

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: P252674

Luminaire Tested: **LE_6B20D010 EC6B10208027 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252674
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B20D010 EC6B10208027 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2275.0 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

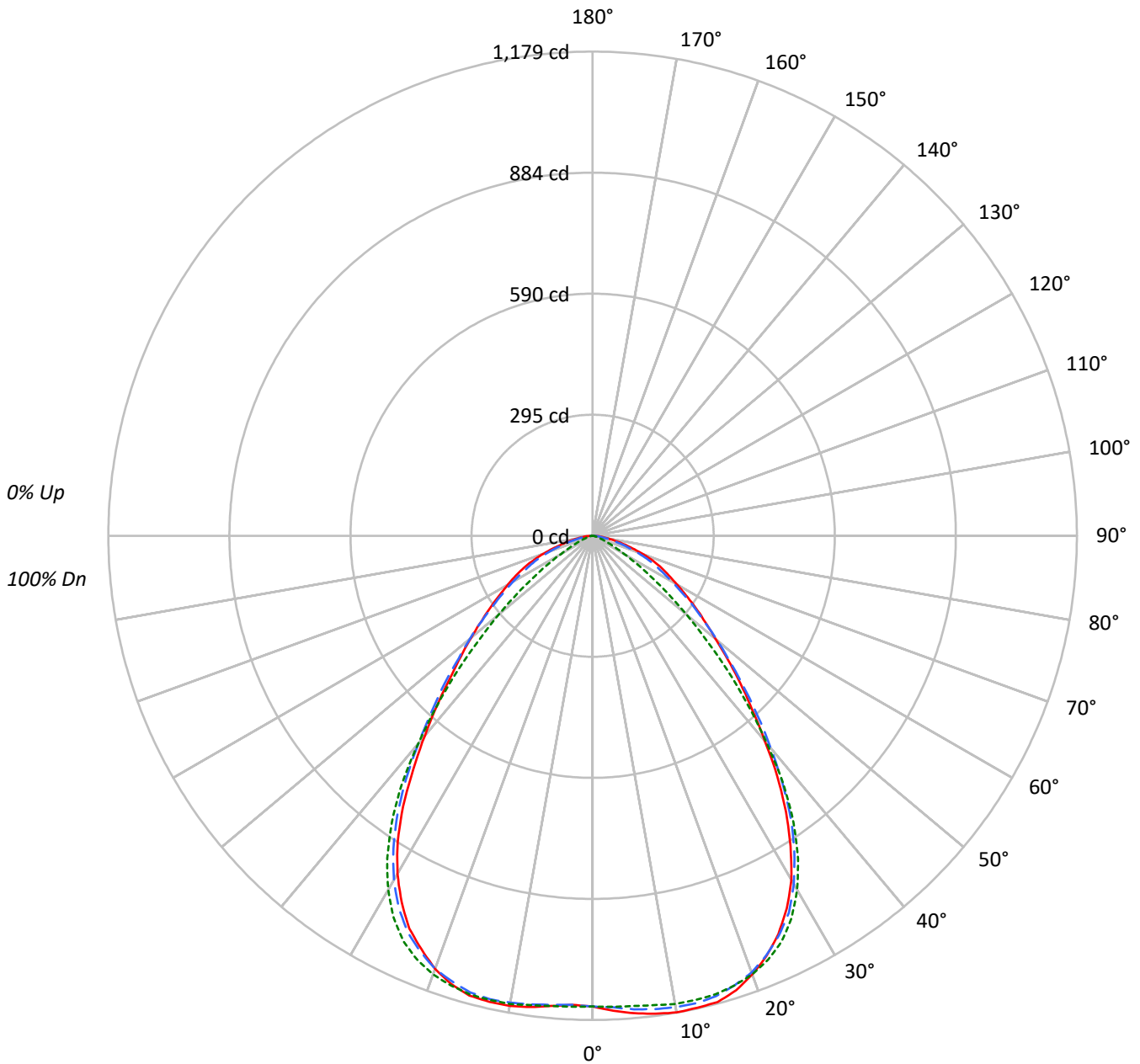
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	109	105	102	99	101	98	96	97	95	93	94	92	91	89								
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78								
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68								
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61								
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54								
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48								
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44								
8	67	55	47	42	66	54	47	42	53	47	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	39	35	45	39	35	44	39	35	33								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	74779	74779	74779
5°	76440	75274	75274
10°	78079	76681	77006
15°	79389	78072	78288
20°	78904	78904	77891
25°	77024	78428	75973
30°	72915	74987	71567
35°	65340	67920	64042
40°	55511	56201	54123
45°	46962	42921	45320
50°	39665	30266	39167
55°	34851	19553	34476
60°	30898	11626	31107
65°	28543	7009	28543
70°	24759	4025	24130
75°	19636	2470	18401
80°	14615	1841	13976
85°	13399	1198	12127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.3	4.9
10°-20°	326.6	14.4
20°-30°	491.2	21.6
30°-40°	516.4	22.7
40°-50°	385.8	17.0
50°-60°	240.2	10.6
60°-70°	136.6	6.0
70°-80°	56.3	2.5
80°-90°	11.6	0.5
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°	928.1	40.8
0°-40°	1444.6	63.5
0°-60°	2070.5	91.0
0°-90°	2275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2275.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1146	1146	1146	1146	1146	
5°	1167	1158	1149	1146	1149	112
15°	1175	1161	1156	1151	1159	330
25°	1070	1073	1090	1065	1055	490
35°	820	841	853	828	804	509
45°	509	520	465	511	491	394
55°	306	300	172	295	303	276
65°	185	165	45	165	185	182
75°	78	62	10	60	73	85
85°	18	11	2	10	16	20
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°	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2
2.5°	1157.5	1155.9	1157.5	1154.2	1152.6	1152.6	1154.2	1151.0	1149.4	1151.0	1149.4
5°	1167.2	1164.0	1165.6	1164.0	1160.8	1160.8	1162.4	1157.5	1157.5	1159.1	1157.5
7.5°	1173.8	1173.8	1173.8	1170.5	1168.9	1167.2	1170.5	1165.6	1164.0	1164.0	1162.4
10°	1178.6	1177.0	1178.6	1175.4	1172.1	1170.5	1173.8	1170.5	1167.2	1170.5	1165.6
12.5°	1177.0	1177.0	1177.0	1175.4	1172.1	1170.5	1173.8	1168.9	1167.2	1168.9	1165.6
15°	1175.4	1170.5	1172.1	1170.5	1165.6	1165.6	1167.2	1162.4	1159.1	1164.0	1160.8
17.5°	1160.8	1157.5	1159.1	1155.9	1152.6	1151.0	1152.6	1151.0	1147.9	1151.0	1147.9
20°	1136.5	1136.5	1138.1	1134.9	1131.6	1130.0	1133.2	1130.0	1126.8	1131.6	1131.6
22.5°	1107.2	1107.2	1107.2	1105.6	1104.0	1104.0	1104.0	1102.4	1100.8	1104.0	1105.6
25°	1070.0	1068.4	1070.0	1071.6	1070.0	1068.4	1070.0	1070.0	1066.8	1073.2	1073.2
27.5°	1023.0	1023.0	1026.2	1024.6	1024.6	1023.0	1026.2	1026.2	1024.6	1029.5	1034.4
30°	967.9	964.6	967.9	967.9	969.5	969.5	971.1	971.1	971.1	976.0	979.2
32.5°	896.5	898.1	903.0	901.4	899.8	904.6	904.6	907.9	909.5	912.8	914.4
35°	820.4	822.0	822.0	823.6	826.9	823.6	831.6	830.0	831.6	838.1	841.4
37.5°	739.2	734.4	742.5	739.2	740.9	740.9	744.1	745.8	750.6	758.8	758.8
40°	651.8	653.4	656.6	658.2	659.9	659.9	659.9	664.8	666.4	676.0	674.4
42.5°	575.5	575.5	578.8	580.4	580.4	580.4	580.4	585.2	588.5	591.8	595.0
45°	509.0	504.2	507.5	507.5	510.6	509.0	512.2	515.5	517.1	522.0	520.4
47.5°	445.9	444.2	445.9	447.5	445.9	447.5	449.1	450.8	452.4	452.4	452.4
50°	390.8	390.8	392.4	394.0	394.0	394.0	394.0	395.6	395.6	398.9	395.6
52.5°	345.4	347.0	347.0	345.4	347.0	347.0	348.5	348.5	347.0	347.0	342.1
55°	306.4	304.8	306.4	304.8	306.4	306.4	304.8	304.8	303.1	301.5	299.9
57.5°	269.1	269.1	269.1	269.1	267.5	269.1	267.5	265.9	265.9	262.6	257.8
60°	236.8	236.8	236.8	236.8	236.8	235.1	236.8	235.1	231.9	228.6	222.1
62.5°	209.1	207.5	209.1	207.5	207.5	205.9	205.9	204.2	201.0	197.8	191.2
65°	184.9	186.5	184.9	184.9	183.2	181.6	181.6	180.0	175.1	171.9	165.4
67.5°	158.9	157.2	157.2	157.2	155.6	155.6	155.6	152.4	149.1	144.2	137.8
70°	129.8	129.8	129.8	128.1	128.1	126.5	126.5	124.9	121.6	118.4	110.2
72.5°	102.1	102.1	102.1	98.9	100.5	98.9	98.9	95.6	94.0	89.1	84.2
75°	77.9	77.9	76.2	76.2	74.6	73.0	73.0	71.4	69.8	66.5	61.6
77.5°	56.8	56.8	56.8	55.1	53.5	51.9	51.9	50.2	48.6	47.0	43.8
80°	38.9	38.9	38.9	38.9	37.2	35.6	35.6	34.0	34.0	32.4	29.1
82.5°	26.0	26.0	26.0	26.0	24.4	24.4	24.4	22.8	21.1	21.1	17.9
85°	17.9	17.9	16.2	16.2	16.2	16.2	14.6	14.6	13.0	11.4	11.4
87.5°	9.8	9.8	9.8	9.8	8.1	8.1	8.1	8.1	6.5	6.5	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2
2.5°	1154.2	1154.2	1152.6	1147.9	1149.4	1147.9	1149.4	1147.9	1143.0	1147.9	1143.0
5°	1160.8	1162.4	1159.1	1152.6	1154.2	1152.6	1152.6	1151.0	1146.2	1149.4	1146.2
7.5°	1167.2	1165.6	1164.0	1157.5	1159.1	1157.5	1157.5	1154.2	1149.4	1152.6	1147.9
10°	1170.5	1170.5	1167.2	1160.8	1160.8	1159.1	1160.8	1159.1	1152.6	1157.5	1154.2
12.5°	1170.5	1168.9	1168.9	1160.8	1162.4	1160.8	1162.4	1159.1	1154.2	1157.5	1155.9
15°	1165.6	1165.6	1164.0	1155.9	1157.5	1157.5	1159.1	1155.9	1151.0	1155.9	1152.6
17.5°	1155.9	1155.9	1154.2	1147.9	1151.0	1151.0	1152.6	1149.4	1144.6	1147.9	1147.9
20°	1136.5	1138.1	1138.1	1133.2	1136.5	1136.5	1138.1	1136.5	1134.9	1136.5	1133.2
22.5°	1113.8	1117.0	1117.0	1112.1	1115.4	1115.4	1120.2	1118.6	1115.4	1117.0	1115.4
25°	1079.8	1083.0	1086.2	1083.0	1086.2	1086.2	1091.1	1089.5	1086.2	1089.5	1084.6
27.5°	1040.9	1042.4	1045.6	1042.4	1047.2	1045.6	1050.5	1048.9	1044.0	1048.9	1047.2
30°	985.8	992.1	997.0	992.1	997.0	997.0	1000.2	998.6	997.0	995.4	995.4
32.5°	924.1	930.6	930.6	929.0	932.2	932.2	933.9	930.6	929.0	930.6	932.2
35°	847.9	851.1	854.4	852.8	854.4	856.0	854.4	856.0	851.1	852.8	852.8
37.5°	765.2	768.5	768.5	763.6	766.9	766.9	763.6	763.6	760.4	763.6	757.1
40°	677.6	674.4	676.0	672.8	669.5	669.5	667.9	661.5	658.2	659.9	661.5
42.5°	591.8	591.8	586.9	578.8	570.6	570.6	565.8	562.5	556.1	559.4	557.8
45°	518.8	510.6	504.2	491.2	486.4	483.1	475.0	466.9	463.6	465.2	463.6
47.5°	449.1	442.6	426.4	408.5	403.6	398.9	389.1	379.4	376.1	372.9	372.9
50°	390.8	379.4	361.5	342.1	334.0	325.9	312.9	303.1	296.6	298.2	298.2
52.5°	337.2	324.2	303.1	278.9	269.1	259.4	248.0	236.8	231.9	230.2	230.2
55°	290.2	275.6	254.5	227.0	218.9	207.5	192.9	180.0	173.5	171.9	175.1
57.5°	248.0	235.1	210.8	183.2	173.5	162.1	147.5	136.1	128.1	126.5	128.1
60°	214.0	196.1	175.1	149.1	136.1	126.5	110.2	100.5	92.4	89.1	90.8
62.5°	180.0	163.8	142.6	116.8	107.0	97.2	82.6	71.4	64.9	63.2	64.9
65°	154.0	137.8	118.4	95.6	85.9	76.2	63.2	51.9	47.0	45.4	47.0
67.5°	128.1	113.5	97.2	76.2	68.1	60.0	47.0	38.9	32.4	30.8	32.4
70°	103.8	90.8	74.6	60.0	51.9	45.4	35.6	27.5	22.8	21.1	22.8
72.5°	77.9	68.1	56.8	43.8	38.9	34.0	26.0	19.5	16.2	14.6	16.2
75°	56.8	48.6	40.5	30.8	27.5	24.4	17.9	13.0	11.4	9.8	11.4
77.5°	38.9	34.0	27.5	21.1	17.9	16.2	11.4	9.8	8.1	6.5	6.5
80°	26.0	22.8	17.9	14.6	13.0	11.4	8.1	6.5	4.9	4.9	4.9
82.5°	16.2	13.0	11.4	8.1	6.5	6.5	4.9	3.2	3.2	3.2	3.2
85°	9.8	8.1	6.5	4.9	3.2	3.2	1.6	1.6	1.6	1.6	1.6
87.5°	4.9	3.2	3.2	1.6	1.6	1.6	1.6	1.6	0.0	0.0	1.6
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°	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2
2.5°	1146.2	1143.0	1143.0	1144.6	1146.2	1147.9	1144.6	1143.0	1143.0	1147.9	1144.6
5°	1146.2	1144.6	1144.6	1144.6	1147.9	1149.4	1146.2	1144.6	1146.2	1151.0	1149.4
7.5°	1151.0	1147.9	1149.4	1149.4	1151.0	1154.2	1151.0	1149.4	1151.0	1155.9	1152.6
10°	1154.2	1151.0	1152.6	1151.0	1155.9	1157.5	1154.2	1152.6	1154.2	1160.8	1159.1
12.5°	1155.9	1154.2	1154.2	1152.6	1157.5	1159.1	1155.9	1154.2	1155.9	1160.8	1159.1
15°	1152.6	1151.0	1151.0	1151.0	1154.2	1157.5	1152.6	1151.0	1151.0	1155.9	1154.2
17.5°	1146.2	1143.0	1143.0	1143.0	1144.6	1146.2	1141.4	1139.8	1138.1	1143.0	1141.4
20°	1134.9	1131.6	1128.4	1128.4	1130.0	1130.0	1126.8	1121.9	1121.9	1123.5	1120.2
22.5°	1113.8	1112.1	1108.9	1107.2	1110.5	1108.9	1102.4	1097.5	1095.9	1097.5	1094.4
25°	1084.6	1081.4	1079.8	1078.1	1079.8	1078.1	1071.6	1065.1	1065.1	1065.1	1060.2
27.5°	1044.0	1040.9	1039.2	1039.2	1040.9	1037.6	1031.1	1024.6	1021.4	1021.4	1016.5
30°	992.1	992.1	990.5	988.9	987.4	987.4	977.6	971.1	967.9	969.5	966.2
32.5°	929.0	927.4	925.8	920.9	922.5	920.9	912.8	907.9	903.0	899.8	898.1
35°	847.9	847.9	846.2	846.2	846.2	844.6	836.5	831.6	828.4	826.9	822.0
37.5°	758.8	757.1	755.5	755.5	755.5	755.5	750.6	745.8	745.8	744.1	740.9
40°	658.2	659.9	661.5	659.9	664.8	669.5	663.1	659.9	658.2	663.1	656.6
42.5°	561.0	559.4	567.4	569.0	569.0	577.1	578.8	580.4	578.8	582.0	582.0
45°	466.9	465.2	473.4	476.6	484.8	494.5	499.4	507.5	510.6	513.9	510.6
47.5°	377.8	384.2	390.8	398.9	405.2	421.5	431.2	439.4	442.6	447.5	447.5
50°	303.1	309.6	321.0	327.5	335.6	355.0	371.2	382.6	389.1	394.0	392.4
52.5°	233.5	244.8	259.4	265.9	277.2	299.9	317.8	330.8	338.9	343.8	345.4
55°	180.0	189.6	204.2	214.0	225.4	249.6	272.4	287.0	295.0	301.5	304.8
57.5°	133.0	144.2	160.5	168.6	181.6	209.1	228.6	246.4	256.1	264.2	265.9
60°	97.2	108.6	123.2	133.0	145.9	173.5	196.1	212.4	223.8	230.2	233.5
62.5°	69.8	81.0	95.6	105.4	116.8	141.0	163.8	180.0	191.2	199.4	204.2
65°	50.2	61.6	76.2	84.2	94.0	116.8	137.8	154.0	165.4	175.1	178.4
67.5°	37.2	45.4	58.4	66.5	76.2	94.0	111.9	126.5	137.8	145.9	149.1
70°	27.5	34.0	45.4	50.2	56.8	73.0	87.5	100.5	110.2	116.8	120.0
72.5°	19.5	24.4	32.4	37.2	42.1	55.1	66.5	76.2	82.6	89.1	92.4
75°	13.0	16.2	22.8	26.0	29.1	38.9	47.0	55.1	60.0	64.9	66.5
77.5°	8.1	11.4	16.2	17.9	21.1	26.0	32.4	37.2	40.5	43.8	47.0
80°	4.9	6.5	9.8	11.4	13.0	17.9	21.1	24.4	27.5	30.8	32.4
82.5°	3.2	4.9	6.5	6.5	8.1	9.8	13.0	16.2	17.9	19.5	21.1
85°	1.6	1.6	3.2	3.2	4.9	4.9	6.5	8.1	9.8	11.4	13.0
87.5°	1.6	1.6	1.6	1.6	3.2	3.2	4.9	4.9	4.9	6.5	6.5
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: P252674

CATALOG NUMBER: LE_6B20D010 EC6B10208027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2	1146.2
2.5°	1141.4	1146.2	1141.4	1144.6	1143.0	1143.0	1141.4	1143.0
5°	1146.2	1152.6	1146.2	1151.0	1147.9	1147.9	1147.9	1149.4
7.5°	1151.0	1157.5	1152.6	1157.5	1155.9	1154.2	1154.2	1157.5
10°	1155.9	1160.8	1157.5	1162.4	1160.8	1159.1	1159.1	1162.4
12.5°	1155.9	1162.4	1159.1	1164.0	1162.4	1160.8	1160.8	1162.4
15°	1151.0	1159.1	1154.2	1159.1	1157.5	1155.9	1155.9	1159.1
17.5°	1136.5	1143.0	1139.8	1143.0	1143.0	1141.4	1143.0	1144.6
20°	1117.0	1121.9	1118.6	1121.9	1121.9	1118.6	1120.2	1121.9
22.5°	1089.5	1094.4	1091.1	1094.4	1092.8	1091.1	1091.1	1089.5
25°	1055.4	1061.9	1057.0	1060.2	1057.0	1053.8	1053.8	1055.4
27.5°	1013.2	1018.1	1011.6	1014.9	1011.6	1008.4	1008.4	1006.8
30°	958.1	959.8	954.9	958.1	954.9	953.2	950.0	950.0
32.5°	891.6	893.2	888.4	888.4	885.1	885.1	878.8	883.5
35°	813.9	815.5	813.9	812.2	807.4	805.8	804.1	804.1
37.5°	732.8	732.8	727.9	726.2	723.0	719.9	721.4	716.6
40°	650.1	648.5	643.6	645.2	643.6	638.8	637.1	635.5
42.5°	572.2	572.2	567.4	569.0	565.8	564.1	559.4	561.0
45°	504.2	504.2	499.4	499.4	497.8	492.9	494.5	491.2
47.5°	442.6	442.6	441.0	441.0	436.1	434.5	434.5	434.5
50°	389.1	389.1	389.1	389.1	387.5	385.9	384.2	385.9
52.5°	343.8	347.0	345.4	345.4	343.8	342.1	340.5	340.5
55°	303.1	304.8	304.8	306.4	304.8	303.1	304.8	303.1
57.5°	267.5	270.8	270.8	270.8	270.8	270.8	269.1	267.5
60°	236.8	238.4	238.4	240.0	240.0	240.0	238.4	238.4
62.5°	205.9	209.1	210.8	210.8	212.4	210.8	210.8	210.8
65°	181.6	184.9	186.5	184.9	186.5	186.5	184.9	184.9
67.5°	152.4	155.6	155.6	155.6	155.6	157.2	155.6	155.6
70°	123.2	126.5	124.9	126.5	126.5	126.5	126.5	126.5
72.5°	94.0	95.6	97.2	97.2	98.9	97.2	97.2	97.2
75°	68.1	71.4	71.4	71.4	71.4	73.0	73.0	73.0
77.5°	48.6	50.2	50.2	51.9	51.9	51.9	51.9	53.5
80°	34.0	34.0	35.6	35.6	37.2	37.2	37.2	37.2
82.5°	22.8	24.4	24.4	24.4	24.4	24.4	24.4	24.4
85°	13.0	14.6	14.6	14.6	14.6	16.2	16.2	16.2
87.5°	8.1	8.1	8.1	8.1	8.1	8.1	6.5	6.5
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)