

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: P252575

Luminaire Tested: **LE_6B20D010 EC6B10209024 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252575
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B20D010 EC6B10209024 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1835.0 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

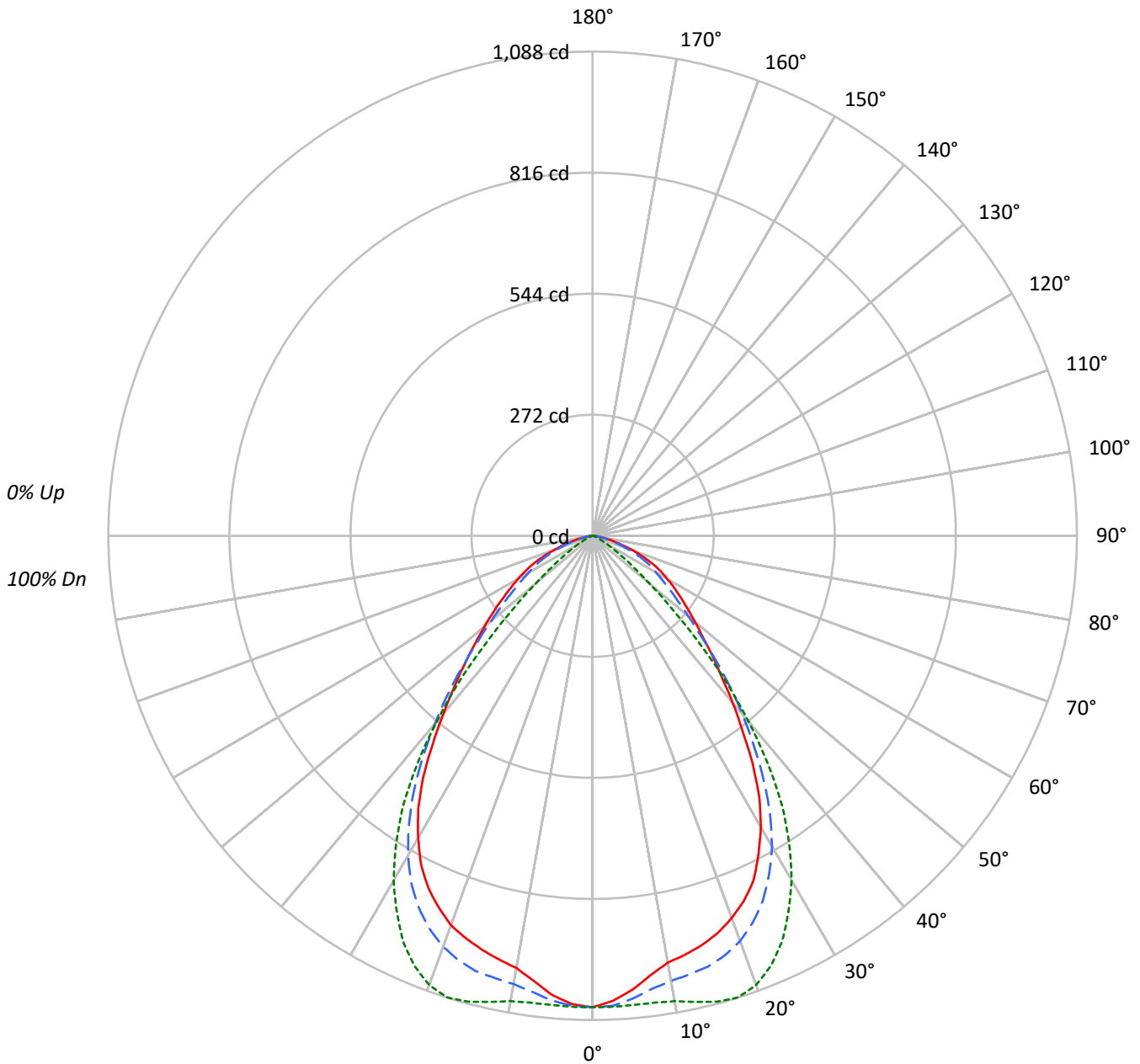
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	69116	69116	69116
5°	67055	69301	67854
10°	64511	70348	65320
15°	64273	73209	65016
20°	63443	74572	64630
25°	61540	72475	62857
30°	56937	67356	59054
35°	49945	59215	52876
40°	41629	46415	44329
45°	35023	30622	37404
50°	30337	16788	32195
55°	27435	8917	28140
60°	25248	4632	25248
65°	22878	2455	22307
70°	18465	1412	17053
75°	12654	907	11721
80°	8266	451	7364
85°	5539	898	4566



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.8	5.4
10°-20°	285.7	15.6
20°-30°	422.1	23.0
30°-40°	426.3	23.2
40°-50°	293.8	16.0
50°-60°	168.8	9.2
60°-70°	98.2	5.4
70°-80°	35.8	2.0
80°-90°	5.5	0.3
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°	806.5	44.0
0°-40°	1232.8	67.2
0°-60°	1695.5	92.4
0°-90°	1835.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1835.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1059	1059	1059	1059	1059	
5°	1024	1044	1058	1048	1036	96
15°	952	1002	1084	1013	963	268
25°	855	905	1007	924	873	390
35°	627	670	744	701	664	389
45°	380	385	332	409	405	295
55°	241	212	78	220	247	217
65°	148	125	16	124	144	145
75°	50	40	4	39	46	57
85°	7	4	1	5	6	9
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°	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4
2.5°	1046.0	1047.2	1048.4	1047.2	1048.4	1053.4	1049.6	1052.1	1052.1	1053.4	1057.0
5°	1023.9	1023.9	1026.4	1025.1	1028.9	1033.8	1030.0	1033.8	1035.0	1037.4	1043.5
7.5°	995.8	995.8	997.0	997.0	1001.9	1006.8	1004.4	1009.2	1014.1	1019.0	1026.4
10°	973.8	976.1	976.1	977.4	982.2	988.4	987.1	993.2	998.2	1005.5	1015.4
12.5°	963.9	965.1	965.1	967.6	972.5	978.6	977.4	983.5	990.9	999.4	1009.2
15°	951.6	954.1	952.9	955.4	960.2	966.4	965.1	971.2	979.9	988.4	1001.9
17.5°	935.8	937.0	938.1	938.1	943.1	948.0	948.0	954.1	963.9	973.8	988.4
20°	913.8	916.1	916.1	917.4	921.0	928.4	927.1	933.2	943.1	952.9	968.8
22.5°	888.0	889.2	889.2	890.4	896.5	900.2	901.5	906.4	914.9	925.9	940.6
25°	854.9	856.1	854.9	858.6	861.0	868.4	865.9	872.0	881.9	890.4	905.1
27.5°	807.1	809.6	809.6	810.8	816.9	823.0	823.0	829.1	837.8	843.9	858.6
30°	755.8	759.4	755.8	761.9	764.2	769.1	772.9	776.5	783.9	792.4	805.9
32.5°	696.9	695.6	696.9	699.4	706.8	710.4	712.9	716.5	723.9	731.2	742.2
35°	627.1	629.5	630.8	635.6	635.6	641.8	643.0	645.5	656.5	661.4	670.0
37.5°	553.6	556.0	557.2	559.8	564.6	567.1	570.8	574.4	581.8	590.4	595.2
40°	488.8	488.8	489.9	492.4	496.0	497.2	500.9	505.9	510.8	518.1	523.0
42.5°	427.5	428.6	427.5	429.9	433.6	438.5	437.2	443.4	444.6	449.5	453.1
45°	379.6	379.6	377.2	379.6	379.6	384.6	383.4	385.8	384.6	387.0	384.6
47.5°	334.4	335.6	334.4	335.6	335.6	335.6	336.9	334.4	335.6	331.9	324.6
50°	298.9	300.1	297.6	298.9	297.6	296.4	297.6	294.0	292.8	287.9	280.5
52.5°	268.2	267.0	265.8	265.8	265.8	264.5	263.4	259.6	256.0	251.1	242.5
55°	241.2	240.0	238.9	238.9	236.4	235.1	235.1	231.5	227.8	221.6	211.9
57.5°	216.8	215.5	214.4	214.4	213.1	210.6	210.6	207.0	202.1	194.8	186.1
60°	193.5	193.5	193.5	192.2	192.2	189.9	189.9	186.1	181.2	173.9	164.1
62.5°	172.8	171.5	171.5	171.5	171.5	170.2	169.0	166.6	161.6	154.4	145.8
65°	148.2	148.2	148.2	148.2	147.0	147.0	147.0	143.2	140.9	133.5	124.9
67.5°	121.2	121.2	121.2	121.2	120.0	121.2	121.2	118.8	116.4	109.0	101.6
70°	96.8	95.5	94.2	95.5	94.2	94.2	95.5	93.1	91.9	85.8	78.4
72.5°	71.0	72.2	71.0	71.0	71.0	69.9	71.0	69.9	67.4	62.5	57.6
75°	50.2	51.5	51.5	50.2	50.2	50.2	49.0	49.0	46.5	42.9	40.4
77.5°	34.2	34.2	34.2	34.2	33.1	33.1	33.1	31.9	30.6	28.1	25.8
80°	22.0	22.0	22.0	22.0	20.9	20.9	20.9	19.6	19.6	17.1	14.8
82.5°	13.5	13.5	13.5	13.5	13.5	13.5	12.2	12.2	11.0	9.8	8.6
85°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	6.1	6.1	4.9	3.6
87.5°	2.5	2.5	3.6	3.6	3.6	3.6	3.6	3.6	2.5	2.5	2.5
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4
2.5°	1054.5	1055.8	1055.8	1055.8	1059.4	1060.6	1057.0	1053.4	1060.6	1059.4	1061.9
5°	1042.2	1046.0	1048.4	1049.6	1053.4	1055.8	1052.1	1050.9	1057.0	1058.2	1059.4
7.5°	1027.6	1033.8	1039.9	1042.2	1047.2	1049.6	1048.4	1048.4	1055.8	1058.2	1058.2
10°	1017.8	1026.4	1033.8	1039.9	1046.0	1049.6	1049.6	1050.9	1059.4	1061.9	1064.4
12.5°	1015.4	1026.4	1036.1	1044.8	1049.6	1055.8	1057.0	1060.6	1069.2	1072.9	1072.9
15°	1009.2	1023.9	1036.1	1047.2	1054.5	1061.9	1064.4	1071.6	1081.5	1083.9	1086.4
17.5°	998.2	1012.9	1027.6	1041.1	1050.9	1057.0	1064.4	1071.6	1083.9	1087.6	1088.9
20°	978.6	995.8	1010.5	1023.9	1033.8	1042.2	1049.6	1058.2	1069.2	1074.1	1075.4
22.5°	949.2	966.4	981.0	995.8	1005.5	1012.9	1020.2	1030.0	1041.1	1046.0	1046.0
25°	913.8	929.6	945.5	956.5	966.4	974.9	978.6	989.6	1000.6	1006.8	1006.8
27.5°	868.4	883.1	897.8	910.0	916.1	923.5	929.6	939.4	948.0	952.9	957.8
30°	810.8	825.5	839.0	851.2	858.6	865.9	872.0	879.4	888.0	894.1	895.4
32.5°	748.4	760.6	774.1	786.2	793.6	796.1	802.2	809.6	816.9	821.9	823.0
35°	679.8	688.4	696.9	707.9	715.2	715.2	721.4	726.2	732.4	743.5	741.0
37.5°	598.9	611.1	617.2	621.0	625.9	630.8	632.0	638.1	645.5	647.9	651.6
40°	523.0	526.6	530.4	530.4	535.2	535.2	535.2	536.5	543.8	545.0	549.9
42.5°	447.0	447.0	443.4	439.8	440.9	439.8	433.6	433.6	437.2	442.1	442.1
45°	376.0	367.4	356.4	347.9	341.8	339.2	331.9	331.9	330.8	331.9	336.9
47.5°	316.0	301.2	282.9	265.8	259.6	254.8	243.8	238.9	236.4	237.6	240.0
50°	265.8	249.9	229.0	208.2	197.2	191.1	177.6	169.0	167.8	165.4	170.2
52.5°	229.0	209.5	187.4	162.9	151.9	142.1	127.4	120.0	115.1	115.1	116.4
55°	197.2	176.4	151.9	127.4	116.4	109.0	94.2	84.5	79.6	78.4	82.0
57.5°	170.2	150.6	126.1	101.6	90.6	82.0	67.4	58.8	55.1	52.6	53.9
60°	149.4	129.9	105.4	82.0	72.2	62.5	50.2	40.4	35.5	35.5	36.8
62.5°	129.9	111.5	89.4	67.4	58.8	50.2	36.8	28.1	24.5	23.2	24.5
65°	110.2	93.1	74.8	56.4	47.8	40.4	29.4	22.0	17.1	15.9	17.1
67.5°	89.4	75.9	60.0	45.4	38.0	31.9	22.0	15.9	12.2	11.0	12.2
70°	69.9	57.6	45.4	33.1	28.1	23.2	15.9	12.2	8.6	7.4	8.6
72.5°	50.2	41.6	31.9	23.2	19.6	15.9	11.0	8.6	6.1	4.9	6.1
75°	34.2	28.1	20.9	14.8	12.2	11.0	7.4	4.9	3.6	3.6	3.6
77.5°	22.0	17.1	13.5	9.8	7.4	6.1	3.6	2.5	2.5	2.5	2.5
80°	12.2	9.8	7.4	4.9	3.6	3.6	2.5	2.5	1.2	1.2	1.2
82.5°	7.4	4.9	3.6	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2
85°	3.6	2.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	1.2	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4
2.5°	1057.0	1058.2	1054.5	1059.4	1055.8	1060.6	1060.6	1055.8	1057.0	1054.5	1059.4
5°	1054.5	1054.5	1052.1	1055.8	1050.9	1055.8	1054.5	1046.0	1048.4	1043.5	1048.4
7.5°	1054.5	1052.1	1048.4	1052.1	1046.0	1049.6	1044.8	1036.1	1033.8	1027.6	1027.6
10°	1058.2	1054.5	1049.6	1050.9	1044.8	1046.0	1038.6	1026.4	1022.8	1015.4	1012.9
12.5°	1066.8	1063.1	1055.8	1058.2	1049.6	1049.6	1039.9	1025.1	1017.8	1008.0	1005.5
15°	1079.0	1072.9	1064.4	1065.5	1057.0	1052.1	1039.9	1022.8	1012.9	999.4	995.8
17.5°	1081.5	1075.4	1064.4	1064.4	1053.4	1047.2	1032.5	1012.9	1000.6	987.1	979.9
20°	1068.0	1061.9	1049.6	1048.4	1038.6	1030.0	1014.1	994.5	982.2	967.6	961.5
22.5°	1039.9	1032.5	1021.5	1020.2	1010.5	1005.5	988.4	968.8	956.5	941.9	937.0
25°	998.2	994.5	983.5	982.2	973.8	967.6	952.9	934.5	923.5	908.8	903.9
27.5°	949.2	945.5	934.5	934.5	924.8	921.0	907.6	890.4	881.9	868.4	862.2
30°	890.4	885.5	879.4	878.1	869.6	865.9	853.6	837.8	829.1	818.1	815.8
32.5°	820.6	816.9	813.2	812.0	803.5	799.8	791.2	775.2	768.0	758.1	754.5
35°	739.8	737.4	733.6	732.4	728.8	725.1	716.5	704.2	700.6	693.2	689.5
37.5°	646.6	649.1	646.6	646.6	643.0	644.2	636.9	629.5	625.9	621.0	618.5
40°	546.2	551.1	554.9	554.9	553.6	558.5	557.2	551.1	549.9	547.5	546.2
42.5°	444.6	447.0	454.4	459.2	458.1	470.4	471.5	476.5	480.1	477.6	478.9
45°	338.0	345.4	355.1	360.1	366.2	382.1	390.8	400.5	409.1	414.0	412.8
47.5°	243.8	252.2	263.4	270.6	281.8	301.2	323.4	335.6	347.9	354.0	360.1
50°	176.4	185.0	198.4	209.5	216.8	243.8	267.0	282.9	296.4	305.0	311.1
52.5°	123.8	133.5	148.2	158.0	169.0	194.8	221.6	240.0	254.8	265.8	271.9
55°	85.8	96.8	110.2	120.0	132.2	159.2	185.0	204.5	220.5	230.2	237.6
57.5°	60.0	69.9	83.2	91.9	104.1	129.9	155.5	175.1	191.1	200.9	209.5
60°	40.4	50.2	63.8	72.2	82.0	107.8	131.0	151.9	166.6	176.4	185.0
62.5°	28.1	36.8	50.2	58.8	67.4	89.4	111.5	129.9	144.5	155.5	162.9
65°	22.0	29.4	40.4	47.8	56.4	74.8	93.1	109.0	123.8	134.8	139.6
67.5°	15.9	23.2	31.9	38.0	44.1	60.0	75.9	88.1	101.6	110.2	116.4
70°	11.0	15.9	23.2	28.1	33.1	45.4	57.6	68.6	78.4	84.5	89.4
72.5°	8.6	11.0	15.9	19.6	23.2	31.9	41.6	50.2	57.6	62.5	67.4
75°	4.9	7.4	11.0	13.5	15.9	22.0	28.1	34.2	39.2	42.9	45.4
77.5°	2.5	3.6	6.1	7.4	9.8	13.5	18.4	22.0	25.8	28.1	30.6
80°	2.5	2.5	3.6	3.6	4.9	7.4	9.8	12.2	14.8	17.1	18.4
82.5°	1.2	1.2	2.5	2.5	2.5	3.6	4.9	7.4	8.6	9.8	11.0
85°	1.2	1.2	1.2	1.2	1.2	2.5	2.5	3.6	4.9	6.1	6.1
87.5°	0.0	0.0	1.2	1.2	1.2	1.2	1.2	2.5	2.5	2.5	3.6
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: P252575

CATALOG NUMBER: LE_6B20D010 EC6B10209024 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4	1059.4
2.5°	1055.8	1058.2	1057.0	1059.4	1055.8	1054.5	1057.0	1053.4
5°	1042.2	1043.5	1042.2	1042.2	1039.9	1037.4	1039.9	1036.1
7.5°	1021.5	1021.5	1017.8	1017.8	1012.9	1010.5	1010.5	1009.2
10°	1004.4	1000.6	997.0	998.2	990.9	988.4	987.1	986.0
12.5°	995.8	993.2	987.1	987.1	979.9	977.4	976.1	974.9
15°	986.0	981.0	976.1	974.9	968.8	966.4	965.1	962.6
17.5°	968.8	965.1	959.0	959.0	952.9	951.6	949.2	948.0
20°	950.4	945.5	940.6	940.6	933.2	933.2	929.6	930.9
22.5°	924.8	921.0	916.1	916.1	910.0	908.8	905.1	903.9
25°	894.1	889.2	885.5	884.2	879.4	877.0	875.8	873.2
27.5°	853.6	850.0	846.4	843.9	837.8	836.5	832.9	834.1
30°	803.5	801.0	799.8	797.4	790.0	787.5	787.5	783.9
32.5°	748.4	744.6	742.2	738.5	732.4	731.2	727.5	728.8
35°	681.0	676.1	672.4	673.6	666.2	665.0	662.6	663.9
37.5°	611.1	606.2	601.4	600.1	594.0	594.0	590.4	590.4
40°	538.9	534.0	531.5	531.5	524.2	525.4	521.8	520.5
42.5°	474.0	469.1	467.9	466.6	463.0	461.8	458.1	459.2
45°	412.8	411.5	411.5	409.1	405.4	404.1	405.4	405.4
47.5°	358.9	360.1	358.9	358.9	356.4	358.9	356.4	357.6
50°	313.5	316.0	316.0	316.0	314.8	316.0	316.0	317.2
52.5°	275.6	279.2	278.0	279.2	278.0	280.5	279.2	280.5
55°	242.5	245.0	246.1	247.4	247.4	247.4	247.4	247.4
57.5°	211.9	215.5	216.8	218.0	218.0	220.5	218.0	218.0
60°	187.4	191.1	192.2	193.5	193.5	194.8	192.2	193.5
62.5°	165.4	169.0	169.0	170.2	170.2	170.2	167.8	169.0
65°	143.2	144.5	145.8	145.8	144.5	144.5	143.2	144.5
67.5°	118.8	120.0	118.8	118.8	117.6	117.6	115.1	116.4
70°	91.9	91.9	93.1	91.9	90.6	91.9	90.6	89.4
72.5°	68.6	68.6	68.6	67.4	67.4	66.1	67.4	67.4
75°	46.5	46.5	47.8	47.8	47.8	47.8	46.5	46.5
77.5°	30.6	30.6	30.6	30.6	31.9	30.6	30.6	30.6
80°	19.6	19.6	20.9	20.9	19.6	19.6	19.6	19.6
82.5°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
85°	7.4	7.4	7.4	7.4	6.1	6.1	6.1	6.1
87.5°	3.6	3.6	3.6	3.6	3.6	3.6	2.5	2.5
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)