

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: P252370

Luminaire Tested: **LE_6B20D010 EC6B10209035 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252370
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 EC6B10209035 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1996.3 lumens
Efficiency: N/A
Efficacy: 96.0 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

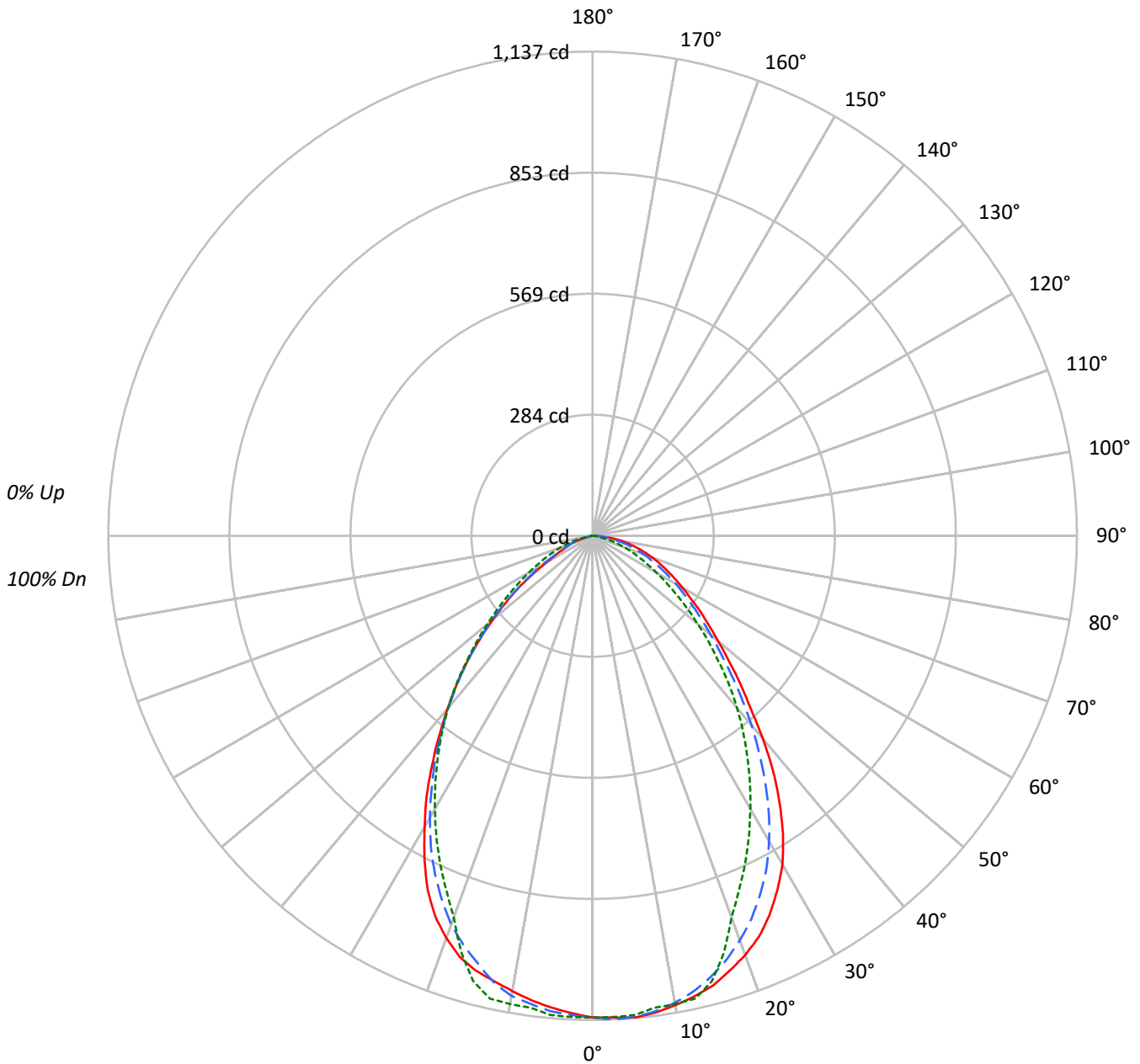
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	43																			
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°	73794	73794	73794
5°	74364	73977	72825
10°	74157	73958	71911
15°	73817	73121	71432
20°	72718	66192	69761
25°	70747	61015	65982
30°	67167	55777	59431
35°	60960	50423	52294
40°	52922	44916	45044
45°	45126	38622	38216
50°	39066	32662	30865
55°	34919	27242	23886
60°	31824	22625	16101
65°	29701	18602	12026
70°	28307	15146	10091
75°	26669	10738	3327
80°	25398	5560	1127
85°	20885	3294	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.8	5.4
10°-20°	298.7	15.0
20°-30°	412.4	20.7
30°-40°	419.6	21.0
40°-50°	337.2	16.9
50°-60°	224.2	11.2
60°-70°	127.8	6.4
70°-80°	57.4	2.9
80°-90°	12.1	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°	817.9	41.0
0°-40°	1237.5	62.0
0°-60°	1799.0	90.1
0°-90°	1996.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1996.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1131	1131	1131	1131	1131	
5°	1136	1134	1130	1121	1112	108
15°	1093	1072	1083	1040	1058	308
25°	983	930	848	876	917	450
35°	765	707	633	645	657	476
45°	489	460	419	414	414	379
55°	307	286	240	213	210	276
65°	192	172	120	78	78	192
75°	106	88	43	18	13	113
85°	28	19	4	2	0	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°	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1
2.5°	1132.5	1138.4	1137.0	1135.5	1137.0	1135.5	1132.5	1132.5	1129.6	1129.6	1137.0
5°	1135.5	1138.4	1137.0	1135.5	1135.5	1137.0	1131.1	1131.1	1128.1	1126.6	1134.0
7.5°	1129.6	1134.0	1131.1	1131.1	1129.6	1131.1	1125.2	1125.2	1120.8	1119.4	1126.6
10°	1119.4	1125.2	1122.2	1122.2	1122.2	1119.4	1116.4	1114.9	1110.5	1109.0	1113.5
12.5°	1107.6	1112.0	1110.5	1107.6	1107.6	1107.6	1101.8	1100.2	1094.4	1091.4	1095.9
15°	1092.9	1095.9	1094.4	1092.9	1090.0	1090.0	1084.1	1081.1	1075.2	1069.4	1072.4
17.5°	1070.9	1075.2	1072.4	1070.9	1066.5	1066.5	1060.6	1057.6	1048.9	1043.0	1044.4
20°	1047.4	1048.9	1047.4	1044.4	1040.0	1038.5	1032.6	1026.8	1019.5	1012.1	1010.6
22.5°	1019.5	1020.9	1016.5	1013.6	1009.1	1007.8	1000.4	996.0	984.2	975.4	973.9
25°	982.8	984.2	984.2	976.9	973.9	971.0	963.6	956.2	946.0	934.2	929.9
27.5°	938.6	943.1	940.1	932.8	926.9	925.5	918.1	912.2	899.0	888.8	882.9
30°	891.6	890.1	888.8	884.2	875.5	874.0	866.6	859.4	849.0	835.9	828.5
32.5°	831.4	831.4	830.0	825.5	816.8	813.8	807.9	799.1	787.4	777.1	769.8
35°	765.4	766.8	765.4	756.5	750.6	747.8	744.8	734.5	724.2	712.5	706.6
37.5°	696.2	691.9	693.4	686.0	678.6	681.6	672.8	668.4	656.6	647.8	641.9
40°	621.4	624.2	618.4	615.5	611.1	606.6	606.6	599.4	593.5	583.1	580.2
42.5°	547.9	552.4	550.9	547.9	542.0	543.5	536.1	533.2	525.9	521.5	517.1
45°	489.1	489.1	489.1	486.2	484.8	481.9	477.4	473.0	468.6	462.8	459.8
47.5°	431.9	431.9	433.4	430.4	427.5	426.0	423.0	423.0	415.8	409.9	406.9
50°	384.9	384.9	384.9	381.9	379.0	379.0	376.0	373.1	368.8	364.2	361.4
52.5°	342.2	342.2	342.2	339.4	337.9	336.4	334.9	333.5	327.6	324.6	321.8
55°	307.0	305.5	305.5	304.1	301.1	301.1	299.6	296.8	292.4	287.9	286.5
57.5°	271.8	273.2	271.8	271.8	268.9	268.9	265.9	264.4	260.0	257.1	254.1
60°	243.9	243.9	243.9	242.4	239.5	240.9	238.0	236.5	232.1	227.6	224.8
62.5°	215.9	217.4	217.4	215.9	213.0	213.0	211.5	210.0	205.6	201.2	196.9
65°	192.4	192.4	192.4	191.0	189.5	189.5	188.0	186.5	182.1	176.2	171.9
67.5°	170.4	168.9	168.9	168.9	167.5	166.0	164.5	163.0	158.6	154.2	148.4
70°	148.4	148.4	148.4	146.9	144.0	145.4	144.0	142.5	138.1	133.6	129.2
72.5°	127.8	127.8	126.4	124.9	124.9	123.4	123.4	121.9	117.5	111.6	107.2
75°	105.8	105.8	105.8	105.8	102.9	104.2	101.4	99.9	97.0	92.5	88.1
77.5°	86.6	86.6	86.6	85.2	83.8	83.8	82.2	80.8	76.4	73.5	67.6
80°	67.6	67.6	67.6	67.6	66.1	64.6	63.1	61.8	58.8	54.4	50.0
82.5°	50.0	50.0	48.5	48.5	48.5	47.0	45.5	44.1	41.1	38.2	35.2
85°	27.9	29.4	29.4	26.5	27.9	26.5	26.5	23.5	23.5	20.6	19.1
87.5°	10.2	8.9	8.9	8.9	8.9	8.9	8.9	7.4	7.4	7.4	5.9
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1
2.5°	1131.1	1129.6	1135.5	1135.5	1126.6	1131.1	1132.5	1129.6	1129.6	1131.1	1126.6
5°	1128.1	1125.2	1131.1	1132.5	1123.8	1128.1	1129.6	1126.6	1128.1	1129.6	1123.8
7.5°	1117.9	1117.9	1122.2	1123.8	1114.9	1119.4	1119.4	1116.4	1117.9	1117.9	1113.5
10°	1107.6	1103.1	1107.6	1107.6	1100.2	1101.8	1104.6	1103.1	1109.0	1116.4	1116.4
12.5°	1088.5	1084.1	1091.4	1091.4	1087.0	1092.9	1100.2	1104.6	1110.5	1113.5	1104.6
15°	1065.0	1066.5	1079.6	1090.0	1085.5	1094.4	1101.8	1098.8	1091.4	1082.6	1069.4
17.5°	1034.1	1029.8	1041.5	1047.4	1041.5	1044.4	1050.2	1044.4	1032.6	1025.4	1007.8
20°	998.9	987.1	987.1	984.2	973.9	973.9	972.5	962.1	957.8	953.4	946.0
22.5°	959.2	946.0	941.6	932.8	924.0	922.5	918.1	907.8	901.9	899.0	890.1
25°	913.6	901.9	894.6	885.8	872.5	869.6	865.2	854.9	852.0	847.6	840.2
27.5°	866.6	852.0	841.8	832.9	821.1	819.6	810.9	803.5	797.6	794.8	788.9
30°	812.4	796.1	788.9	777.1	768.2	765.4	758.0	747.8	743.2	740.4	736.0
32.5°	752.1	738.9	731.5	721.2	709.5	711.0	702.1	693.4	690.4	687.5	683.0
35°	693.4	680.1	671.2	662.5	655.1	652.2	646.4	639.0	634.6	633.1	630.1
37.5°	628.8	618.4	611.1	602.2	596.4	593.5	590.5	583.1	580.2	580.2	574.4
40°	565.5	556.8	550.9	546.5	539.1	537.6	534.8	530.2	528.9	527.4	523.0
42.5°	508.2	496.5	492.1	489.1	484.8	481.9	480.4	477.4	476.0	474.5	470.1
45°	453.9	443.6	439.2	436.2	431.9	430.4	428.9	424.5	421.6	418.6	417.1
47.5°	401.0	393.6	392.2	384.9	381.9	379.0	376.0	373.1	371.6	370.1	364.2
50°	355.5	351.1	343.8	339.4	336.4	334.9	329.0	324.6	323.1	321.8	317.2
52.5°	314.4	308.5	304.1	296.8	295.2	292.4	289.4	283.5	280.6	279.1	274.8
55°	277.6	273.2	267.4	261.5	257.1	255.6	251.2	245.4	242.4	239.5	236.5
57.5°	246.8	239.5	233.6	227.6	224.8	220.4	215.9	213.0	208.6	204.1	199.8
60°	217.4	211.5	204.1	198.2	195.4	192.4	186.5	182.1	177.8	173.4	168.9
62.5°	189.5	183.6	176.2	170.4	167.5	164.5	158.6	154.2	149.9	145.4	139.5
65°	164.5	158.6	152.8	146.9	144.0	141.0	135.1	129.2	124.9	120.5	114.6
67.5°	144.0	136.6	130.8	124.9	121.9	119.0	113.1	108.8	102.9	98.4	92.5
70°	121.9	116.0	111.6	105.8	102.9	99.9	94.0	88.1	83.8	79.4	73.5
72.5°	102.9	95.5	91.1	85.2	82.2	80.8	74.9	70.5	66.1	60.2	55.9
75°	82.2	76.4	70.5	66.1	63.1	61.8	55.9	51.4	47.0	42.6	38.2
77.5°	63.1	58.8	52.9	48.5	45.5	44.1	38.2	33.8	29.4	26.5	22.0
80°	47.0	41.1	38.2	33.8	32.4	29.4	26.5	22.0	19.1	14.8	11.8
82.5°	32.4	27.9	25.0	22.0	20.6	19.1	16.1	13.2	10.2	8.9	7.4
85°	17.6	14.8	13.2	11.8	10.2	10.2	8.9	7.4	5.9	4.4	3.0
87.5°	5.9	4.4	4.4	4.4	4.4	3.0	3.0	3.0	1.5	1.5	1.5
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°	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1
2.5°	1129.6	1129.6	1129.6	1128.1	1128.1	1128.1	1126.6	1132.5	1126.6	1125.2	1129.6
5°	1128.1	1125.2	1125.2	1125.2	1125.2	1123.8	1122.2	1125.2	1120.8	1119.4	1119.4
7.5°	1119.4	1117.9	1117.9	1116.4	1114.9	1113.5	1112.0	1113.5	1109.0	1107.6	1107.6
10°	1120.8	1117.9	1117.9	1113.5	1110.5	1106.1	1101.8	1103.1	1097.2	1092.9	1092.9
12.5°	1103.1	1095.9	1091.4	1087.0	1084.1	1082.6	1076.8	1079.6	1073.8	1072.4	1072.4
15°	1063.5	1054.8	1047.4	1044.4	1044.4	1041.5	1037.1	1043.0	1040.0	1041.5	1048.9
17.5°	1001.9	997.4	993.0	991.5	993.0	996.0	998.9	1007.8	1007.8	1012.1	1019.5
20°	947.5	944.5	947.5	947.5	949.0	954.9	960.8	968.0	971.0	975.4	985.6
22.5°	894.6	894.6	897.5	901.9	900.5	910.8	912.2	925.5	925.5	934.2	943.1
25°	843.1	843.1	846.1	847.6	850.5	856.4	862.2	872.5	875.5	884.2	891.6
27.5°	793.2	791.8	791.8	793.2	796.1	803.5	806.5	818.2	822.6	828.5	835.9
30°	737.4	736.0	738.9	741.9	740.4	747.8	752.1	760.9	763.9	769.8	775.6
32.5°	684.5	684.5	684.5	687.5	687.5	693.4	693.4	703.6	703.6	708.0	713.9
35°	630.1	630.1	631.6	633.1	634.6	636.0	637.5	643.4	644.9	646.4	649.2
37.5°	578.8	577.2	578.8	578.8	575.9	581.8	581.8	587.6	583.1	587.6	589.0
40°	525.9	525.9	524.4	524.4	524.4	527.4	524.4	528.9	525.9	528.9	527.4
42.5°	471.5	471.5	468.6	471.5	470.1	470.1	470.1	473.0	468.6	471.5	473.0
45°	417.1	415.8	415.8	414.2	414.2	414.2	415.8	415.8	414.2	417.1	417.1
47.5°	364.2	362.9	362.9	362.9	362.9	364.2	359.9	362.9	359.9	359.9	359.9
50°	318.8	317.2	315.9	314.4	312.9	312.9	311.4	311.4	308.5	307.0	305.5
52.5°	274.8	273.2	270.2	270.2	268.9	267.4	263.0	263.0	258.5	257.1	257.1
55°	235.0	230.6	229.1	226.2	226.2	223.2	220.4	217.4	213.0	210.0	210.0
57.5°	198.2	193.9	191.0	189.5	188.0	185.1	179.2	177.8	171.9	170.4	168.9
60°	166.0	161.6	157.1	154.2	152.8	148.4	142.5	139.5	136.6	132.2	127.8
62.5°	135.1	130.8	124.9	123.4	120.5	116.0	111.6	107.2	104.2	99.9	97.0
65°	108.8	104.2	99.9	97.0	94.0	89.6	85.2	80.8	77.9	76.4	74.9
67.5°	88.1	82.2	77.9	76.4	73.5	70.5	66.1	64.6	61.8	61.8	61.8
70°	69.0	64.6	60.2	58.8	57.2	54.4	51.4	51.4	51.4	51.4	51.4
72.5°	51.4	48.5	44.1	42.6	41.1	39.6	36.8	38.2	36.8	36.8	36.8
75°	32.4	29.4	26.5	25.0	23.5	22.0	20.6	19.1	17.6	16.1	16.1
77.5°	17.6	14.8	13.2	11.8	11.8	10.2	8.9	8.9	7.4	7.4	7.4
80°	10.2	8.9	7.4	5.9	5.9	4.4	4.4	4.4	4.4	3.0	3.0
82.5°	5.9	4.4	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5
85°	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0
87.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	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	0.0	0.0	0.0



TEST NUMBER: P252370

CATALOG NUMBER: LE_6B20D010 EC6B10209035 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1	1131.1
2.5°	1122.2	1126.6	1122.2	1126.6	1126.6	1126.6	1126.6	1122.2
5°	1114.9	1117.9	1113.5	1116.4	1117.9	1116.4	1116.4	1112.0
7.5°	1101.8	1104.6	1100.2	1104.6	1106.1	1104.6	1103.1	1100.2
10°	1088.5	1090.0	1085.5	1088.5	1091.4	1091.4	1090.0	1085.5
12.5°	1067.9	1072.4	1067.9	1070.9	1073.8	1075.2	1075.2	1070.9
15°	1044.4	1051.8	1048.9	1053.2	1057.6	1059.1	1059.1	1057.6
17.5°	1020.9	1028.2	1023.9	1031.2	1035.6	1038.5	1040.0	1037.1
20°	987.1	996.0	993.0	998.9	1004.8	1009.1	1009.1	1004.8
22.5°	943.1	954.9	953.4	957.8	965.1	966.6	969.5	966.6
25°	894.6	903.4	901.9	906.4	915.1	915.1	916.6	916.6
27.5°	838.8	847.6	846.1	849.0	854.9	856.4	857.9	854.9
30°	778.5	783.0	783.0	787.4	791.8	793.2	793.2	788.9
32.5°	712.5	718.4	721.2	719.8	724.2	727.1	725.6	725.6
35°	652.2	653.6	655.1	656.6	658.1	661.0	658.1	656.6
37.5°	587.6	592.0	589.0	592.0	594.9	593.5	592.0	592.0
40°	528.9	530.2	527.4	530.2	531.8	531.8	531.8	528.9
42.5°	470.1	473.0	470.1	473.0	473.0	473.0	473.0	471.5
45°	411.2	414.2	414.2	415.8	415.8	414.2	414.2	414.2
47.5°	357.0	359.9	357.0	359.9	361.4	358.4	358.4	358.4
50°	305.5	304.1	304.1	305.5	305.5	305.5	305.5	304.1
52.5°	252.6	254.1	254.1	254.1	255.6	254.1	255.6	255.6
55°	207.1	207.1	207.1	208.6	207.1	207.1	208.6	210.0
57.5°	166.0	164.5	163.0	163.0	164.5	163.0	163.0	163.0
60°	127.8	126.4	124.9	124.9	124.9	124.9	124.9	123.4
62.5°	95.5	95.5	95.5	97.0	97.0	97.0	97.0	98.4
65°	76.4	76.4	76.4	76.4	76.4	76.4	76.4	77.9
67.5°	61.8	61.8	61.8	63.1	63.1	63.1	63.1	63.1
70°	51.4	51.4	52.9	51.4	52.9	52.9	52.9	52.9
72.5°	35.2	35.2	35.2	35.2	35.2	33.8	35.2	33.8
75°	14.8	14.8	14.8	14.8	14.8	14.8	14.8	13.2
77.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
80°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	1.5	1.5	1.5	1.5	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)