

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: P257044

Luminaire Tested: **HGL-S-UF-30L830-UNV-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257044  
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-30L830-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: 3069.8 lumens  
Efficiency: N/A  
Efficacy: 131.8 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

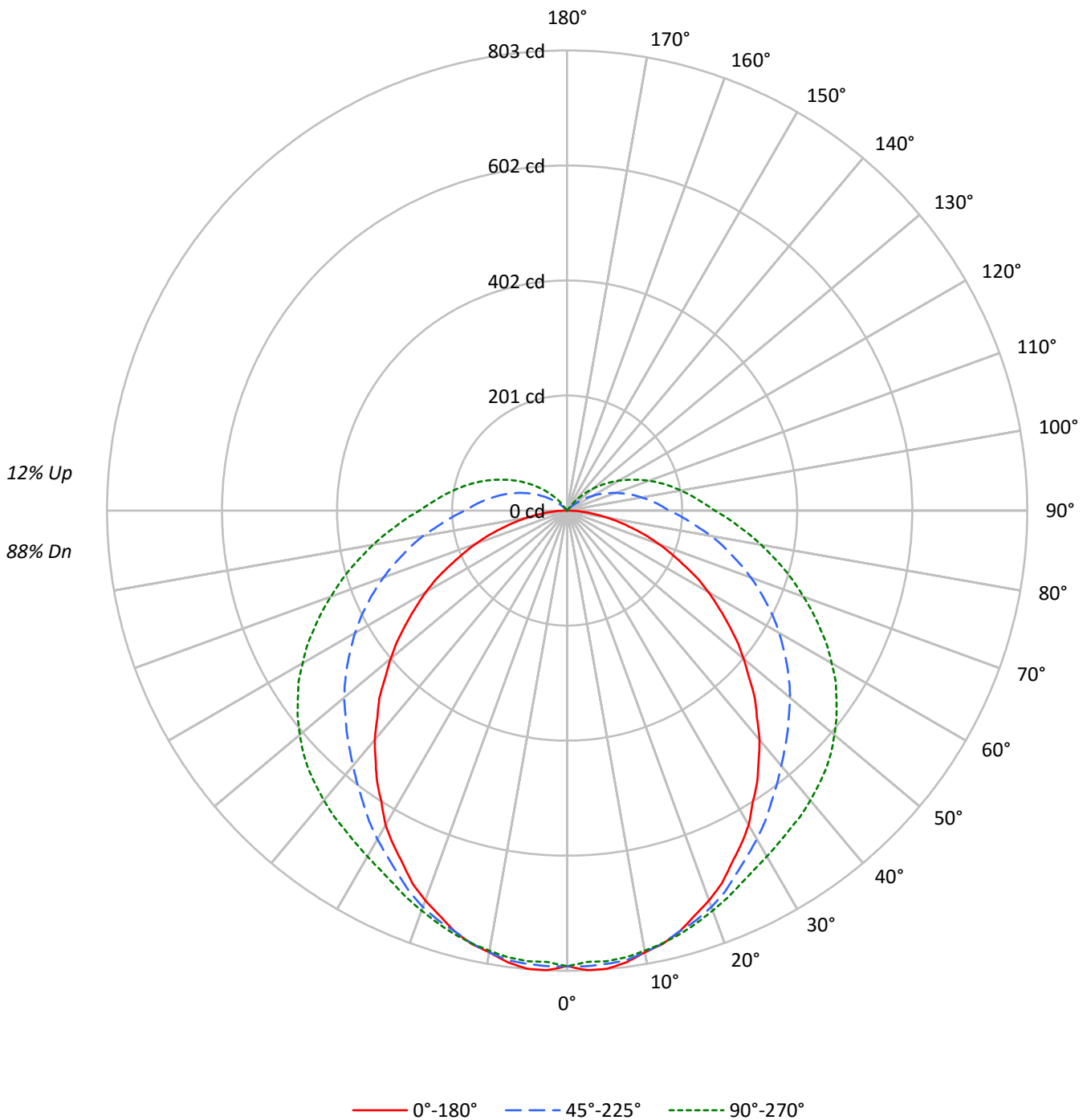
Input Watts (W): 23.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P257044

CATALOG NUMBER: HGL-S-UF-30L830-UNV-4

### Luminous Intensity Polar Plot





TEST NUMBER: P257044

CATALOG NUMBER: HGL-S-UF-30L830-UNV-4

**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°	9335	9335	9335
5°	9439	9089	8948
10°	9289	8804	8608
15°	9173	8466	8286
20°	8958	8186	7963
25°	8693	7818	7676
30°	8462	7504	7487
35°	8143	7192	7374
40°	7836	6933	7325
45°	7502	6745	7286
50°	7119	6606	7214
55°	6748	6453	7122
60°	6402	6318	7001
65°	5897	6183	6855
70°	5447	6055	6699
75°	4830	5927	6584
80°	4142	5902	6498
85°	3250	5895	6485



TEST NUMBER: P257044

CATALOG NUMBER: HGL-S-UF-30L830-UNV-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.3	2.5
10°-20°	214.1	7.0
20°-30°	321.2	10.5
30°-40°	390.0	12.7
40°-50°	421.3	13.7
50°-60°	412.6	13.4
60°-70°	366.0	11.9
70°-80°	293.2	9.5
80°-90°	212.5	6.9
90°-100°	149.7	4.9
100°-110°	104.5	3.4
110°-120°	64.7	2.1
120°-130°	32.9	1.1
130°-140°	11.4	0.4
140°-150°	0.5	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	610.6	19.9
0°-40°	1000.7	32.6
0°-60°	1834.6	59.8
0°-90°	2706.1	88.2
90°-120°	318.8	10.4
90°-150°	363.6	11.8
90°-180°	364.0	11.9
0°-180°	3069.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	803	795	794	790	789	76
15°	760	754	760	766	765	214
25°	679	681	699	710	718	313
35°	578	582	621	658	678	361
45°	464	476	544	612	638	356
55°	342	370	468	545	574	306
65°	224	277	385	459	487	224
75°	117	191	296	368	391	125
85°	31	117	214	277	298	34
90°	1	86	178	236	257	2
95°	0	67	155	210	228	0
105°	0	36	111	160	177	0
115°	0	11	70	113	127	0
125°	0	0	34	69	82	0
135°	0	0	6	30	40	0
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: P257044

CATALOG NUMBER: HGL-S-UF-30L830-UNV-4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	795.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0
2.5°	802.6	801.6	798.8	795.9	795.0	795.0	794.0	793.1	793.1	792.1	795.9
5°	802.6	801.6	798.8	795.0	794.0	795.0	794.0	792.1	792.1	791.2	794.0
7.5°	795.0	793.1	791.2	788.3	787.4	787.4	786.4	786.4	786.4	786.4	791.2
10°	782.6	781.7	779.8	776.9	776.9	776.0	776.0	776.9	776.9	777.9	782.6
12.5°	774.1	772.2	769.3	766.5	765.5	765.5	764.6	763.6	764.6	765.5	773.1
15°	759.8	758.9	757.0	754.1	754.1	754.1	754.1	753.2	753.2	754.1	759.8
17.5°	740.8	738.9	738.0	736.1	737.0	738.0	738.9	738.0	739.9	742.7	749.4
20°	723.7	721.8	719.9	717.1	717.1	718.0	719.0	719.0	723.7	727.5	736.1
22.5°	704.7	703.8	701.9	700.9	700.9	701.9	701.9	700.0	702.8	708.5	719.9
25°	679.1	678.1	677.2	677.2	679.1	681.0	681.9	682.9	685.7	689.5	699.0
27.5°	657.2	656.3	654.4	652.5	654.4	656.3	657.2	659.1	664.8	672.4	680.0
30°	633.5	632.5	631.6	631.6	633.5	634.4	635.4	634.4	642.0	653.4	662.0
32.5°	603.1	602.2	603.1	603.1	607.9	610.7	612.6	613.6	620.2	630.6	643.0
35°	578.4	578.4	577.5	579.4	580.3	582.2	584.1	588.9	598.4	608.8	621.1
37.5°	549.0	549.0	549.0	553.7	557.5	558.5	559.4	565.1	577.5	587.9	601.2
40°	522.4	522.4	522.4	524.3	527.1	530.0	533.8	540.4	552.8	568.0	581.3
42.5°	490.1	491.0	492.9	497.7	501.5	503.4	506.2	516.7	530.0	548.0	562.3
45°	463.5	462.5	464.4	468.2	472.0	475.8	480.6	492.0	508.1	528.1	544.2
47.5°	430.2	431.2	433.1	439.7	444.5	449.2	454.9	468.2	487.2	507.2	525.2
50°	401.8	402.7	407.5	411.2	416.0	421.7	428.3	445.4	466.3	486.3	508.1
52.5°	373.3	374.2	378.0	380.9	388.5	395.1	403.7	422.6	444.5	466.3	488.2
55°	341.9	343.8	346.7	353.3	362.8	370.4	379.9	400.8	422.6	446.4	468.2
57.5°	312.5	313.4	318.2	324.8	336.2	345.7	357.1	379.0	402.7	425.5	447.3
60°	284.9	286.8	289.7	298.2	313.4	322.9	334.3	357.1	381.8	404.6	427.4
62.5°	256.4	258.3	262.1	271.6	289.7	300.1	312.5	336.2	360.9	383.7	406.5
65°	224.1	226.0	231.7	244.1	265.9	277.3	289.7	314.4	338.1	361.9	384.7
67.5°	196.6	197.6	205.2	218.4	241.2	255.5	268.8	292.5	316.3	340.0	362.8
70°	170.0	171.9	177.6	195.7	220.3	231.7	246.0	271.6	295.4	319.1	341.0
72.5°	143.4	145.3	153.9	173.8	199.5	211.8	223.2	250.7	274.5	297.3	319.1
75°	116.8	119.7	131.1	153.9	178.6	190.9	203.3	227.9	253.6	275.4	296.3
77.5°	93.1	95.9	110.2	133.9	158.6	171.0	183.3	207.0	230.8	254.5	276.4
80°	70.3	74.1	91.2	114.9	139.6	152.0	163.4	188.1	210.8	232.7	255.5
82.5°	50.3	55.1	75.0	97.8	122.5	133.9	145.3	169.1	191.9	212.7	232.7
85°	31.3	39.9	59.8	81.7	105.4	116.8	128.2	152.0	173.8	194.7	213.7
87.5°	15.2	26.6	45.6	66.5	89.3	100.7	112.1	134.9	155.8	176.7	195.7
90°	0.9	15.2	32.3	52.2	75.0	85.5	96.9	118.7	139.6	159.6	177.6
92.5°	0.0	9.5	25.6	44.6	65.5	76.9	87.4	109.2	129.2	149.1	166.2
95°	0.0	4.7	19.9	38.0	57.9	67.4	77.9	98.8	118.7	137.7	154.8
97.5°	0.0	0.9	14.2	30.4	49.4	59.8	69.3	89.3	109.2	127.3	143.4
100°	0.0	0.0	9.5	24.7	41.8	51.3	60.8	79.8	98.8	115.9	132.0
102.5°	0.0	0.0	4.7	19.0	35.1	43.7	52.2	71.2	89.3	106.4	121.6
105°	0.0	0.0	0.9	13.3	28.5	36.1	44.6	61.7	79.8	95.9	111.1
107.5°	0.0	0.0	0.0	7.6	21.8	29.4	37.0	53.2	70.3	85.5	99.7
110°	0.0	0.0	0.0	3.8	16.1	22.8	30.4	45.6	60.8	76.0	90.2



TEST NUMBER: P257044

CATALOG NUMBER: HGL-S-UF-30L830-UNV-4

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.0	0.0	0.9	10.4	17.1	23.7	38.0	52.2	66.5	79.8
115°	0.0	0.0	0.0	0.0	5.7	11.4	17.1	30.4	43.7	57.9	70.3
117.5°	0.0	0.0	0.0	0.0	1.9	6.6	11.4	23.7	36.1	48.4	60.8
120°	0.0	0.0	0.0	0.0	0.0	2.8	6.6	17.1	28.5	39.9	51.3
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.9	10.4	20.9	32.3	42.7
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	14.2	24.7	34.2
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	8.5	17.1	25.6
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	10.4	18.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	5.7	11.4
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	5.7
137.5°	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
140°	0.9	0.9	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



TEST NUMBER: P257044

CATALOG NUMBER: HGL-S-UF-30L830-UNV-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	795.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0
2.5°	798.8	795.0	795.0	794.0	793.1	792.1	790.2	789.3	787.4	788.3
5°	796.9	793.1	793.1	791.2	790.2	790.2	789.3	789.3	788.3	789.3
7.5°	794.0	789.3	789.3	787.4	786.4	785.5	785.5	785.5	785.5	786.4
10°	786.4	783.6	783.6	782.6	781.7	779.8	778.8	779.8	778.8	779.8
12.5°	776.0	773.1	775.0	775.0	775.0	773.1	772.2	773.1	772.2	773.1
15°	762.7	761.7	764.6	765.5	766.5	765.5	764.6	764.6	764.6	764.6
17.5°	749.4	748.4	752.2	754.1	754.1	754.1	754.1	753.2	753.2	754.1
20°	738.0	734.2	736.1	739.9	740.8	740.8	741.8	742.7	742.7	742.7
22.5°	721.8	719.9	720.9	723.7	725.6	726.6	729.4	729.4	730.4	731.3
25°	702.8	705.7	706.6	709.5	710.4	712.3	716.1	718.0	718.0	718.0
27.5°	682.9	688.6	692.4	694.3	696.2	698.1	702.8	706.6	706.6	706.6
30°	663.9	669.6	677.2	681.0	682.9	684.8	691.4	696.2	697.1	697.1
32.5°	643.9	651.5	662.9	668.6	669.6	672.4	681.0	686.7	687.6	687.6
35°	626.8	636.3	648.7	656.3	658.2	661.0	670.5	677.2	678.1	678.1
37.5°	611.7	621.1	634.4	644.9	646.8	650.6	660.1	668.6	669.6	670.5
40°	594.6	606.0	619.2	631.6	635.4	639.2	649.6	658.2	660.1	660.1
42.5°	577.5	591.7	605.0	619.2	624.0	627.8	639.2	647.7	649.6	649.6
45°	559.4	577.5	590.8	606.0	611.7	615.5	625.9	635.4	638.2	638.2
47.5°	543.3	562.3	575.6	590.8	596.5	602.2	611.7	621.1	624.0	624.9
50°	525.2	546.1	559.4	573.7	581.3	587.0	596.5	606.9	609.8	608.8
52.5°	507.2	527.1	541.4	556.6	564.2	569.9	578.4	589.8	592.7	592.7
55°	488.2	508.1	523.3	537.6	545.2	552.8	561.3	570.8	574.6	573.7
57.5°	469.2	487.2	503.4	518.6	525.2	532.8	541.4	550.9	553.7	555.6
60°	449.2	465.4	483.4	497.7	504.3	511.9	520.5	529.0	533.8	532.8
62.5°	427.4	445.4	462.5	475.8	482.5	490.1	498.6	506.2	510.0	511.9
65°	405.6	422.6	438.8	453.0	458.7	466.3	475.8	481.5	486.3	487.2
67.5°	382.8	399.9	416.0	431.2	436.9	443.5	452.1	457.8	462.5	463.5
70°	360.0	378.0	394.2	408.4	414.1	419.8	428.3	434.0	438.8	438.8
72.5°	338.1	356.2	371.4	385.6	391.3	396.1	404.6	410.3	414.1	415.0
75°	316.3	333.4	348.6	362.8	367.6	373.3	380.9	386.6	390.4	391.3
77.5°	294.4	312.5	326.7	340.0	344.8	349.5	358.1	362.8	366.6	366.6
80°	273.5	290.6	304.9	317.2	321.0	326.7	334.3	339.1	341.9	343.8
82.5°	253.6	269.7	283.0	294.4	300.1	303.9	311.5	316.3	319.1	321.0
85°	231.7	248.8	262.1	273.5	277.3	283.0	289.7	294.4	297.3	298.2
87.5°	211.8	227.0	240.3	253.6	258.3	262.1	268.8	273.5	276.4	278.3
90°	194.7	208.9	221.3	231.7	236.5	241.2	248.8	253.6	256.4	257.4
92.5°	182.4	196.6	208.0	218.4	223.2	227.0	233.6	238.4	241.2	242.2
95°	171.0	184.3	195.7	206.1	209.9	213.7	220.3	224.1	226.0	227.9
97.5°	158.6	172.9	183.3	192.8	197.6	200.4	207.0	210.8	213.7	214.6
100°	147.2	160.5	171.0	181.4	185.2	188.1	194.7	198.5	200.4	201.4
102.5°	135.8	149.1	159.6	169.1	172.9	175.7	181.4	185.2	188.1	189.0
105°	124.4	136.8	147.2	156.7	160.5	163.4	169.1	172.9	175.7	176.7
107.5°	114.0	125.4	135.8	144.4	148.2	151.0	156.7	160.5	163.4	164.3
110°	103.5	114.0	124.4	133.0	136.8	139.6	145.3	148.2	151.0	152.0





TEST NUMBER: P257044

CATALOG NUMBER: HGL-S-UF-30L830-UNV-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	92.1	103.5	113.0	121.6	124.4	128.2	133.0	136.8	138.7	139.6
115°	82.6	93.1	101.6	110.2	113.0	115.9	121.6	124.4	127.3	127.3
117.5°	72.2	81.7	91.2	98.8	101.6	104.5	110.2	113.0	114.9	115.9
120°	62.7	71.2	79.8	87.4	91.2	93.1	98.8	101.6	103.5	104.5
122.5°	53.2	61.7	70.3	76.9	79.8	82.6	87.4	90.2	92.1	93.1
125°	43.7	52.2	59.8	66.5	69.3	72.2	76.0	78.8	80.7	81.7
127.5°	35.1	42.7	50.3	56.0	58.9	61.7	65.5	68.4	70.3	71.2
130°	26.6	33.2	40.8	46.5	49.4	51.3	55.1	57.9	59.8	60.8
132.5°	18.0	24.7	31.3	37.0	39.9	41.8	45.6	47.5	49.4	50.3
135°	11.4	17.1	22.8	27.5	30.4	32.3	36.1	38.0	39.9	39.9
137.5°	5.7	10.4	15.2	19.0	20.9	23.7	26.6	28.5	29.4	30.4
140°	1.9	4.7	8.5	11.4	13.3	15.2	18.0	19.9	20.9	21.8
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)