

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: P252474

Luminaire Tested: **LE_6B20D010 EC6B10209035 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252474
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 EC6B10209035 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1873.8 lumens
Efficiency: N/A
Efficacy: 90.1 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

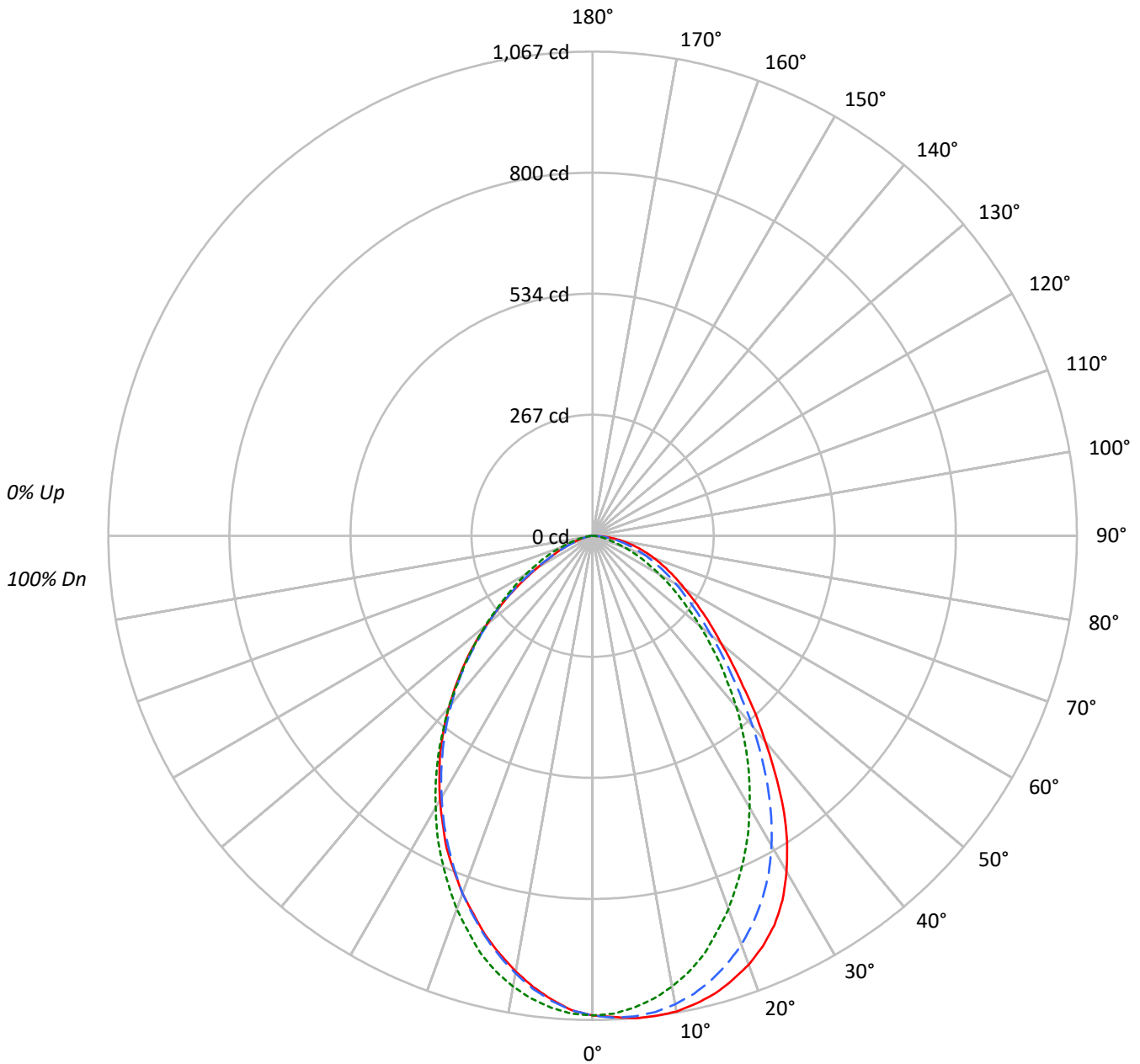
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	68966	68966	68966
5°	69904	68365	67206
10°	70513	66817	64584
15°	70507	64361	61585
20°	69816	60749	58208
25°	68170	56645	54745
30°	64372	52093	50654
35°	58347	47237	46656
40°	50384	42004	41893
45°	43217	36574	36850
50°	37554	31301	30845
55°	33736	26389	24705
60°	30650	22208	18202
65°	28790	18355	13369
70°	27449	14287	9805
75°	26266	10360	6655
80°	24834	7176	4433
85°	22007	4416	2171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.9	5.3
10°-20°	270.8	14.5
20°-30°	376.0	20.1
30°-40°	389.4	20.8
40°-50°	320.0	17.1
50°-60°	220.0	11.7
60°-70°	126.4	6.7
70°-80°	58.1	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°	745.7	39.8
0°-40°	1135.1	60.6
0°-60°	1675.1	89.4
0°-90°	1873.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1873.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1057	1057	1057	1057	1057	
5°	1067	1063	1044	1029	1026	102
15°	1044	1013	953	915	912	294
25°	947	884	787	753	760	433
35°	733	672	593	576	586	454
45°	468	433	396	392	399	365
55°	297	269	232	219	217	267
65°	186	163	119	84	87	186
75°	104	82	41	26	26	110
85°	29	20	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°	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1061.5	1070.2	1064.4	1063.0	1065.9	1065.9	1065.9	1061.5	1064.4	1060.0	1063.0
5°	1067.4	1074.8	1068.9	1065.9	1068.9	1070.2	1065.9	1063.0	1067.4	1061.5	1063.0
7.5°	1067.4	1074.8	1068.9	1067.4	1068.9	1068.9	1067.4	1061.5	1064.4	1058.5	1058.5
10°	1064.4	1070.2	1064.4	1061.5	1063.0	1061.5	1061.5	1054.1	1055.6	1048.2	1048.2
12.5°	1055.6	1063.0	1055.6	1052.6	1052.6	1052.6	1048.2	1042.4	1043.9	1035.0	1033.6
15°	1043.9	1049.8	1042.4	1039.5	1039.5	1038.0	1035.0	1026.2	1026.2	1017.4	1013.0
17.5°	1026.2	1032.1	1026.2	1021.9	1020.4	1017.4	1014.5	1005.6	1002.8	992.5	988.1
20°	1005.6	1010.1	1004.2	999.9	996.9	994.0	988.1	979.2	976.4	966.0	958.8
22.5°	979.2	985.1	976.4	971.9	969.0	964.6	958.8	949.9	945.5	932.2	923.5
25°	947.0	949.9	942.5	938.1	932.2	929.4	925.0	913.2	908.8	894.1	883.9
27.5°	905.9	908.8	900.0	897.0	889.8	886.8	880.9	870.6	864.8	850.0	839.8
30°	854.5	857.4	851.5	847.1	841.2	835.4	831.0	820.8	811.9	797.2	788.4
32.5°	797.2	801.6	795.8	789.9	779.6	781.0	773.8	763.5	756.1	742.9	732.6
35°	732.6	735.5	728.2	726.8	720.9	715.0	707.6	700.2	695.9	681.2	672.4
37.5°	660.6	668.0	660.6	654.8	651.9	647.5	643.0	632.8	629.9	621.0	609.2
40°	591.6	596.1	591.6	585.8	581.4	581.4	575.5	569.6	562.2	553.5	549.1
42.5°	530.0	527.1	525.6	522.6	516.8	515.4	513.9	506.5	502.1	493.2	486.0
45°	468.4	469.8	466.9	465.4	461.0	458.1	455.1	449.2	447.8	439.0	433.1
47.5°	417.0	415.5	412.5	412.5	409.6	406.6	403.8	399.4	397.9	390.5	384.6
50°	370.0	371.5	370.0	368.5	364.1	362.6	359.8	356.8	353.9	346.5	340.6
52.5°	331.8	330.4	328.9	328.9	324.5	323.0	320.0	317.1	314.1	306.9	302.5
55°	296.6	296.6	295.1	293.6	289.2	287.8	286.2	283.4	279.0	273.1	268.6
57.5°	264.2	264.2	262.8	261.4	258.4	258.4	255.5	252.5	249.6	243.8	237.9
60°	234.9	236.4	234.9	233.4	230.5	230.5	229.0	224.6	223.1	215.9	211.4
62.5°	210.0	210.0	210.0	208.5	207.0	204.1	204.1	199.6	196.8	192.4	186.5
65°	186.5	186.5	186.5	185.0	182.0	180.6	179.1	176.1	173.2	168.9	163.0
67.5°	164.4	164.4	164.4	163.0	160.0	158.5	157.1	155.6	151.2	146.9	141.0
70°	143.9	143.9	142.4	141.0	139.5	138.0	136.5	133.6	130.6	124.8	120.4
72.5°	123.4	123.4	123.4	120.4	118.9	118.9	116.0	114.5	111.6	105.8	101.2
75°	104.2	102.8	102.8	101.2	99.9	98.4	96.9	95.4	91.0	88.1	82.2
77.5°	85.1	85.1	83.6	82.2	82.2	80.8	79.2	76.4	74.9	70.5	66.1
80°	66.1	66.1	66.1	66.1	64.6	63.1	63.1	60.2	58.8	54.4	51.4
82.5°	49.9	48.5	48.5	48.5	47.0	45.5	45.5	44.0	42.6	39.6	36.8
85°	29.4	27.9	27.9	27.9	26.4	26.4	25.0	25.0	23.5	20.5	20.5
87.5°	8.8	8.8	10.2	10.2	8.8	8.8	8.8	8.8	8.8	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°	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1060.0	1064.4	1058.5	1057.1	1063.0	1060.0	1058.5	1055.6	1057.1	1054.1	1049.8
5°	1058.5	1064.4	1057.1	1052.6	1060.0	1055.6	1052.6	1049.8	1049.8	1043.9	1040.9
7.5°	1054.1	1057.1	1049.8	1045.4	1049.8	1045.4	1042.4	1038.0	1036.5	1029.1	1024.8
10°	1042.4	1045.4	1036.5	1030.6	1035.0	1029.1	1024.8	1020.4	1017.4	1008.6	1002.8
12.5°	1026.2	1027.8	1017.4	1010.1	1013.0	1008.6	1001.2	995.4	992.5	983.6	976.4
15°	1004.2	1005.6	994.0	983.6	986.6	980.8	971.9	966.0	961.6	952.9	942.5
17.5°	977.8	976.4	963.1	952.9	954.2	947.0	938.1	929.4	923.5	913.2	905.9
20°	948.4	944.0	929.4	917.6	919.1	910.2	900.0	891.1	883.9	875.0	864.8
22.5°	911.8	905.9	892.6	878.0	879.4	872.1	857.4	850.0	842.8	831.0	822.1
25°	872.1	863.2	850.0	835.4	835.4	826.6	814.9	806.0	798.6	786.9	776.6
27.5°	825.1	820.8	803.1	791.4	789.9	781.0	770.8	760.5	751.8	741.4	731.1
30°	773.8	766.4	753.1	740.0	737.0	729.6	719.4	707.6	701.8	691.5	682.8
32.5°	719.4	712.0	697.4	684.1	682.8	676.9	668.0	656.2	650.4	643.0	637.1
35°	657.8	654.8	640.1	629.9	629.9	624.0	615.1	604.9	600.5	593.1	585.8
37.5°	599.0	594.6	581.4	572.6	572.6	565.2	556.4	552.0	547.6	541.8	537.4
40°	537.4	534.4	524.1	515.4	516.8	510.9	505.0	499.1	496.2	493.2	488.9
42.5°	480.1	477.1	469.8	462.5	462.5	458.1	452.2	447.8	444.9	440.5	439.0
45°	428.8	424.2	418.4	411.1	411.1	406.6	403.8	400.8	399.4	396.4	392.0
47.5°	378.8	375.9	370.0	362.6	362.6	362.6	356.8	352.4	352.4	349.4	348.0
50°	336.2	331.8	327.4	321.5	321.5	318.6	314.1	309.8	309.8	308.4	305.4
52.5°	296.6	293.6	287.8	281.9	281.9	279.0	274.5	273.1	271.6	267.2	265.8
55°	262.8	259.9	255.5	248.1	246.6	245.1	240.8	237.9	236.4	232.0	232.0
57.5°	232.0	229.0	221.8	217.2	215.9	212.9	208.5	205.5	204.1	201.1	198.2
60°	205.5	201.1	195.2	189.4	187.9	185.0	180.6	177.6	176.1	170.2	167.4
62.5°	180.6	176.1	170.2	164.4	163.0	160.0	154.1	151.2	148.2	142.4	139.5
65°	157.1	152.8	146.9	141.0	138.0	136.5	130.6	126.2	123.4	118.9	113.0
67.5°	135.1	130.6	124.8	117.5	117.5	113.0	108.6	104.2	99.9	95.4	91.0
70°	114.5	110.1	104.2	98.4	96.9	94.0	89.5	83.6	80.8	74.9	70.5
72.5°	95.4	91.0	85.1	79.2	77.8	74.9	70.5	64.6	60.2	55.8	51.4
75°	77.8	73.4	67.5	63.1	61.6	58.8	54.4	48.5	44.0	41.1	36.8
77.5°	61.6	57.2	52.9	48.5	47.0	44.0	39.6	36.8	32.2	29.4	25.0
80°	47.0	44.0	39.6	36.8	35.2	32.2	29.4	25.0	22.0	19.1	17.6
82.5°	33.8	30.9	27.9	23.5	23.5	20.5	19.1	16.1	13.2	11.8	10.2
85°	19.1	16.1	14.6	13.2	11.8	11.8	10.2	8.8	7.4	5.9	5.9
87.5°	5.9	5.9	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°	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1049.8	1051.2	1048.2	1051.2	1048.2	1049.8	1046.8	1049.8	1046.8	1049.8	1043.9
5°	1039.5	1039.5	1035.0	1038.0	1035.0	1036.5	1030.6	1032.1	1029.1	1032.1	1026.2
7.5°	1021.9	1023.2	1016.0	1018.9	1014.5	1014.5	1010.1	1011.5	1007.1	1008.6	1004.2
10°	1001.2	999.9	992.5	995.4	989.5	989.5	985.1	985.1	979.2	980.8	974.9
12.5°	971.9	970.5	961.6	964.6	958.8	958.8	954.2	954.2	948.4	951.4	945.5
15°	938.1	936.6	927.9	929.4	923.5	923.5	917.6	919.1	914.6	917.6	911.8
17.5°	900.0	898.5	889.8	891.1	883.9	885.2	880.9	879.4	876.5	878.0	873.5
20°	860.4	857.4	848.6	850.0	847.1	842.8	839.8	841.2	838.4	841.2	836.9
22.5°	819.2	813.4	806.0	806.0	803.1	803.1	798.6	801.6	795.8	800.1	797.2
25°	772.2	767.9	762.0	764.9	759.0	759.0	754.6	756.1	753.1	756.1	753.1
27.5°	726.8	723.8	715.0	717.9	713.5	715.0	710.6	712.0	710.6	713.5	710.6
30°	678.2	676.9	671.0	671.0	669.5	668.0	666.5	666.5	665.1	669.5	666.5
32.5°	632.8	628.4	622.5	626.9	619.5	624.0	621.0	624.0	621.0	624.0	622.5
35°	585.8	584.4	577.0	578.5	577.0	577.0	575.5	575.5	575.5	579.9	579.9
37.5°	535.9	534.4	530.0	531.5	528.5	527.1	527.1	530.0	530.0	533.0	533.0
40°	487.4	488.9	484.5	484.5	483.0	483.0	483.0	486.0	484.5	487.4	486.0
42.5°	439.0	439.0	434.6	436.0	434.6	436.0	436.0	439.0	439.0	440.5	439.0
45°	393.5	393.5	392.0	393.5	390.5	392.0	390.5	393.5	392.0	393.5	393.5
47.5°	348.0	348.0	348.0	346.5	346.5	346.5	346.5	346.5	345.0	348.0	346.5
50°	305.4	306.9	305.4	305.4	303.9	305.4	303.9	303.9	301.0	302.5	302.5
52.5°	267.2	267.2	264.2	264.2	264.2	262.8	262.8	262.8	261.4	261.4	258.4
55°	230.5	230.5	227.6	227.6	226.1	224.6	223.1	223.1	218.8	218.8	214.4
57.5°	196.8	195.2	190.9	190.9	187.9	186.5	185.0	183.5	180.6	177.6	176.1
60°	165.9	163.0	160.0	158.5	155.6	152.8	149.8	146.9	143.9	142.4	141.0
62.5°	136.5	132.1	129.2	127.8	124.8	120.4	117.5	114.5	111.6	110.1	107.1
65°	110.1	105.8	101.2	99.9	96.9	94.0	89.5	86.6	83.6	82.2	82.2
67.5°	86.6	82.2	76.4	76.4	73.4	70.5	67.5	64.6	63.1	64.6	64.6
70°	64.6	61.6	57.2	55.8	52.9	49.9	48.5	48.5	48.5	49.9	48.5
72.5°	48.5	44.0	41.1	39.6	38.1	36.8	36.8	36.8	35.2	36.8	36.8
75°	33.8	30.9	27.9	27.9	26.4	26.4	26.4	26.4	26.4	26.4	26.4
77.5°	23.5	20.5	19.1	19.1	19.1	17.6	17.6	17.6	17.6	17.6	17.6
80°	14.6	14.6	13.2	13.2	11.8	11.8	11.8	11.8	11.8	11.8	11.8
82.5°	8.8	8.8	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	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: P252474

CATALOG NUMBER: LE_6B20D010 EC6B10209035 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1043.9	1048.2	1042.4	1046.8	1045.4	1043.9	1040.9	1046.8
5°	1026.2	1027.8	1021.9	1027.8	1026.2	1023.2	1020.4	1026.2
7.5°	1001.2	1005.6	998.4	1004.2	1002.8	999.9	996.9	1002.8
10°	973.4	977.8	971.9	976.4	976.4	973.4	969.0	974.9
12.5°	942.5	945.5	939.6	945.5	944.0	941.1	939.6	944.0
15°	908.8	913.2	907.4	911.8	910.2	908.8	907.4	911.8
17.5°	872.1	876.5	872.1	876.5	876.5	872.1	870.6	873.5
20°	835.4	838.4	833.9	838.4	836.9	836.9	833.9	838.4
22.5°	794.2	798.6	795.8	798.6	797.2	797.2	795.8	798.6
25°	753.1	757.6	753.1	757.6	756.1	756.1	753.1	760.5
27.5°	712.0	715.0	710.6	716.5	715.0	712.0	713.5	715.0
30°	668.0	671.0	668.0	672.4	672.4	672.4	669.5	672.4
32.5°	624.0	628.4	624.0	628.4	626.9	626.9	625.4	628.4
35°	579.9	581.4	578.5	582.9	582.9	584.4	581.4	585.8
37.5°	534.4	535.9	534.4	535.9	538.9	534.4	537.4	538.9
40°	487.4	490.4	488.9	490.4	490.4	491.9	490.4	491.9
42.5°	440.5	443.4	440.5	444.9	443.4	443.4	444.9	444.9
45°	392.0	396.4	393.5	396.4	397.9	396.4	396.4	399.4
47.5°	346.5	349.4	348.0	349.4	349.4	349.4	349.4	352.4
50°	301.0	302.5	302.5	303.9	303.9	305.4	302.5	303.9
52.5°	255.5	258.4	258.4	258.4	256.9	258.4	258.4	258.4
55°	214.4	215.9	212.9	215.9	215.9	214.4	214.4	217.2
57.5°	174.8	174.8	174.8	174.8	174.8	173.2	174.8	174.8
60°	138.0	139.5	138.0	138.0	138.0	138.0	136.5	139.5
62.5°	107.1	107.1	105.8	107.1	107.1	107.1	108.6	108.6
65°	83.6	85.1	83.6	85.1	85.1	85.1	85.1	86.6
67.5°	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
70°	49.9	49.9	49.9	51.4	49.9	49.9	49.9	51.4
72.5°	36.8	36.8	36.8	36.8	36.8	36.8	38.1	38.1
75°	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4
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°	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)