°-40°	489.9	12.7
40°-50°	529.2	13.7
50°-60°	518.3	13.4
60°-70°	459.7	11.9
70°-80°	368.2	9.5
80°-90°	266.9	6.9
90°-100°	188.1	4.9
100°-110°	131.2	3.4
110°-120°	81.2	2.1
120°-130°	41.3	1.1
130°-140°	14.3	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°	767.0	19.9
0°-40°	1257.0	32.6
0°-60°	2304.4	59.8
0°-90°	3399.2	88.2
90°-120°	400.5	10.4
90°-150°	456.8	11.8
90°-180°	457.0	11.9
0°-180°	3856.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	1008	998	997	993	991	95
15°	954	947	954	963	960	268
25°	853	855	878	892	902	394
35°	726	731	780	827	852	454
45°	582	598	684	768	802	447
55°	430	465	588	685	721	385
65°	282	348	483	576	612	281
75°	147	240	372	462	492	157
85°	39	147	268	348	375	43
90°	1	107	223	297	323	3
95°	0	85	194	264	286	0
105°	0	45	140	202	222	0
115°	0	14	88	142	160	0
125°	0	0	43	87	103	0
135°	0	0	7	38	50	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



TEST NUMBER: P257069

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5
2.5°	1008.1	1006.9	1003.3	999.7	998.5	998.5	997.3	996.2	996.2	995.0	999.7
5°	1008.1	1006.9	1003.3	998.5	997.3	998.5	997.3	995.0	995.0	993.8	997.3
7.5°	998.5	996.2	993.8	990.2	989.0	989.0	987.8	987.8	987.8	987.8	993.8
10°	983.0	981.8	979.4	975.9	975.9	974.7	974.7	975.9	975.9	977.1	983.0
12.5°	972.3	969.9	966.3	962.7	961.6	961.6	960.4	959.2	960.4	961.6	971.1
15°	954.4	953.2	950.8	947.2	947.2	947.2	947.2	946.0	946.0	947.2	954.4
17.5°	930.5	928.1	927.0	924.6	925.8	927.0	928.1	927.0	929.3	932.9	941.3
20°	909.1	906.7	904.3	900.7	900.7	901.9	903.1	903.1	909.1	913.8	924.6
22.5°	885.2	884.0	881.6	880.4	880.4	881.6	881.6	879.2	882.8	890.0	904.3
25°	853.0	851.8	850.6	850.6	853.0	855.4	856.6	857.8	861.3	866.1	878.0
27.5°	825.6	824.4	822.0	819.6	822.0	824.4	825.6	827.9	835.1	844.6	854.2
30°	795.7	794.5	793.3	793.3	795.7	796.9	798.1	796.9	806.5	820.8	831.5
32.5°	757.6	756.4	757.6	757.6	763.5	767.1	769.5	770.7	779.0	792.1	807.7
35°	726.5	726.5	725.3	727.7	728.9	731.3	733.7	739.7	751.6	764.7	780.2
37.5°	689.6	689.6	689.6	695.5	700.3	701.5	702.7	709.8	725.3	738.5	755.2
40°	656.1	656.1	656.1	658.5	662.1	665.7	670.5	678.8	694.3	713.4	730.1
42.5°	615.6	616.8	619.2	625.1	629.9	632.3	635.9	649.0	665.7	688.4	706.3
45°	582.2	581.0	583.4	588.1	592.9	597.7	603.7	618.0	638.3	663.3	683.6
47.5°	540.4	541.6	544.0	552.4	558.3	564.3	571.4	588.1	612.0	637.1	659.7
50°	504.6	505.8	511.8	516.6	522.5	529.7	538.0	559.5	585.8	610.8	638.3
52.5°	468.8	470.0	474.8	478.4	487.9	496.3	507.0	530.9	558.3	585.8	613.2
55°	429.5	431.9	435.4	443.8	455.7	465.3	477.2	503.4	530.9	560.7	588.1
57.5°	392.5	393.7	399.7	408.0	422.3	434.2	448.6	476.0	505.8	534.5	561.9
60°	357.9	360.3	363.9	374.6	393.7	405.6	419.9	448.6	479.6	508.2	536.8
62.5°	322.1	324.5	329.3	341.2	363.9	377.0	392.5	422.3	453.3	482.0	510.6
65°	281.5	283.9	291.1	306.6	334.0	348.4	363.9	394.9	424.7	454.5	483.2
67.5°	246.9	248.1	257.7	274.4	303.0	320.9	337.6	367.4	397.3	427.1	455.7
70°	213.5	215.9	223.1	245.8	276.8	291.1	309.0	341.2	371.0	400.8	428.3
72.5°	180.1	182.5	193.3	218.3	250.5	266.0	280.4	315.0	344.8	373.4	400.8
75°	146.7	150.3	164.6	193.3	224.3	239.8	255.3	286.3	318.5	346.0	372.2
77.5°	116.9	120.5	138.4	168.2	199.2	214.7	230.2	260.1	289.9	319.7	347.2
80°	88.3	93.1	114.5	144.4	175.4	190.9	205.2	236.2	264.8	292.3	320.9
82.5°	63.2	69.2	94.2	122.9	153.9	168.2	182.5	212.4	241.0	267.2	292.3
85°	39.4	50.1	75.2	102.6	132.4	146.7	161.1	190.9	218.3	244.6	268.4
87.5°	19.1	33.4	57.3	83.5	112.1	126.5	140.8	169.4	195.7	221.9	245.8
90°	1.2	19.1	40.6	65.6	94.2	107.4	121.7	149.1	175.4	200.4	223.1
92.5°	0.0	11.9	32.2	56.1	82.3	96.6	109.8	137.2	162.2	187.3	208.8
95°	0.0	6.0	25.1	47.7	72.8	84.7	97.8	124.1	149.1	173.0	194.5
97.5°	0.0	1.2	17.9	38.2	62.0	75.2	87.1	112.1	137.2	159.9	180.1
100°	0.0	0.0	11.9	31.0	52.5	64.4	76.4	100.2	124.1	145.5	165.8
102.5°	0.0	0.0	6.0	23.9	44.1	54.9	65.6	89.5	112.1	133.6	152.7
105°	0.0	0.0	1.2	16.7	35.8	45.3	56.1	77.5	100.2	120.5	139.6
107.5°	0.0	0.0	0.0	9.5	27.4	37.0	46.5	66.8	88.3	107.4	125.3
110°	0.0	0.0	0.0	4.8	20.3	28.6	38.2	57.3	76.4	95.4	113.3



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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	1.2	13.1	21.5	29.8	47.7	65.6	83.5	100.2
115°	0.0	0.0	0.0	0.0	7.2	14.3	21.5	38.2	54.9	72.8	88.3
117.5°	0.0	0.0	0.0	0.0	2.4	8.4	14.3	29.8	45.3	60.8	76.4
120°	0.0	0.0	0.0	0.0	0.0	3.6	8.4	21.5	35.8	50.1	64.4
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.4	13.1	26.2	40.6	53.7
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	17.9	31.0	42.9
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	10.7	21.5	32.2
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	13.1	22.7
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	7.2	14.3
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	7.2
137.5°	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
140°	1.2	1.2	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°	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5
2.5°	1003.3	998.5	998.5	997.3	996.2	995.0	992.6	991.4	989.0	990.2
5°	1000.9	996.2	996.2	993.8	992.6	992.6	991.4	991.4	990.2	991.4
7.5°	997.3	991.4	991.4	989.0	987.8	986.6	986.6	986.6	986.6	987.8
10°	987.8	984.2	984.2	983.0	981.8	979.4	978.3	979.4	978.3	979.4
12.5°	974.7	971.1	973.5	973.5	973.5	971.1	969.9	971.1	969.9	971.1
15°	958.0	956.8	960.4	961.6	962.7	961.6	960.4	960.4	960.4	960.4
17.5°	941.3	940.1	944.9	947.2	947.2	947.2	947.2	946.0	946.0	947.2
20°	927.0	922.2	924.6	929.3	930.5	930.5	931.7	932.9	932.9	932.9
22.5°	906.7	904.3	905.5	909.1	911.4	912.6	916.2	916.2	917.4	918.6
25°	882.8	886.4	887.6	891.2	892.4	894.7	899.5	901.9	901.9	901.9
27.5°	857.8	864.9	869.7	872.1	874.5	876.9	882.8	887.6	887.6	887.6
30°	833.9	841.1	850.6	855.4	857.8	860.1	868.5	874.5	875.7	875.7
32.5°	808.9	818.4	832.7	839.9	841.1	844.6	855.4	862.5	863.7	863.7
35°	787.4	799.3	814.8	824.4	826.7	830.3	842.3	850.6	851.8	851.8
37.5°	768.3	780.2	796.9	810.0	812.4	817.2	829.1	839.9	841.1	842.3
40°	746.8	761.1	777.8	793.3	798.1	802.9	816.0	826.7	829.1	829.1
42.5°	725.3	743.2	759.9	777.8	783.8	788.6	802.9	813.6	816.0	816.0
45°	702.7	725.3	742.0	761.1	768.3	773.1	786.2	798.1	801.7	801.7
47.5°	682.4	706.3	723.0	742.0	749.2	756.4	768.3	780.2	783.8	785.0
50°	659.7	686.0	702.7	720.6	730.1	737.3	749.2	762.3	765.9	764.7
52.5°	637.1	662.1	680.0	699.1	708.6	715.8	726.5	740.8	744.4	744.4
55°	613.2	638.3	657.3	675.2	684.8	694.3	705.1	717.0	721.8	720.6
57.5°	589.3	612.0	632.3	651.4	659.7	669.3	680.0	691.9	695.5	697.9
60°	564.3	584.6	607.2	625.1	633.5	643.0	653.8	664.5	670.5	669.3
62.5°	536.8	559.5	581.0	597.7	606.0	615.6	626.3	635.9	640.6	643.0
65°	509.4	530.9	551.2	569.1	576.2	585.8	597.7	604.8	610.8	612.0
67.5°	480.8	502.3	522.5	541.6	548.8	557.1	567.9	575.0	581.0	582.2
70°	452.1	474.8	495.1	513.0	520.1	527.3	538.0	545.2	551.2	551.2
72.5°	424.7	447.4	466.5	484.4	491.5	497.5	508.2	515.4	520.1	521.3
75°	397.3	418.7	437.8	455.7	461.7	468.8	478.4	485.5	490.3	491.5
77.5°	369.8	392.5	410.4	427.1	433.1	439.0	449.8	455.7	460.5	460.5
80°	343.6	365.1	383.0	398.5	403.2	410.4	419.9	425.9	429.5	431.9
82.5°	318.5	338.8	355.5	369.8	377.0	381.8	391.3	397.3	400.8	403.2
85°	291.1	312.6	329.3	343.6	348.4	355.5	363.9	369.8	373.4	374.6
87.5°	266.0	285.1	301.8	318.5	324.5	329.3	337.6	343.6	347.2	349.5
90°	244.6	262.5	278.0	291.1	297.1	303.0	312.6	318.5	322.1	323.3
92.5°	229.1	246.9	261.3	274.4	280.4	285.1	293.5	299.4	303.0	304.2
95°	214.7	231.4	245.8	258.9	263.7	268.4	276.8	281.5	283.9	286.3
97.5°	199.2	217.1	230.2	242.2	248.1	251.7	260.1	264.8	268.4	269.6
100°	184.9	201.6	214.7	227.9	232.6	236.2	244.6	249.3	251.7	252.9
102.5°	170.6	187.3	200.4	212.4	217.1	220.7	227.9	232.6	236.2	237.4
105°	156.3	171.8	184.9	196.8	201.6	205.2	212.4	217.1	220.7	221.9
107.5°	143.2	157.5	170.6	181.3	186.1	189.7	196.8	201.6	205.2	206.4
110°	130.0	143.2	156.3	167.0	171.8	175.4	182.5	186.1	189.7	190.9



TEST NUMBER: P257069

CATALOG NUMBER: HGL-S-UF-50L940-UNV-4

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	115.7	130.0	142.0	152.7	156.3	161.1	167.0	171.8	174.2	175.4
115°	103.8	116.9	127.7	138.4	142.0	145.5	152.7	156.3	159.9	159.9
117.5°	90.7	102.6	114.5	124.1	127.7	131.2	138.4	142.0	144.4	145.5
120°	78.7	89.5	100.2	109.8	114.5	116.9	124.1	127.7	130.0	131.2
122.5°	66.8	77.5	88.3	96.6	100.2	103.8	109.8	113.3	115.7	116.9
125°	54.9	65.6	75.2	83.5	87.1	90.7	95.4	99.0	101.4	102.6
127.5°	44.1	53.7	63.2	70.4	74.0	77.5	82.3	85.9	88.3	89.5
130°	33.4	41.8	51.3	58.5	62.0	64.4	69.2	72.8	75.2	76.4
132.5°	22.7	31.0	39.4	46.5	50.1	52.5	57.3	59.6	62.0	63.2
135°	14.3	21.5	28.6	34.6	38.2	40.6	45.3	47.7	50.1	50.1
137.5°	7.2	13.1	19.1	23.9	26.2	29.8	33.4	35.8	37.0	38.2
140°	2.4	6.0	10.7	14.3	16.7	19.1	22.7	25.1	26.2	27.4
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)