

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: P252473

Luminaire Tested: **LE\_6B20D010 EC6B10209030 6LBLWW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252473  
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 EC6B10209030 6LBLWW1H  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1847.5 lumens  
Efficiency: N/A  
Efficacy: 88.8 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

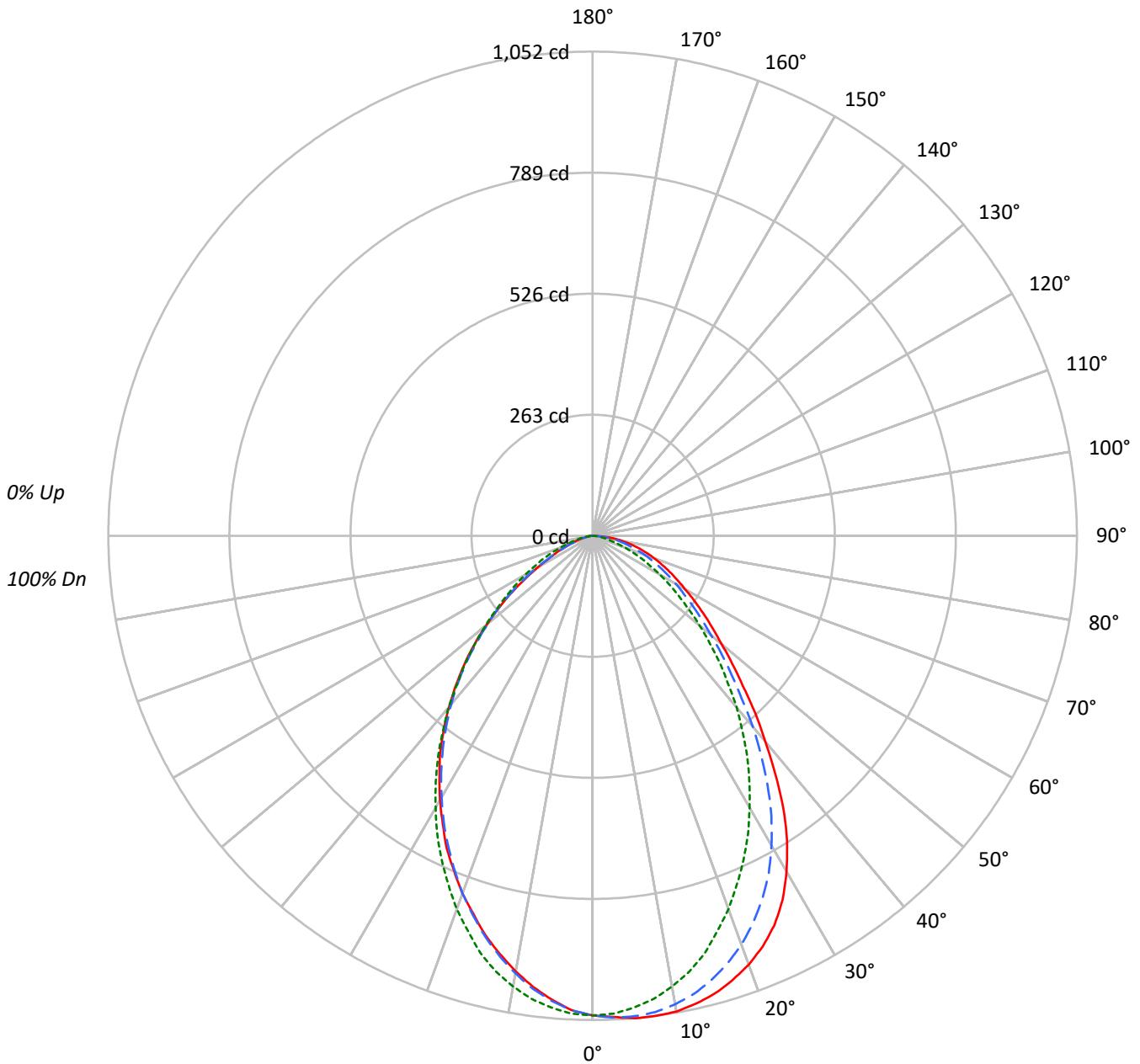
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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																			
1	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88																			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77																			
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67																			
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59																			
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53																			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47																			
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43																			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39																			
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35																			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33																			

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

	0°	90°	180°
0°	67994	67994	67994
5°	68922	67402	66269
10°	69526	65883	63677
15°	69514	63456	60720
20°	68844	59902	57389
25°	67220	55853	53982
30°	63468	51370	49946
35°	57535	46584	46002
40°	49686	41425	41305
45°	42608	36066	36334
50°	37026	30855	30408
55°	33259	26025	24364
60°	30219	21908	17941
65°	28389	18092	13183
70°	27068	14096	9652
75°	25913	10209	6554
80°	24458	7101	4358
85°	21708	4342	2171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.5	5.3
10°-20°	267.0	14.5
20°-30°	370.7	20.1
30°-40°	384.0	20.8
40°-50°	315.5	17.1
50°-60°	216.9	11.7
60°-70°	124.7	6.7
70°-80°	57.3	3.1
80°-90°	14.0	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°	735.2	39.8
0°-40°	1119.2	60.6
0°-60°	1651.6	89.4
0°-90°	1847.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1847.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1042	1042	1042	1042	1042	
5°	1052	1048	1029	1015	1012	100
15°	1029	999	940	902	899	290
25°	934	872	776	743	750	427
35°	722	663	585	568	578	448
45°	462	427	391	386	394	360
55°	292	265	229	216	214	263
65°	184	161	117	82	85	183
75°	103	81	40	26	26	109
85°	29	20	6	3	3	32
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°	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2
2.5°	1046.6	1055.2	1049.5	1048.0	1051.0	1051.0	1051.0	1046.6	1049.5	1045.1	1048.0
5°	1052.4	1059.6	1053.9	1051.0	1053.9	1055.2	1051.0	1048.0	1052.4	1046.6	1048.0
7.5°	1052.4	1059.6	1053.9	1052.4	1053.9	1053.9	1052.4	1046.6	1049.5	1043.8	1043.8
10°	1049.5	1055.2	1049.5	1046.6	1048.0	1046.6	1046.6	1039.4	1040.9	1033.6	1033.6
12.5°	1040.9	1048.0	1040.9	1037.9	1037.9	1037.9	1033.6	1027.8	1029.2	1020.5	1019.1
15°	1029.2	1035.0	1027.8	1024.9	1024.9	1023.5	1020.5	1011.9	1011.9	1003.1	998.9
17.5°	1011.9	1017.6	1011.9	1007.5	1006.1	1003.1	1000.2	991.6	988.8	978.6	974.2
20°	991.6	996.0	990.1	985.8	982.9	980.0	974.2	965.5	962.6	952.5	945.2
22.5°	965.5	971.4	962.6	958.2	955.4	951.1	945.2	936.6	932.2	919.2	910.5
25°	933.8	936.6	929.4	925.0	919.2	916.4	912.0	900.4	896.0	881.6	871.5
27.5°	893.1	896.0	887.4	884.5	877.2	874.4	868.5	858.4	852.6	838.1	828.0
30°	842.5	845.4	839.6	835.2	829.5	823.6	819.4	809.2	800.5	786.0	777.4
32.5°	786.0	790.4	784.6	778.8	768.6	770.1	762.9	752.8	745.5	732.5	722.4
35°	722.4	725.2	718.0	716.5	710.8	705.0	697.8	690.5	686.1	671.6	663.0
37.5°	651.4	658.6	651.4	645.6	642.8	638.4	634.0	623.9	621.0	612.4	600.8
40°	583.4	587.8	583.4	577.6	573.2	573.2	567.5	561.6	554.4	545.8	541.4
42.5°	522.6	519.6	518.2	515.4	509.5	508.1	506.6	499.4	495.1	486.4	479.1
45°	461.8	463.2	460.4	458.9	454.5	451.6	448.8	443.0	441.5	432.9	427.0
47.5°	411.1	409.6	406.8	406.8	403.9	401.0	398.1	393.8	392.2	385.0	379.2
50°	364.8	366.2	364.8	363.4	359.0	357.5	354.6	351.8	348.9	341.6	335.9
52.5°	327.1	325.8	324.2	324.2	319.9	318.5	315.6	312.6	309.8	302.5	298.2
55°	292.4	292.4	291.0	289.5	285.1	283.8	282.2	279.4	275.0	269.2	264.9
57.5°	260.6	260.6	259.1	257.6	254.8	254.8	251.9	249.0	246.1	240.2	234.5
60°	231.6	233.0	231.6	230.1	227.2	227.2	225.9	221.5	220.0	212.8	208.5
62.5°	207.0	207.0	207.0	205.5	204.1	201.2	201.2	196.9	194.0	189.6	183.9
65°	183.9	183.9	183.9	182.4	179.5	178.0	176.6	173.8	170.9	166.5	160.6
67.5°	162.1	162.1	162.1	160.6	157.8	156.4	154.9	153.5	149.1	144.8	139.0
70°	141.9	141.9	140.4	139.0	137.5	136.1	134.6	131.8	128.9	123.0	118.8
72.5°	121.6	121.6	121.6	118.8	117.2	117.2	114.4	112.9	110.0	104.2	99.9
75°	102.8	101.4	101.4	99.9	98.4	97.0	95.5	94.1	89.8	86.9	81.1
77.5°	84.0	84.0	82.5	81.1	81.1	79.6	78.1	75.2	73.9	69.5	65.1
80°	65.1	65.1	65.1	65.1	63.8	62.2	62.2	59.4	57.9	53.5	50.6
82.5°	49.2	47.8	47.8	47.8	46.4	44.9	44.9	43.4	42.0	39.1	36.2
85°	29.0	27.5	27.5	27.5	26.0	26.0	24.6	24.6	23.1	20.2	20.2
87.5°	8.6	8.6	10.1	10.1	8.6	8.6	8.6	8.6	8.6	7.2	7.2
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°	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2
2.5°	1045.1	1049.5	1043.8	1042.2	1048.0	1045.1	1043.8	1040.9	1042.2	1039.4	1035.0
5°	1043.8	1049.5	1042.2	1037.9	1045.1	1040.9	1037.9	1035.0	1035.0	1029.2	1026.4
7.5°	1039.4	1042.2	1035.0	1030.6	1035.0	1030.6	1027.8	1023.5	1022.0	1014.8	1010.4
10°	1027.8	1030.6	1022.0	1016.2	1020.5	1014.8	1010.4	1006.1	1003.1	994.5	988.8
12.5°	1011.9	1013.2	1003.1	996.0	998.9	994.5	987.2	981.5	978.6	969.9	962.6
15°	990.1	991.6	980.0	969.9	972.8	967.0	958.2	952.5	948.1	939.5	929.4
17.5°	964.1	962.6	949.6	939.5	940.9	933.8	925.0	916.4	910.5	900.4	893.1
20°	935.1	930.8	916.4	904.8	906.2	897.5	887.4	878.6	871.5	862.8	852.6
22.5°	899.0	893.1	880.1	865.6	867.1	859.9	845.4	838.1	830.9	819.4	810.6
25°	859.9	851.1	838.1	823.6	823.6	815.0	803.4	794.8	787.5	775.9	765.8
27.5°	813.5	809.2	791.9	780.2	778.8	770.1	760.0	749.9	741.1	731.0	720.9
30°	762.9	755.6	742.6	729.6	726.8	719.5	709.4	697.8	692.0	681.9	673.1
32.5°	709.4	702.1	687.6	674.6	673.1	667.4	658.6	647.1	641.2	634.0	628.2
35°	648.5	645.6	631.1	621.0	621.0	615.2	606.5	596.4	592.1	584.9	577.6
37.5°	590.6	586.2	573.2	564.5	564.5	557.4	548.6	544.2	540.0	534.1	529.9
40°	529.9	526.9	516.8	508.1	509.5	503.8	498.0	492.1	489.2	486.4	482.0
42.5°	473.4	470.5	463.2	456.0	456.0	451.6	445.9	441.5	438.6	434.2	432.9
45°	422.8	418.4	412.6	405.4	405.4	401.0	398.1	395.2	393.8	390.9	386.5
47.5°	373.5	370.6	364.8	357.5	357.5	357.5	351.8	347.4	347.4	344.5	343.1
50°	331.5	327.1	322.8	317.0	317.0	314.1	309.8	305.5	305.5	304.0	301.1
52.5°	292.4	289.5	283.8	277.9	277.9	275.0	270.8	269.2	267.8	263.5	262.0
55°	259.1	256.2	251.9	244.6	243.2	241.8	237.4	234.5	233.0	228.8	228.8
57.5°	228.8	225.9	218.6	214.2	212.8	209.9	205.5	202.6	201.2	198.4	195.4
60°	202.6	198.4	192.5	186.8	185.2	182.4	178.0	175.1	173.8	167.9	165.0
62.5°	178.0	173.8	167.9	162.1	160.6	157.8	152.0	149.1	146.2	140.4	137.5
65°	154.9	150.5	144.8	139.0	136.1	134.6	128.9	124.5	121.6	117.2	111.5
67.5°	133.1	128.9	123.0	115.8	115.8	111.5	107.1	102.8	98.4	94.1	89.8
70°	112.9	108.6	102.8	97.0	95.5	92.6	88.2	82.5	79.6	73.9	69.5
72.5°	94.1	89.8	84.0	78.1	76.8	73.9	69.5	63.8	59.4	55.0	50.6
75°	76.8	72.4	66.6	62.2	60.8	57.9	53.5	47.8	43.4	40.5	36.2
77.5°	60.8	56.5	52.1	47.8	46.4	43.4	39.1	36.2	31.9	29.0	24.6
80°	46.4	43.4	39.1	36.2	34.8	31.9	29.0	24.6	21.8	18.9	17.4
82.5°	33.2	30.4	27.5	23.1	23.1	20.2	18.9	15.9	13.0	11.6	10.1
85°	18.9	15.9	14.5	13.0	11.6	11.6	10.1	8.6	7.2	5.8	5.8
87.5°	5.8	5.8	4.4	4.4	4.4	4.4	2.9	2.9	2.9	2.9	2.9
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°	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2
2.5°	1035.0	1036.5	1033.6	1036.5	1033.6	1035.0	1032.1	1035.0	1032.1	1035.0	1029.2
5°	1024.9	1024.9	1020.5	1023.5	1020.5	1022.0	1016.2	1017.6	1014.8	1017.6	1011.9
7.5°	1007.5	1009.0	1001.8	1004.6	1000.2	1000.2	996.0	997.4	993.0	994.5	990.1
10°	987.2	985.8	978.6	981.5	975.6	975.6	971.4	971.4	965.5	967.0	961.2
12.5°	958.2	956.9	948.1	951.1	945.2	945.2	940.9	940.9	935.1	938.0	932.2
15°	925.0	923.5	914.9	916.4	910.5	910.5	904.8	906.2	901.9	904.8	899.0
17.5°	887.4	885.9	877.2	878.6	871.5	872.9	868.5	867.1	864.2	865.6	861.4
20°	848.2	845.4	836.8	838.1	835.2	830.9	828.0	829.5	826.6	829.5	825.1
22.5°	807.8	802.0	794.8	794.8	791.9	791.9	787.5	790.4	784.6	788.9	786.0
25°	761.4	757.1	751.2	754.2	748.4	748.4	744.0	745.5	742.6	745.5	742.6
27.5°	716.5	713.6	705.0	707.9	703.5	705.0	700.6	702.1	700.6	703.5	700.6
30°	668.8	667.4	661.5	661.5	660.1	658.6	657.2	657.2	655.8	660.1	657.2
32.5°	623.9	619.6	613.8	618.1	610.9	615.2	612.4	615.2	612.4	615.2	613.8
35°	577.6	576.1	568.9	570.4	568.9	568.9	567.5	567.5	567.5	571.8	571.8
37.5°	528.4	526.9	522.6	524.0	521.1	519.6	519.6	522.6	522.6	525.5	525.5
40°	480.6	482.0	477.8	477.8	476.2	476.2	476.2	479.1	477.8	480.6	479.1
42.5°	432.9	432.9	428.5	429.9	428.5	429.9	429.9	432.9	432.9	434.2	432.9
45°	388.0	388.0	386.5	388.0	385.0	386.5	385.0	388.0	386.5	388.0	388.0
47.5°	343.1	343.1	343.1	341.6	341.6	341.6	341.6	341.6	340.1	343.1	341.6
50°	301.1	302.5	301.1	301.1	299.6	301.1	299.6	299.6	296.8	298.2	298.2
52.5°	263.5	263.5	260.6	260.6	260.6	259.1	259.1	259.1	257.6	257.6	254.8
55°	227.2	227.2	224.4	224.4	222.9	221.5	220.0	220.0	215.8	215.8	211.4
57.5°	194.0	192.5	188.1	188.1	185.2	183.9	182.4	181.0	178.0	175.1	173.8
60°	163.6	160.6	157.8	156.4	153.5	150.5	147.6	144.8	141.9	140.4	139.0
62.5°	134.6	130.2	127.4	126.0	123.0	118.8	115.8	112.9	110.0	108.6	105.6
65°	108.6	104.2	99.9	98.4	95.5	92.6	88.2	85.4	82.5	81.1	81.1
67.5°	85.4	81.1	75.2	75.2	72.4	69.5	66.6	63.8	62.2	63.8	63.8
70°	63.8	60.8	56.5	55.0	52.1	49.2	47.8	47.8	47.8	49.2	47.8
72.5°	47.8	43.4	40.5	39.1	37.6	36.2	36.2	36.2	34.8	36.2	36.2
75°	33.2	30.4	27.5	27.5	26.0	26.0	26.0	26.0	26.0	26.0	26.0
77.5°	23.1	20.2	18.9	18.9	18.9	17.4	17.4	17.4	17.4	17.4	17.4
80°	14.5	14.5	13.0	13.0	11.6	11.6	11.6	11.6	11.6	11.6	11.6
82.5°	8.6	8.6	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
85°	4.4	4.4	4.4	4.4	4.4	2.9	2.9	2.9	2.9	2.9	2.9
87.5°	1.5	1.5	1.5	1.5	1.5	2.9	2.9	2.9	2.9	2.9	2.9
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: P252473

CATALOG NUMBER: LE\_6B20D010 EC6B10209030 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2
2.5°	1029.2	1033.6	1027.8	1032.1	1030.6	1029.2	1026.4	1032.1
5°	1011.9	1013.2	1007.5	1013.2	1011.9	1009.0	1006.1	1011.9
7.5°	987.2	991.6	984.4	990.1	988.8	985.8	982.9	988.8
10°	959.8	964.1	958.2	962.6	962.6	959.8	955.4	961.2
12.5°	929.4	932.2	926.5	932.2	930.8	927.9	926.5	930.8
15°	896.0	900.4	894.6	899.0	897.5	896.0	894.6	899.0
17.5°	859.9	864.2	859.9	864.2	864.2	859.9	858.4	861.4
20°	823.6	826.6	822.2	826.6	825.1	825.1	822.2	826.6
22.5°	783.1	787.5	784.6	787.5	786.0	786.0	784.6	787.5
25°	742.6	747.0	742.6	747.0	745.5	745.5	742.6	749.9
27.5°	702.1	705.0	700.6	706.4	705.0	702.1	703.5	705.0
30°	658.6	661.5	658.6	663.0	663.0	663.0	660.1	663.0
32.5°	615.2	619.6	615.2	619.6	618.1	618.1	616.6	619.6
35°	571.8	573.2	570.4	574.8	574.8	576.1	573.2	577.6
37.5°	526.9	528.4	526.9	528.4	531.2	526.9	529.9	531.2
40°	480.6	483.5	482.0	483.5	483.5	485.0	483.5	485.0
42.5°	434.2	437.1	434.2	438.6	437.1	437.1	438.6	438.6
45°	386.5	390.9	388.0	390.9	392.2	390.9	390.9	393.8
47.5°	341.6	344.5	343.1	344.5	344.5	344.5	344.5	347.4
50°	296.8	298.2	298.2	299.6	299.6	301.1	298.2	299.6
52.5°	251.9	254.8	254.8	254.8	253.4	254.8	254.8	254.8
55°	211.4	212.8	209.9	212.8	212.8	211.4	211.4	214.2
57.5°	172.2	172.2	172.2	172.2	172.2	170.9	172.2	172.2
60°	136.1	137.5	136.1	136.1	136.1	136.1	134.6	137.5
62.5°	105.6	105.6	104.2	105.6	105.6	105.6	107.1	107.1
65°	82.5	84.0	82.5	84.0	84.0	84.0	84.0	85.4
67.5°	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
70°	49.2	49.2	49.2	50.6	49.2	49.2	49.2	50.6
72.5°	36.2	36.2	36.2	36.2	36.2	36.2	37.6	37.6
75°	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
77.5°	17.4	17.4	17.4	18.9	17.4	18.9	17.4	17.4
80°	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
82.5°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
85°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
87.5°	2.9	2.9	2.9	2.9	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



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















(END OF REPORT)