

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: P257045

Luminaire Tested: **HGL-S-UF-40L830-UNV-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257045  
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-40L830-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: 3877.3 lumens  
Efficiency: N/A  
Efficacy: 131.0 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

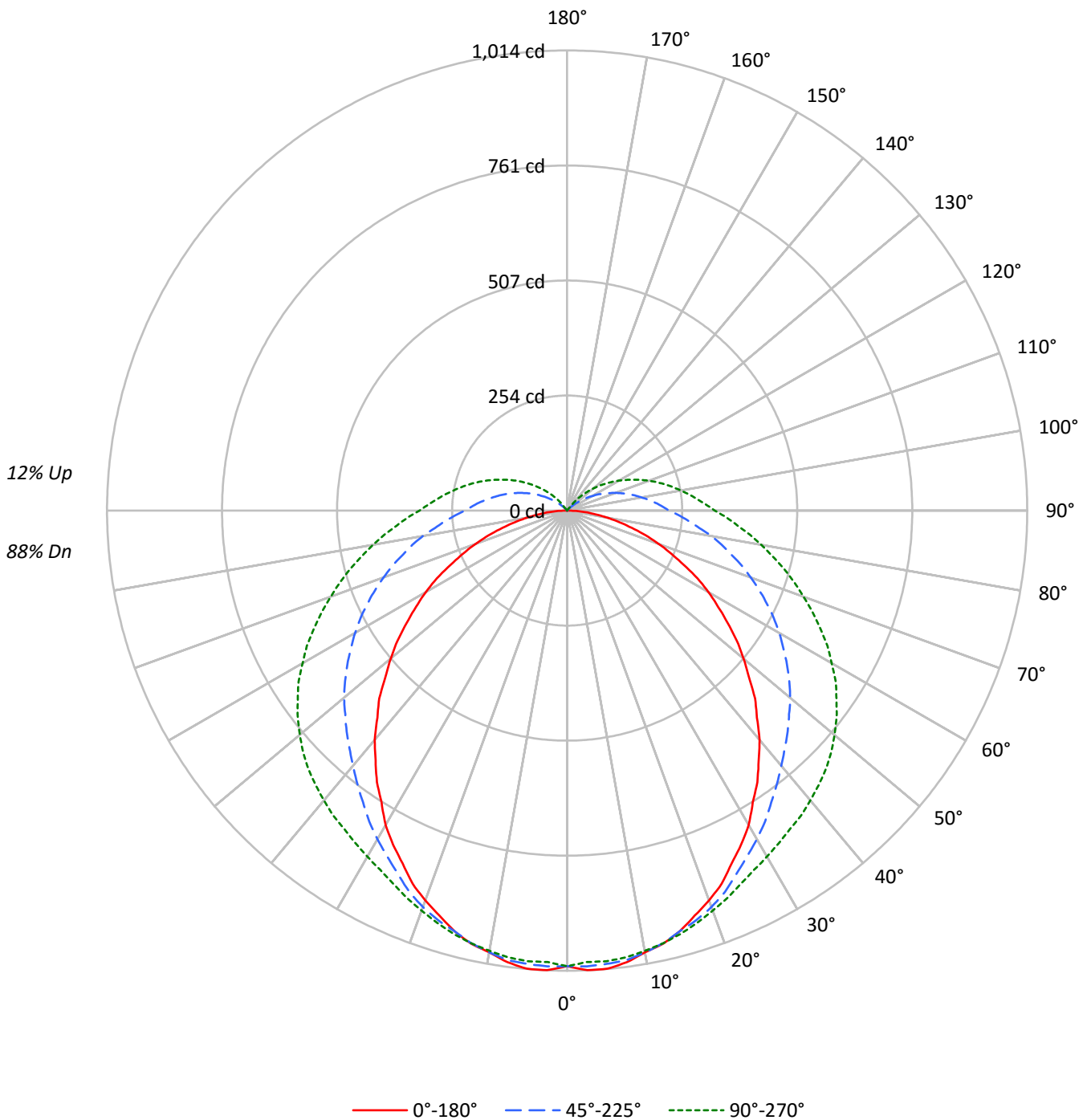
Input Watts (W): 29.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	11789	11789	11789
5°	11920	11479	11300
10°	11733	11120	10872
15°	11586	10693	10465
20°	11315	10339	10058
25°	10979	9874	9695
30°	10688	9477	9457
35°	10284	9084	9314
40°	9898	8756	9251
45°	9475	8520	9203
50°	8990	8345	9111
55°	8523	8151	8994
60°	8087	7980	8843
65°	7450	7808	8659
70°	6879	7645	8461
75°	6099	7487	8315
80°	5232	7455	8206
85°	4111	7445	8192



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.1	2.5
10°-20°	270.4	7.0
20°-30°	405.8	10.5
30°-40°	492.6	12.7
40°-50°	532.1	13.7
50°-60°	521.1	13.4
60°-70°	462.2	11.9
70°-80°	370.2	9.5
80°-90°	268.3	6.9
90°-100°	189.1	4.9
100°-110°	131.9	3.4
110°-120°	81.7	2.1
120°-130°	41.5	1.1
130°-140°	14.4	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°	771.3	19.9
0°-40°	1263.9	32.6
0°-60°	2317.1	59.8
0°-90°	3417.9	88.2
90°-120°	402.7	10.4
90°-150°	459.3	11.8
90°-180°	459.0	11.8
0°-180°	3877.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1004	1004	1004	1004	1004	
5°	1014	1004	1003	998	997	96
15°	960	952	960	968	966	270
25°	858	860	883	897	907	396
35°	730	735	784	831	856	456
45°	585	601	687	772	806	450
55°	432	468	591	689	724	387
65°	283	350	486	579	615	283
75°	148	241	374	464	494	158
85°	40	148	270	350	377	43
90°	1	108	224	299	325	3
95°	0	85	196	265	288	0
105°	0	46	140	203	223	0
115°	0	14	89	143	161	0
125°	0	0	43	88	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: P257045

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0
2.5°	1013.6	1012.4	1008.8	1005.2	1004.0	1004.0	1002.8	1001.6	1001.6	1000.4	1005.2
5°	1013.6	1012.4	1008.8	1004.0	1002.8	1004.0	1002.8	1000.4	1000.4	999.2	1002.8
7.5°	1004.0	1001.6	999.2	995.6	994.4	994.4	993.2	993.2	993.2	993.2	999.2
10°	988.5	987.3	984.9	981.3	981.3	980.1	980.1	981.3	981.3	982.5	988.5
12.5°	977.7	975.3	971.7	968.1	966.9	966.9	965.7	964.5	965.7	966.9	976.5
15°	959.7	958.5	956.1	952.5	952.5	952.5	952.5	951.3	951.3	952.5	959.7
17.5°	935.7	933.3	932.1	929.7	930.9	932.1	933.3	932.1	934.5	938.1	946.5
20°	914.1	911.7	909.3	905.7	905.7	906.9	908.1	908.1	914.1	918.9	929.7
22.5°	890.1	888.9	886.5	885.3	885.3	886.5	886.5	884.1	887.7	894.9	909.3
25°	857.7	856.5	855.3	855.3	857.7	860.1	861.3	862.5	866.1	870.9	882.9
27.5°	830.1	828.9	826.5	824.1	826.5	828.9	830.1	832.5	839.7	849.3	858.9
30°	800.1	798.9	797.7	797.7	800.1	801.3	802.5	801.3	810.9	825.3	836.1
32.5°	761.7	760.5	761.7	761.7	767.7	771.3	773.7	774.9	783.3	796.5	812.1
35°	730.5	730.5	729.3	731.7	732.9	735.3	737.7	743.7	755.7	768.9	784.5
37.5°	693.4	693.4	693.4	699.4	704.2	705.4	706.6	713.7	729.3	742.5	759.3
40°	659.8	659.8	659.8	662.2	665.8	669.4	674.2	682.6	698.2	717.3	734.1
42.5°	619.0	620.2	622.6	628.6	633.4	635.8	639.4	652.6	669.4	692.2	710.1
45°	585.4	584.2	586.6	591.4	596.2	601.0	607.0	621.4	641.8	667.0	687.4
47.5°	543.4	544.6	547.0	555.4	561.4	567.4	574.6	591.4	615.4	640.6	663.4
50°	507.4	508.6	514.6	519.4	525.4	532.6	541.0	562.6	589.0	614.2	641.8
52.5°	471.4	472.6	477.4	481.0	490.6	499.0	509.8	533.8	561.4	589.0	616.6
55°	431.8	434.2	437.8	446.2	458.2	467.8	479.8	506.2	533.8	563.8	591.4
57.5°	394.7	395.9	401.9	410.3	424.6	436.6	451.0	478.6	508.6	537.4	565.0
60°	359.9	362.3	365.9	376.7	395.9	407.9	422.3	451.0	482.2	511.0	539.8
62.5°	323.9	326.3	331.1	343.1	365.9	379.1	394.7	424.6	455.8	484.6	513.4
65°	283.1	285.5	292.7	308.3	335.9	350.3	365.9	397.1	427.0	457.0	485.8
67.5°	248.3	249.5	259.1	275.9	304.7	322.7	339.5	369.5	399.5	429.4	458.2
70°	214.7	217.1	224.3	247.1	278.3	292.7	310.7	343.1	373.1	403.1	430.6
72.5°	181.1	183.5	194.3	219.5	251.9	267.5	281.9	316.7	346.7	375.5	403.1
75°	147.5	151.1	165.5	194.3	225.5	241.1	256.7	287.9	320.3	347.9	374.3
77.5°	117.6	121.2	139.2	169.1	200.3	215.9	231.5	261.5	291.5	321.5	349.1
80°	88.8	93.6	115.2	145.1	176.3	191.9	206.3	237.5	266.3	293.9	322.7
82.5°	63.6	69.6	94.8	123.6	154.7	169.1	183.5	213.5	242.3	268.7	293.9
85°	39.6	50.4	75.6	103.2	133.2	147.5	161.9	191.9	219.5	245.9	269.9
87.5°	19.2	33.6	57.6	84.0	112.8	127.2	141.5	170.3	196.7	223.1	247.1
90°	1.2	19.2	40.8	66.0	94.8	108.0	122.4	149.9	176.3	201.5	224.3
92.5°	0.0	12.0	32.4	56.4	82.8	97.2	110.4	138.0	163.1	188.3	209.9
95°	0.0	6.0	25.2	48.0	73.2	85.2	98.4	124.8	149.9	173.9	195.5
97.5°	0.0	1.2	18.0	38.4	62.4	75.6	87.6	112.8	138.0	160.7	181.1
100°	0.0	0.0	12.0	31.2	52.8	64.8	76.8	100.8	124.8	146.3	166.7
102.5°	0.0	0.0	6.0	24.0	44.4	55.2	66.0	90.0	112.8	134.4	153.5
105°	0.0	0.0	1.2	16.8	36.0	45.6	56.4	78.0	100.8	121.2	140.4
107.5°	0.0	0.0	0.0	9.6	27.6	37.2	46.8	67.2	88.8	108.0	126.0
110°	0.0	0.0	0.0	4.8	20.4	28.8	38.4	57.6	76.8	96.0	114.0



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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	1.2	13.2	21.6	30.0	48.0	66.0	84.0	100.8
115°	0.0	0.0	0.0	0.0	7.2	14.4	21.6	38.4	55.2	73.2	88.8
117.5°	0.0	0.0	0.0	0.0	2.4	8.4	14.4	30.0	45.6	61.2	76.8
120°	0.0	0.0	0.0	0.0	0.0	3.6	8.4	21.6	36.0	50.4	64.8
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.4	13.2	26.4	40.8	54.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	18.0	31.2	43.2
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	10.8	21.6	32.4
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	13.2	22.8
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	7.2	14.4
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°	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0
2.5°	1008.8	1004.0	1004.0	1002.8	1001.6	1000.4	998.0	996.8	994.4	995.6
5°	1006.4	1001.6	1001.6	999.2	998.0	998.0	996.8	996.8	995.6	996.8
7.5°	1002.8	996.8	996.8	994.4	993.2	992.0	992.0	992.0	992.0	993.2
10°	993.2	989.7	989.7	988.5	987.3	984.9	983.7	984.9	983.7	984.9
12.5°	980.1	976.5	978.9	978.9	978.9	976.5	975.3	976.5	975.3	976.5
15°	963.3	962.1	965.7	966.9	968.1	966.9	965.7	965.7	965.7	965.7
17.5°	946.5	945.3	950.1	952.5	952.5	952.5	952.5	951.3	951.3	952.5
20°	932.1	927.3	929.7	934.5	935.7	935.7	936.9	938.1	938.1	938.1
22.5°	911.7	909.3	910.5	914.1	916.5	917.7	921.3	921.3	922.5	923.7
25°	887.7	891.3	892.5	896.1	897.3	899.7	904.5	906.9	906.9	906.9
27.5°	862.5	869.7	874.5	876.9	879.3	881.7	887.7	892.5	892.5	892.5
30°	838.5	845.7	855.3	860.1	862.5	864.9	873.3	879.3	880.5	880.5
32.5°	813.3	822.9	837.3	844.5	845.7	849.3	860.1	867.3	868.5	868.5
35°	791.7	803.7	819.3	828.9	831.3	834.9	846.9	855.3	856.5	856.5
37.5°	772.5	784.5	801.3	814.5	816.9	821.7	833.7	844.5	845.7	846.9
40°	750.9	765.3	782.1	797.7	802.5	807.3	820.5	831.3	833.7	833.7
42.5°	729.3	747.3	764.1	782.1	788.1	792.9	807.3	818.1	820.5	820.5
45°	706.6	729.3	746.1	765.3	772.5	777.3	790.5	802.5	806.1	806.1
47.5°	686.2	710.1	726.9	746.1	753.3	760.5	772.5	784.5	788.1	789.3
50°	663.4	689.8	706.6	724.5	734.1	741.3	753.3	766.5	770.1	768.9
52.5°	640.6	665.8	683.8	703.0	712.5	719.7	730.5	744.9	748.5	748.5
55°	616.6	641.8	661.0	679.0	688.6	698.2	708.9	720.9	725.7	724.5
57.5°	592.6	615.4	635.8	655.0	663.4	673.0	683.8	695.8	699.4	701.8
60°	567.4	587.8	610.6	628.6	637.0	646.6	657.4	668.2	674.2	673.0
62.5°	539.8	562.6	584.2	601.0	609.4	619.0	629.8	639.4	644.2	646.6
65°	512.2	533.8	554.2	572.2	579.4	589.0	601.0	608.2	614.2	615.4
67.5°	483.4	505.0	525.4	544.6	551.8	560.2	571.0	578.2	584.2	585.4
70°	454.6	477.4	497.8	515.8	523.0	530.2	541.0	548.2	554.2	554.2
72.5°	427.0	449.8	469.0	487.0	494.2	500.2	511.0	518.2	523.0	524.2
75°	399.5	421.1	440.2	458.2	464.2	471.4	481.0	488.2	493.0	494.2
77.5°	371.9	394.7	412.7	429.4	435.4	441.4	452.2	458.2	463.0	463.0
80°	345.5	367.1	385.1	400.7	405.5	412.7	422.3	428.2	431.8	434.2
82.5°	320.3	340.7	357.5	371.9	379.1	383.9	393.5	399.5	403.1	405.5
85°	292.7	314.3	331.1	345.5	350.3	357.5	365.9	371.9	375.5	376.7
87.5°	267.5	286.7	303.5	320.3	326.3	331.1	339.5	345.5	349.1	351.5
90°	245.9	263.9	279.5	292.7	298.7	304.7	314.3	320.3	323.9	325.1
92.5°	230.3	248.3	262.7	275.9	281.9	286.7	295.1	301.1	304.7	305.9
95°	215.9	232.7	247.1	260.3	265.1	269.9	278.3	283.1	285.5	287.9
97.5°	200.3	218.3	231.5	243.5	249.5	253.1	261.5	266.3	269.9	271.1
100°	185.9	202.7	215.9	229.1	233.9	237.5	245.9	250.7	253.1	254.3
102.5°	171.5	188.3	201.5	213.5	218.3	221.9	229.1	233.9	237.5	238.7
105°	157.1	172.7	185.9	197.9	202.7	206.3	213.5	218.3	221.9	223.1
107.5°	143.9	158.3	171.5	182.3	187.1	190.7	197.9	202.7	206.3	207.5
110°	130.8	143.9	157.1	167.9	172.7	176.3	183.5	187.1	190.7	191.9





TEST NUMBER: P257045

CATALOG NUMBER: HGL-S-UF-40L830-UNV-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	116.4	130.8	142.7	153.5	157.1	161.9	167.9	172.7	175.1	176.3
115°	104.4	117.6	128.4	139.2	142.7	146.3	153.5	157.1	160.7	160.7
117.5°	91.2	103.2	115.2	124.8	128.4	132.0	139.2	142.7	145.1	146.3
120°	79.2	90.0	100.8	110.4	115.2	117.6	124.8	128.4	130.8	132.0
122.5°	67.2	78.0	88.8	97.2	100.8	104.4	110.4	114.0	116.4	117.6
125°	55.2	66.0	75.6	84.0	87.6	91.2	96.0	99.6	102.0	103.2
127.5°	44.4	54.0	63.6	70.8	74.4	78.0	82.8	86.4	88.8	90.0
130°	33.6	42.0	51.6	58.8	62.4	64.8	69.6	73.2	75.6	76.8
132.5°	22.8	31.2	39.6	46.8	50.4	52.8	57.6	60.0	62.4	63.6
135°	14.4	21.6	28.8	34.8	38.4	40.8	45.6	48.0	50.4	50.4
137.5°	7.2	13.2	19.2	24.0	26.4	30.0	33.6	36.0	37.2	38.4
140°	2.4	6.0	10.8	14.4	16.8	19.2	22.8	25.2	26.4	27.6
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)