

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: P252373

Luminaire Tested: **LE\_6B20D010 EC6B10209727 6LBLWW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252373  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B20D010 EC6B10209727 6LBLWW1LI  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1645.0 lumens  
Efficiency: N/A  
Efficacy: 79.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

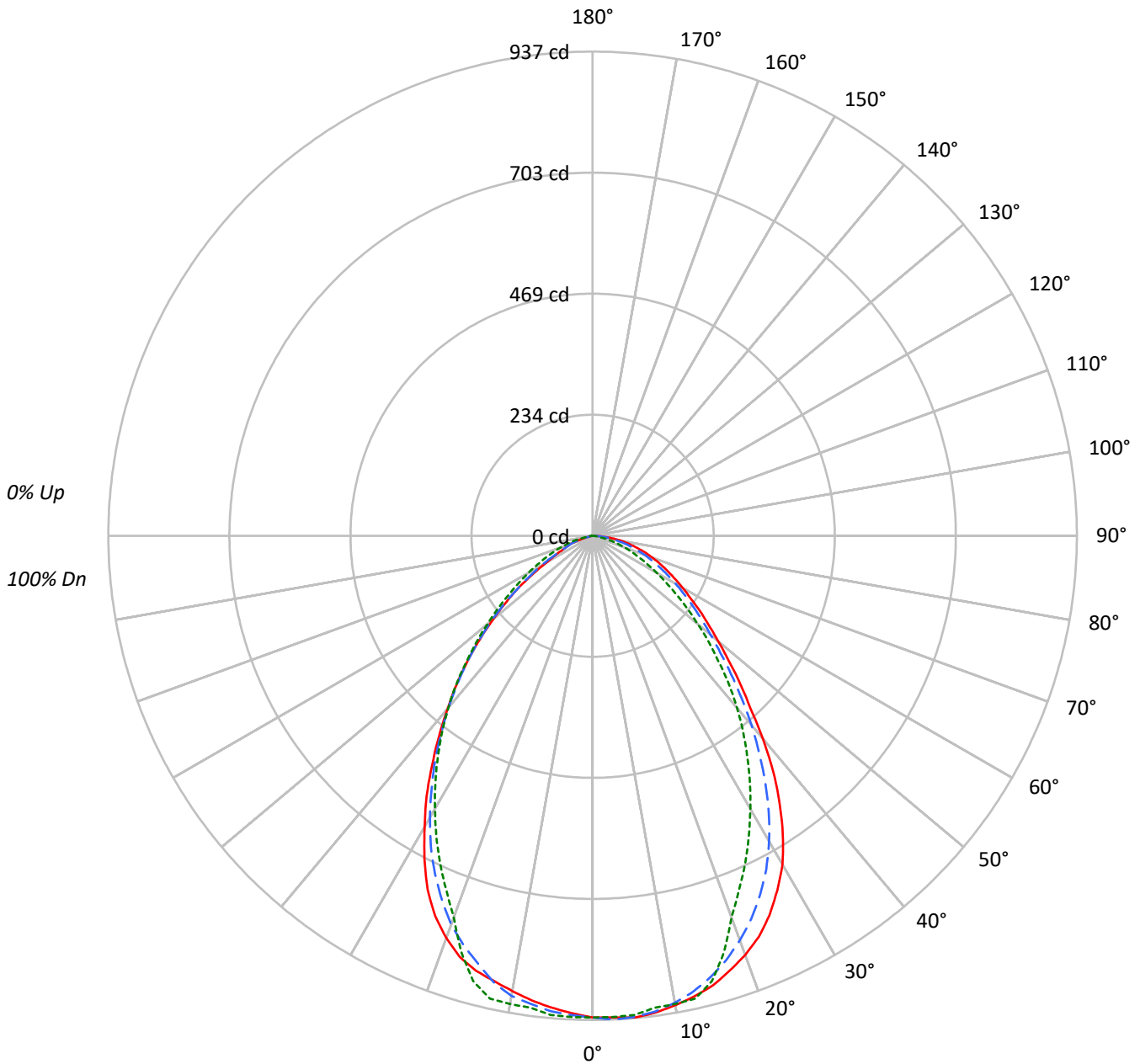
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252373

CATALOG NUMBER: LE\_6B20D010 EC6B10209727 6LBLWW1LI

### Luminous Intensity Polar Plot





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CATALOG NUMBER: LE\_6B20D010 EC6B10209727 6LBLWW1LI

**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								
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77								
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68								
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60								
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54								
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48								
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44								
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40								
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36								
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33								

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

	0°	90°	180°
0°	60811	60811	60811
5°	61285	60964	60015
10°	61106	60947	59258
15°	60828	60254	58863
20°	59923	54542	57486
25°	58294	50282	54378
30°	55355	45961	48967
35°	50224	41558	43095
40°	43605	37013	37115
45°	37192	31831	31499
50°	32185	26907	25435
55°	28777	22430	19689
60°	26227	18646	13257
65°	24483	15314	9895
70°	23310	12475	8317
75°	21955	8848	2748
80°	20889	4546	902
85°	17217	2695	0



TEST NUMBER: P252373

CATALOG NUMBER: LE\_6B20D010 EC6B10209727 6LBLWW1LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.0	5.4
10°-20°	246.2	15.0
20°-30°	339.8	20.7
30°-40°	345.8	21.0
40°-50°	277.9	16.9
50°-60°	184.8	11.2
60°-70°	105.3	6.4
70°-80°	47.3	2.9
80°-90°	10.0	0.6
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°	674.0	41.0
0°-40°	1019.8	62.0
0°-60°	1482.4	90.1
0°-90°	1645.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1645.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	932	932	932	932	932	
5°	936	934	931	924	916	89
15°	901	884	892	857	872	253
25°	810	766	698	722	755	371
35°	631	582	522	531	541	392
45°	403	379	345	341	341	313
55°	253	236	197	176	173	227
65°	159	142	99	64	64	158
75°	87	73	35	14	11	93
85°	23	16	4	1	0	27
90°	0	0	0	0	0	



TEST NUMBER: P252373

CATALOG NUMBER: LE\_6B20D010 EC6B10209727 6LBLWW1LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1
2.5°	933.2	938.1	936.9	935.8	936.9	935.8	933.2	933.2	930.9	930.9	936.9
5°	935.8	938.1	936.9	935.8	935.8	936.9	932.1	932.1	929.6	928.5	934.5
7.5°	930.9	934.5	932.1	932.1	930.9	932.1	927.2	927.2	923.6	922.4	928.5
10°	922.4	927.2	924.8	924.8	924.8	922.4	920.0	918.8	915.1	913.9	917.5
12.5°	912.8	916.4	915.1	912.8	912.8	912.8	907.9	906.6	901.8	899.4	903.0
15°	900.6	903.0	901.8	900.6	898.1	898.1	893.4	890.9	886.1	881.2	883.6
17.5°	882.5	886.1	883.6	882.5	878.8	878.8	874.0	871.5	864.2	859.5	860.6
20°	863.1	864.2	863.1	860.6	857.0	855.8	851.0	846.1	840.1	834.0	832.8
22.5°	840.1	841.2	837.6	835.2	831.6	830.4	824.4	820.8	811.0	803.8	802.5
25°	809.8	811.0	811.0	805.0	802.5	800.1	794.1	788.0	779.5	769.9	766.2
27.5°	773.5	777.1	774.8	768.6	763.9	762.6	756.5	751.8	740.9	732.4	727.5
30°	734.8	733.5	732.4	728.8	721.5	720.2	714.1	708.1	699.6	688.8	682.8
32.5°	685.1	685.1	683.9	680.2	673.0	670.6	665.8	658.5	648.9	640.4	634.2
35°	630.6	631.9	630.6	623.4	618.5	616.1	613.8	605.2	596.8	587.1	582.2
37.5°	573.8	570.1	571.4	565.2	559.2	561.6	554.4	550.8	541.1	533.9	529.0
40°	512.0	514.5	509.6	507.2	503.5	499.9	499.9	493.9	489.0	480.5	478.1
42.5°	451.5	455.1	453.9	451.5	446.6	447.9	441.9	439.4	433.4	429.8	426.1
45°	403.1	403.1	403.1	400.6	399.5	397.0	393.4	389.8	386.1	381.2	378.9
47.5°	355.9	355.9	357.1	354.6	352.2	351.0	348.6	348.6	342.6	337.8	335.2
50°	317.1	317.1	317.1	314.8	312.2	312.2	309.9	307.5	303.9	300.2	297.8
52.5°	282.0	282.0	282.0	279.6	278.4	277.2	276.0	274.8	269.9	267.5	265.1
55°	253.0	251.8	251.8	250.6	248.1	248.1	247.0	244.5	240.9	237.2	236.0
57.5°	224.0	225.1	224.0	224.0	221.5	221.5	219.1	217.9	214.2	211.9	209.4
60°	201.0	201.0	201.0	199.8	197.2	198.5	196.1	194.9	191.2	187.6	185.2
62.5°	178.0	179.1	179.1	178.0	175.5	175.5	174.2	173.1	169.5	165.9	162.2
65°	158.6	158.6	158.6	157.4	156.1	156.1	155.0	153.8	150.1	145.2	141.6
67.5°	140.4	139.2	139.2	139.2	138.0	136.8	135.6	134.4	130.8	127.1	122.2
70°	122.2	122.2	122.2	121.0	118.6	119.9	118.6	117.4	113.8	110.1	106.5
72.5°	105.2	105.2	104.1	102.9	102.9	101.6	101.6	100.5	96.9	92.0	88.4
75°	87.1	87.1	87.1	87.1	84.8	86.0	83.5	82.4	79.9	76.2	72.6
77.5°	71.4	71.4	71.4	70.2	69.0	69.0	67.8	66.6	63.0	60.5	55.6
80°	55.6	55.6	55.6	55.6	54.5	53.2	52.0	50.9	48.4	44.8	41.1
82.5°	41.1	41.1	40.0	40.0	40.0	38.8	37.5	36.4	33.9	31.5	29.0
85°	23.0	24.2	24.2	21.8	23.0	21.8	21.8	19.4	19.4	17.0	15.8
87.5°	8.5	7.2	7.2	7.2	7.2	7.2	7.2	6.0	6.0	6.0	4.9
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: P252373

CATALOG NUMBER: LE\_6B20D010 EC6B10209727 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1
2.5°	932.1	930.9	935.8	935.8	928.5	932.1	933.2	930.9	930.9	932.1	928.5
5°	929.6	927.2	932.1	933.2	926.0	929.6	930.9	928.5	929.6	930.9	926.0
7.5°	921.1	921.1	924.8	926.0	918.8	922.4	922.4	920.0	921.1	921.1	917.5
10°	912.8	909.1	912.8	912.8	906.6	907.9	910.2	909.1	913.9	920.0	920.0
12.5°	897.0	893.4	899.4	899.4	895.8	900.6	906.6	910.2	915.1	917.5	910.2
15°	877.6	878.8	889.8	898.1	894.5	901.8	907.9	905.5	899.4	892.1	881.2
17.5°	852.1	848.5	858.2	863.1	858.2	860.6	865.5	860.6	851.0	844.9	830.4
20°	823.1	813.5	813.5	811.0	802.5	802.5	801.4	792.9	789.2	785.6	779.5
22.5°	790.5	779.5	775.9	768.6	761.4	760.1	756.5	748.1	743.2	740.9	733.5
25°	752.9	743.2	737.1	729.9	719.0	716.6	713.0	704.5	702.1	698.5	692.4
27.5°	714.1	702.1	693.6	686.4	676.6	675.5	668.1	662.1	657.2	654.9	650.0
30°	669.4	656.1	650.0	640.4	633.1	630.6	624.6	616.1	612.5	610.1	606.5
32.5°	619.8	608.9	602.9	594.4	584.6	585.9	578.6	571.4	568.9	566.5	562.9
35°	571.4	560.5	553.2	545.9	539.9	537.5	532.6	526.5	522.9	521.8	519.2
37.5°	518.1	509.6	503.5	496.2	491.5	489.0	486.6	480.5	478.1	478.1	473.2
40°	466.0	458.8	453.9	450.2	444.2	443.0	440.6	437.0	435.8	434.6	430.9
42.5°	418.9	409.1	405.5	403.1	399.5	397.0	395.9	393.4	392.2	391.0	387.4
45°	374.0	365.6	361.9	359.5	355.9	354.6	353.5	349.9	347.4	345.0	343.8
47.5°	330.5	324.4	323.2	317.1	314.8	312.2	309.9	307.5	306.2	305.0	300.2
50°	292.9	289.2	283.2	279.6	277.2	276.0	271.1	267.5	266.2	265.1	261.5
52.5°	259.0	254.2	250.6	244.5	243.2	240.9	238.5	233.6	231.2	230.0	226.4
55°	228.8	225.1	220.2	215.5	211.9	210.6	207.0	202.1	199.8	197.2	194.9
57.5°	203.4	197.2	192.5	187.6	185.2	181.6	178.0	175.5	171.9	168.2	164.6
60°	179.1	174.2	168.2	163.4	161.0	158.6	153.8	150.1	146.5	142.9	139.2
62.5°	156.1	151.2	145.2	140.4	138.0	135.6	130.8	127.1	123.5	119.9	115.0
65°	135.6	130.8	125.9	121.0	118.6	116.2	111.4	106.5	102.9	99.2	94.4
67.5°	118.6	112.6	107.8	102.9	100.5	98.0	93.2	89.6	84.8	81.1	76.2
70°	100.5	95.6	92.0	87.1	84.8	82.4	77.5	72.6	69.0	65.4	60.5
72.5°	84.8	78.6	75.0	70.2	67.8	66.6	61.8	58.1	54.5	49.6	46.0
75°	67.8	63.0	58.1	54.5	52.0	50.9	46.0	42.4	38.8	35.1	31.5
77.5°	52.0	48.4	43.6	40.0	37.5	36.4	31.5	27.9	24.2	21.8	18.1
80°	38.8	33.9	31.5	27.9	26.6	24.2	21.8	18.1	15.8	12.1	9.6
82.5°	26.6	23.0	20.6	18.1	17.0	15.8	13.4	10.9	8.5	7.2	6.0
85°	14.5	12.1	10.9	9.6	8.5	8.5	7.2	6.0	4.9	3.6	2.4
87.5°	4.9	3.6	3.6	3.6	3.6	2.4	2.4	2.4	1.2	1.2	1.2
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: P252373

CATALOG NUMBER: LE\_6B20D010 EC6B10209727 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1
2.5°	930.9	930.9	930.9	929.6	929.6	929.6	928.5	933.2	928.5	927.2	930.9
5°	929.6	927.2	927.2	927.2	927.2	926.0	924.8	927.2	923.6	922.4	922.4
7.5°	922.4	921.1	921.1	920.0	918.8	917.5	916.4	917.5	913.9	912.8	912.8
10°	923.6	921.1	921.1	917.5	915.1	911.5	907.9	909.1	904.2	900.6	900.6
12.5°	909.1	903.0	899.4	895.8	893.4	892.1	887.2	889.8	884.9	883.6	883.6
15°	876.4	869.1	863.1	860.6	860.6	858.2	854.6	859.5	857.0	858.2	864.2
17.5°	825.5	821.9	818.2	817.1	818.2	820.8	823.1	830.4	830.4	834.0	840.1
20°	780.8	778.4	780.8	780.8	782.0	786.9	791.6	797.8	800.1	803.8	812.2
22.5°	737.1	737.1	739.6	743.2	742.0	750.5	751.8	762.6	762.6	769.9	777.1
25°	694.9	694.9	697.2	698.5	700.9	705.8	710.5	719.0	721.5	728.8	734.8
27.5°	653.6	652.5	652.5	653.6	656.1	662.1	664.5	674.2	677.9	682.8	688.8
30°	607.6	606.5	608.9	611.2	610.1	616.1	619.8	627.0	629.5	634.2	639.1
32.5°	564.1	564.1	564.1	566.5	566.5	571.4	571.4	579.9	579.9	583.5	588.2
35°	519.2	519.2	520.5	521.8	522.9	524.1	525.4	530.2	531.4	532.6	535.0
37.5°	476.9	475.8	476.9	476.9	474.5	479.4	479.4	484.2	480.5	484.2	485.4
40°	433.4	433.4	432.1	432.1	432.1	434.6	432.1	435.8	433.4	435.8	434.6
42.5°	388.6	388.6	386.1	388.6	387.4	387.4	387.4	389.8	386.1	388.6	389.8
45°	343.8	342.6	342.6	341.4	341.4	341.4	342.6	342.6	341.4	343.8	343.8
47.5°	300.2	299.0	299.0	299.0	299.0	300.2	296.6	299.0	296.6	296.6	296.6
50°	262.6	261.5	260.2	259.0	257.9	257.9	256.6	256.6	254.2	253.0	251.8
52.5°	226.4	225.1	222.8	222.8	221.5	220.2	216.6	216.6	213.0	211.9	211.9
55°	193.6	190.0	188.9	186.4	186.4	184.0	181.6	179.1	175.5	173.1	173.1
57.5°	163.4	159.8	157.4	156.1	155.0	152.5	147.6	146.5	141.6	140.4	139.2
60°	136.8	133.1	129.5	127.1	125.9	122.2	117.4	115.0	112.6	109.0	105.2
62.5°	111.4	107.8	102.9	101.6	99.2	95.6	92.0	88.4	86.0	82.4	79.9
65°	89.6	86.0	82.4	79.9	77.5	73.9	70.2	66.6	64.1	63.0	61.8
67.5°	72.6	67.8	64.1	63.0	60.5	58.1	54.5	53.2	50.9	50.9	50.9
70°	56.9	53.2	49.6	48.4	47.2	44.8	42.4	42.4	42.4	42.4	42.4
72.5°	42.4	40.0	36.4	35.1	33.9	32.6	30.2	31.5	30.2	30.2	30.2
75°	26.6	24.2	21.8	20.6	19.4	18.1	17.0	15.8	14.5	13.4	13.4
77.5°	14.5	12.1	10.9	9.6	9.6	8.5	7.2	7.2	6.0	6.0	6.0
80°	8.5	7.2	6.0	4.9	4.9	3.6	3.6	3.6	3.6	2.4	2.4
82.5°	4.9	3.6	2.4	2.4	2.4	2.4	1.2	1.2	1.2	1.2	1.2
85°	2.4	2.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0
87.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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: P252373

CATALOG NUMBER: LE\_6B20D010 EC6B10209727 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	932.1	932.1	932.1	932.1	932.1	932.1	932.1	932.1
2.5°	924.8	928.5	924.8	928.5	928.5	928.5	928.5	924.8
5°	918.8	921.1	917.5	920.0	921.1	920.0	920.0	916.4
7.5°	907.9	910.2	906.6	910.2	911.5	910.2	909.1	906.6
10°	897.0	898.1	894.5	897.0	899.4	899.4	898.1	894.5
12.5°	880.0	883.6	880.0	882.5	884.9	886.1	886.1	882.5
15°	860.6	866.8	864.2	867.9	871.5	872.8	872.8	871.5
17.5°	841.2	847.4	843.8	849.8	853.4	855.8	857.0	854.6
20°	813.5	820.8	818.2	823.1	828.0	831.6	831.6	828.0
22.5°	777.1	786.9	785.6	789.2	795.2	796.5	798.9	796.5
25°	737.1	744.5	743.2	746.9	754.1	754.1	755.4	755.4
27.5°	691.1	698.5	697.2	699.6	704.5	705.8	706.9	704.5
30°	641.5	645.1	645.1	648.9	652.5	653.6	653.6	650.0
32.5°	587.1	591.9	594.4	593.1	596.8	599.2	598.0	598.0
35°	537.5	538.6	539.9	541.1	542.2	544.8	542.2	541.1
37.5°	484.2	487.9	485.4	487.9	490.2	489.0	487.9	487.9
40°	435.8	437.0	434.6	437.0	438.2	438.2	438.2	435.8
42.5°	387.4	389.8	387.4	389.8	389.8	389.8	389.8	388.6
45°	338.9	341.4	341.4	342.6	342.6	341.4	341.4	341.4
47.5°	294.1	296.6	294.1	296.6	297.8	295.4	295.4	295.4
50°	251.8	250.6	250.6	251.8	251.8	251.8	251.8	250.6
52.5°	208.2	209.4	209.4	209.4	210.6	209.4	210.6	210.6
55°	170.6	170.6	170.6	171.9	170.6	170.6	171.9	173.1
57.5°	136.8	135.6	134.4	134.4	135.6	134.4	134.4	134.4
60°	105.2	104.1	102.9	102.9	102.9	102.9	102.9	101.6
62.5°	78.6	78.6	78.6	79.9	79.9	79.9	79.9	81.1
65°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	64.1
67.5°	50.9	50.9	50.9	52.0	52.0	52.0	52.0	52.0
70°	42.4	42.4	43.6	42.4	43.6	43.6	43.6	43.6
72.5°	29.0	29.0	29.0	29.0	29.0	27.9	29.0	27.9
75°	12.1	12.1	12.1	12.1	12.1	12.1	12.1	10.9
77.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	1.2	1.2	1.2	1.2	0.0	0.0	0.0
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)