

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P252475

Luminaire Tested: **LE\_6B20D010 EC6B10209040 6LBLWW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252475  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B20D010 EC6B10209040 6LBLWW1H  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1876.3 lumens  
Efficiency: N/A  
Efficacy: 90.2 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

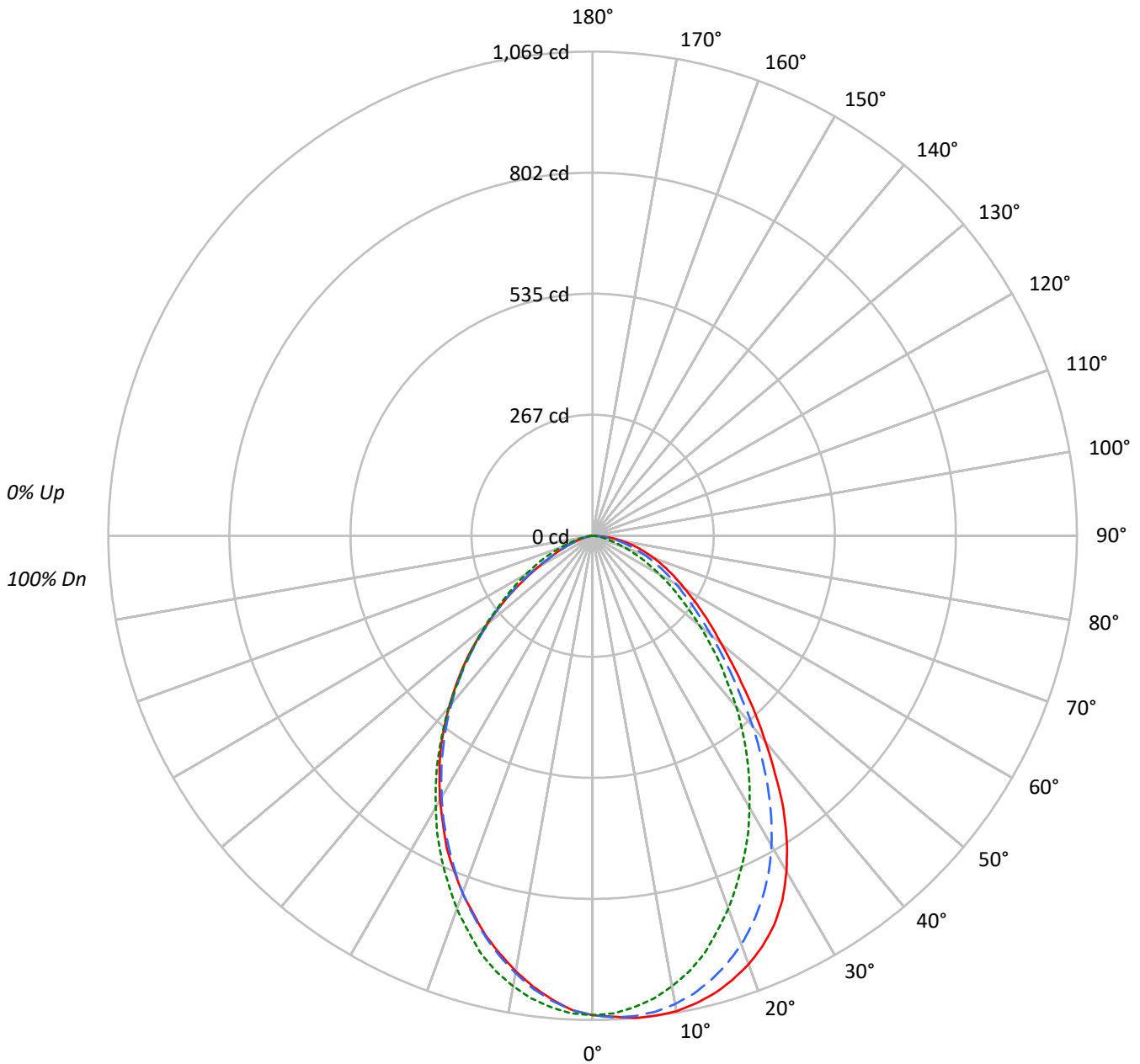
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100				
1	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88				88				
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77				
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67				67				
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59				59				
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53				53				
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47				47				
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43				43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				39				
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35				35				
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33				33				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	69057	69057	69057
5°	69996	68450	67297
10°	70613	66910	64664
15°	70595	64442	61666
20°	69914	60832	58278
25°	68256	56724	54817
30°	64455	52161	50730
35°	58427	47301	46719
40°	50461	42072	41944
45°	43272	36620	36896
50°	37604	31342	30896
55°	33782	26411	24751
60°	30689	22247	18215
65°	28837	18386	13400
70°	27487	14306	9824
75°	26316	10360	6680
80°	24834	7176	4433
85°	22007	4416	2246



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.0	5.3
10°-20°	271.2	14.5
20°-30°	376.5	20.1
30°-40°	389.9	20.8
40°-50°	320.4	17.1
50°-60°	220.2	11.7
60°-70°	126.6	6.7
70°-80°	58.2	3.1
80°-90°	14.2	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	746.7	39.8
0°-40°	1136.6	60.6
0°-60°	1677.3	89.4
0°-90°	1876.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1876.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1058	1058	1058	1058	1058	
5°	1069	1064	1045	1030	1028	102
15°	1045	1014	954	916	913	294
25°	948	885	788	754	762	434
35°	734	673	594	576	587	455
45°	469	434	397	392	400	365
55°	297	269	232	219	218	267
65°	187	163	119	84	87	186
75°	104	82	41	26	26	110
85°	29	21	6	3	3	33
90°	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°	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5
2.5°	1062.9	1071.8	1065.9	1064.4	1067.2	1067.2	1067.2	1062.9	1065.9	1061.4	1064.4
5°	1068.8	1076.1	1070.2	1067.2	1070.2	1071.8	1067.2	1064.4	1068.8	1062.9	1064.4
7.5°	1068.8	1076.1	1070.2	1068.8	1070.2	1070.2	1068.8	1062.9	1065.9	1060.0	1060.0
10°	1065.9	1071.8	1065.9	1062.9	1064.4	1062.9	1062.9	1055.5	1057.0	1049.6	1049.6
12.5°	1057.0	1064.4	1057.0	1054.1	1054.1	1054.1	1049.6	1043.8	1045.2	1036.4	1035.0
15°	1045.2	1051.1	1043.8	1040.9	1040.9	1039.4	1036.4	1027.6	1027.6	1018.8	1014.4
17.5°	1027.6	1033.5	1027.6	1023.2	1021.8	1018.8	1015.9	1007.0	1004.1	993.8	989.4
20°	1007.0	1011.5	1005.5	1001.1	998.2	995.2	989.4	980.6	977.6	967.4	960.0
22.5°	980.6	986.5	977.6	973.2	970.2	965.9	960.0	951.1	946.8	933.5	924.8
25°	948.2	951.1	943.9	939.4	933.5	930.6	926.1	914.4	910.0	895.2	885.0
27.5°	907.0	910.0	901.1	898.2	890.9	888.0	882.1	871.8	865.9	851.2	840.9
30°	855.6	858.5	852.6	848.2	842.4	836.5	832.1	821.8	813.0	798.2	789.5
32.5°	798.2	802.6	796.8	790.9	780.6	782.1	774.8	764.5	757.1	743.9	733.6
35°	733.6	736.5	729.1	727.8	721.9	716.0	708.6	701.2	696.9	682.1	673.4
37.5°	661.5	668.9	661.5	655.6	652.8	648.4	643.9	633.6	630.6	621.9	610.1
40°	592.5	596.9	592.5	586.6	582.1	582.1	576.2	570.4	563.0	554.2	549.9
42.5°	530.8	527.8	526.2	523.4	517.5	516.0	514.5	507.2	502.8	494.0	486.6
45°	469.0	470.4	467.5	466.0	461.6	458.6	455.8	449.9	448.4	439.6	433.6
47.5°	417.5	416.0	413.1	413.1	410.1	407.2	404.2	399.9	398.4	391.0	385.1
50°	370.5	372.0	370.5	369.0	364.6	363.1	360.1	357.2	354.2	347.0	341.1
52.5°	332.2	330.8	329.2	329.2	324.9	323.4	320.5	317.5	314.6	307.2	302.9
55°	297.0	297.0	295.5	294.0	289.6	288.1	286.6	283.8	279.4	273.5	269.0
57.5°	264.6	264.6	263.1	261.6	258.8	258.8	255.8	252.9	249.9	244.0	238.1
60°	235.2	236.8	235.2	233.8	230.8	230.8	229.4	224.9	223.5	216.1	211.8
62.5°	210.2	210.2	210.2	208.8	207.2	204.4	204.4	199.9	197.0	192.6	186.8
65°	186.8	186.8	186.8	185.2	182.2	180.9	179.4	176.4	173.5	169.1	163.1
67.5°	164.6	164.6	164.6	163.1	160.2	158.8	157.2	155.9	151.4	147.0	141.1
70°	144.1	144.1	142.6	141.1	139.6	138.2	136.8	133.8	130.9	125.0	120.5
72.5°	123.5	123.5	123.5	120.5	119.1	119.1	116.1	114.6	111.8	105.9	101.5
75°	104.4	102.9	102.9	101.5	100.0	98.5	97.0	95.5	91.1	88.2	82.4
77.5°	85.2	85.2	83.8	82.4	82.4	80.9	79.4	76.5	75.0	70.6	66.1
80°	66.1	66.1	66.1	66.1	64.6	63.2	63.2	60.2	58.8	54.4	51.5
82.5°	50.0	48.5	48.5	48.5	47.0	45.6	45.6	44.1	42.6	39.8	36.8
85°	29.4	27.9	27.9	27.9	26.5	26.5	25.0	25.0	23.5	20.6	20.6
87.5°	8.9	8.9	10.2	10.2	8.9	8.9	8.9	8.9	8.9	7.4	7.4
90°	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°	95°
0°	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5
2.5°	1061.4	1065.9	1060.0	1058.5	1064.4	1061.4	1060.0	1057.0	1058.5	1055.5	1051.1
5°	1060.0	1065.9	1058.5	1054.1	1061.4	1057.0	1054.1	1051.1	1051.1	1045.2	1042.2
7.5°	1055.5	1058.5	1051.1	1046.8	1051.1	1046.8	1043.8	1039.4	1037.9	1030.5	1026.1
10°	1043.8	1046.8	1037.9	1032.0	1036.4	1030.5	1026.1	1021.8	1018.8	1010.0	1004.1
12.5°	1027.6	1029.1	1018.8	1011.5	1014.4	1010.0	1002.6	996.8	993.8	985.0	977.6
15°	1005.5	1007.0	995.2	985.0	987.9	982.0	973.2	967.4	962.9	954.1	943.9
17.5°	979.1	977.6	964.4	954.1	955.6	948.2	939.4	930.6	924.8	914.4	907.0
20°	949.8	945.2	930.6	918.9	920.2	911.5	901.1	892.4	885.0	876.2	865.9
22.5°	913.0	907.0	893.9	879.1	880.6	873.2	858.5	851.2	843.9	832.1	823.2
25°	873.2	864.4	851.2	836.5	836.5	827.6	815.9	807.1	799.8	788.0	777.8
27.5°	826.2	821.8	804.1	792.4	790.9	782.1	771.8	761.5	752.8	742.4	732.1
30°	774.8	767.4	754.1	741.0	738.0	730.6	720.4	708.6	702.8	692.4	683.6
32.5°	720.4	713.0	698.2	685.1	683.6	677.8	668.9	657.1	651.2	643.9	638.0
35°	658.6	655.6	641.0	630.6	630.6	624.8	616.0	605.6	601.2	593.9	586.6
37.5°	599.8	595.4	582.1	573.4	573.4	566.0	557.1	552.8	548.4	542.5	538.0
40°	538.0	535.1	524.9	516.0	517.5	511.6	505.8	499.9	496.9	494.0	489.5
42.5°	480.8	477.8	470.4	463.1	463.1	458.6	452.8	448.4	445.5	441.0	439.6
45°	429.2	424.9	419.0	411.6	411.6	407.2	404.2	401.4	399.9	396.9	392.5
47.5°	379.2	376.4	370.5	363.1	363.1	363.1	357.2	352.9	352.9	349.9	348.4
50°	336.6	332.2	327.9	322.0	322.0	319.0	314.6	310.2	310.2	308.8	305.8
52.5°	297.0	294.0	288.1	282.2	282.2	279.4	274.9	273.5	272.0	267.5	266.1
55°	263.1	260.2	255.8	248.5	247.0	245.5	241.1	238.1	236.8	232.2	232.2
57.5°	232.2	229.4	222.0	217.6	216.1	213.1	208.8	205.9	204.4	201.4	198.5
60°	205.9	201.4	195.5	189.6	188.1	185.2	180.9	177.9	176.4	170.5	167.6
62.5°	180.9	176.4	170.5	164.6	163.1	160.2	154.4	151.4	148.5	142.6	139.6
65°	157.2	152.9	147.0	141.1	138.2	136.8	130.9	126.4	123.5	119.1	113.2
67.5°	135.2	130.9	125.0	117.6	117.6	113.2	108.8	104.4	100.0	95.5	91.1
70°	114.6	110.2	104.4	98.5	97.0	94.1	89.6	83.8	80.9	75.0	70.6
72.5°	95.5	91.1	85.2	79.4	77.9	75.0	70.6	64.6	60.2	55.9	51.5
75°	77.9	73.5	67.6	63.2	61.8	58.8	54.4	48.5	44.1	41.1	36.8
77.5°	61.8	57.4	52.9	48.5	47.0	44.1	39.8	36.8	32.4	29.4	25.0
80°	47.0	44.1	39.8	36.8	35.2	32.4	29.4	25.0	22.0	19.1	17.6
82.5°	33.9	30.9	27.9	23.5	23.5	20.6	19.1	16.1	13.2	11.8	10.2
85°	19.1	16.1	14.8	13.2	11.8	11.8	10.2	8.9	7.4	5.9	5.9
87.5°	5.9	5.9	4.4	4.4	4.4	4.4	3.0	3.0	3.0	3.0	3.0
90°	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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5
2.5°	1051.1	1052.6	1049.6	1052.6	1049.6	1051.1	1048.2	1051.1	1048.2	1051.1	1045.2
5°	1040.9	1040.9	1036.4	1039.4	1036.4	1037.9	1032.0	1033.5	1030.5	1033.5	1027.6
7.5°	1023.2	1024.6	1017.4	1020.2	1015.9	1015.9	1011.5	1012.9	1008.5	1010.0	1005.5
10°	1002.6	1001.1	993.8	996.8	990.9	990.9	986.5	986.5	980.6	982.0	976.1
12.5°	973.2	971.8	962.9	965.9	960.0	960.0	955.6	955.6	949.8	952.6	946.8
15°	939.4	937.9	929.1	930.6	924.8	924.8	918.9	920.2	915.9	918.9	913.0
17.5°	901.1	899.8	890.9	892.4	885.0	886.5	882.1	880.6	877.6	879.1	874.8
20°	861.5	858.5	849.8	851.2	848.2	843.9	840.9	842.4	839.4	842.4	838.0
22.5°	820.4	814.5	807.1	807.1	804.1	804.1	799.8	802.6	796.8	801.2	798.2
25°	773.2	768.9	763.0	765.9	760.0	760.0	755.6	757.1	754.1	757.1	754.1
27.5°	727.8	724.8	716.0	718.9	714.5	716.0	711.5	713.0	711.5	714.5	711.5
30°	679.2	677.8	671.9	671.9	670.4	668.9	667.4	667.4	666.0	670.4	667.4
32.5°	633.6	629.2	623.4	627.8	620.4	624.8	621.9	624.8	621.9	624.8	623.4
35°	586.6	585.1	577.8	579.2	577.8	577.8	576.2	576.2	576.2	580.8	580.8
37.5°	536.6	535.1	530.8	532.1	529.2	527.8	527.8	530.8	530.8	533.6	533.6
40°	488.1	489.5	485.1	485.1	483.6	483.6	483.6	486.6	485.1	488.1	486.6
42.5°	439.6	439.6	435.1	436.6	435.1	436.6	436.6	439.6	439.6	441.0	439.6
45°	394.0	394.0	392.5	394.0	391.0	392.5	391.0	394.0	392.5	394.0	394.0
47.5°	348.4	348.4	348.4	347.0	347.0	347.0	347.0	347.0	345.5	348.4	347.0
50°	305.8	307.2	305.8	305.8	304.4	305.8	304.4	304.4	301.4	302.9	302.9
52.5°	267.5	267.5	264.6	264.6	264.6	263.1	263.1	263.1	261.6	261.6	258.8
55°	230.8	230.8	227.9	227.9	226.4	224.9	223.5	223.5	219.0	219.0	214.6
57.5°	197.0	195.5	191.1	191.1	188.1	186.8	185.2	183.8	180.9	177.9	176.4
60°	166.1	163.1	160.2	158.8	155.9	152.9	150.0	147.0	144.1	142.6	141.1
62.5°	136.8	132.2	129.4	127.9	125.0	120.5	117.6	114.6	111.8	110.2	107.4
65°	110.2	105.9	101.5	100.0	97.0	94.1	89.6	86.8	83.8	82.4	82.4
67.5°	86.8	82.4	76.5	76.5	73.5	70.6	67.6	64.6	63.2	64.6	64.6
70°	64.6	61.8	57.4	55.9	52.9	50.0	48.5	48.5	48.5	50.0	48.5
72.5°	48.5	44.1	41.1	39.8	38.2	36.8	36.8	36.8	35.2	36.8	36.8
75°	33.9	30.9	27.9	27.9	26.5	26.5	26.5	26.5	26.5	26.5	26.5
77.5°	23.5	20.6	19.1	19.1	19.1	17.6	17.6	17.6	17.6	17.6	17.6
80°	14.8	14.8	13.2	13.2	11.8	11.8	11.8	11.8	11.8	11.8	11.8
82.5°	8.9	8.9	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
85°	4.4	4.4	4.4	4.4	4.4	3.0	3.0	3.0	3.0	3.0	3.0
87.5°	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P252475

CATALOG NUMBER: LE\_6B20D010 EC6B10209040 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5	1058.5
2.5°	1045.2	1049.6	1043.8	1048.2	1046.8	1045.2	1042.2	1048.2
5°	1027.6	1029.1	1023.2	1029.1	1027.6	1024.6	1021.8	1027.6
7.5°	1002.6	1007.0	999.6	1005.5	1004.1	1001.1	998.2	1004.1
10°	974.6	979.1	973.2	977.6	977.6	974.6	970.2	976.1
12.5°	943.9	946.8	940.9	946.8	945.2	942.4	940.9	945.2
15°	910.0	914.4	908.5	913.0	911.5	910.0	908.5	913.0
17.5°	873.2	877.6	873.2	877.6	877.6	873.2	871.8	874.8
20°	836.5	839.4	835.0	839.4	838.0	838.0	835.0	839.4
22.5°	795.4	799.8	796.8	799.8	798.2	798.2	796.8	799.8
25°	754.1	758.6	754.1	758.6	757.1	757.1	754.1	761.5
27.5°	713.0	716.0	711.5	717.4	716.0	713.0	714.5	716.0
30°	668.9	671.9	668.9	673.4	673.4	673.4	670.4	673.4
32.5°	624.8	629.2	624.8	629.2	627.8	627.8	626.2	629.2
35°	580.8	582.1	579.2	583.6	583.6	585.1	582.1	586.6
37.5°	535.1	536.6	535.1	536.6	539.5	535.1	538.0	539.5
40°	488.1	491.0	489.5	491.0	491.0	492.5	491.0	492.5
42.5°	441.0	444.0	441.0	445.5	444.0	444.0	445.5	445.5
45°	392.5	396.9	394.0	396.9	398.4	396.9	396.9	399.9
47.5°	347.0	349.9	348.4	349.9	349.9	349.9	349.9	352.9
50°	301.4	302.9	302.9	304.4	304.4	305.8	302.9	304.4
52.5°	255.8	258.8	258.8	258.8	257.2	258.8	258.8	258.8
55°	214.6	216.1	213.1	216.1	216.1	214.6	214.6	217.6
57.5°	175.0	175.0	175.0	175.0	175.0	173.5	175.0	175.0
60°	138.2	139.6	138.2	138.2	138.2	138.2	136.8	139.6
62.5°	107.4	107.4	105.9	107.4	107.4	107.4	108.8	108.8
65°	83.8	85.2	83.8	85.2	85.2	85.2	85.2	86.8
67.5°	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
70°	50.0	50.0	50.0	51.5	50.0	50.0	50.0	51.5
72.5°	36.8	36.8	36.8	36.8	36.8	36.8	38.2	38.2
75°	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
77.5°	17.6	17.6	17.6	19.1	17.6	19.1	17.6	17.6
80°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
82.5°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
85°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
87.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)