

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: P252365

Luminaire Tested: **LE_6B20D010 EC6B10208040 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252365
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 EC6B10208040 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2386.2 lumens
Efficiency: N/A
Efficacy: 114.7 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

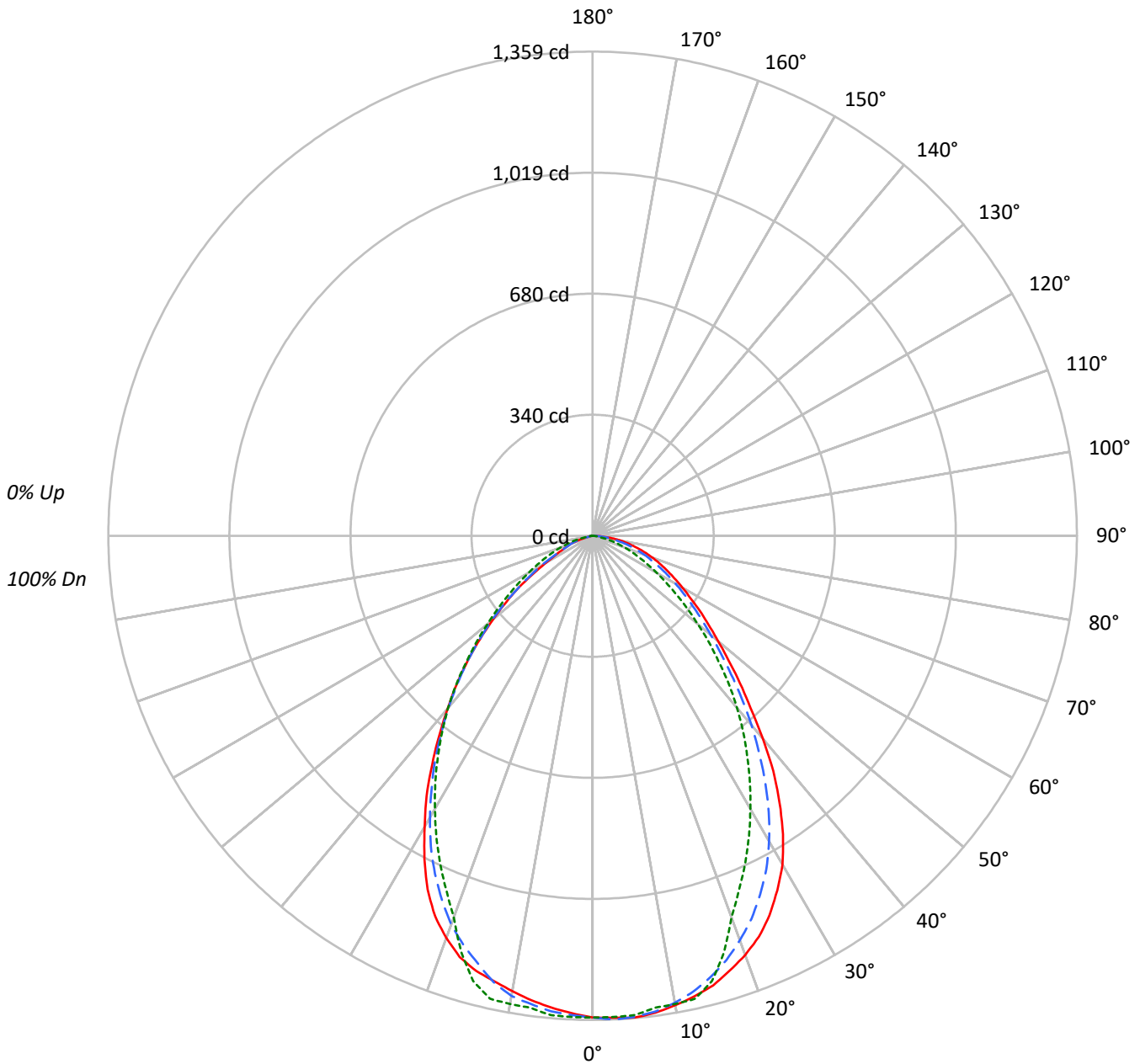
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252365

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBLWW1LI

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	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°	88212	88212	88212
5°	88896	88437	87049
10°	88639	88407	85962
15°	88237	87406	85387
20°	86923	79120	83383
25°	84568	72928	78881
30°	80298	66670	71032
35°	72866	60275	62513
40°	63261	53688	53833
45°	53956	46178	45680
50°	46688	39025	36894
55°	41744	32553	28561
60°	38035	27036	19246
65°	35506	22230	14372
70°	33839	18102	12055
75°	31862	12830	3983
80°	30357	6575	1315
85°	25002	3892	0



TEST NUMBER: P252365

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.7	5.4
10°-20°	357.1	15.0
20°-30°	492.9	20.7
30°-40°	501.6	21.0
40°-50°	403.1	16.9
50°-60°	268.0	11.2
60°-70°	152.7	6.4
70°-80°	68.6	2.9
80°-90°	14.5	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°	977.7	41.0
0°-40°	1479.3	62.0
0°-60°	2150.4	90.1
0°-90°	2386.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2386.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1352	1352	1352	1352	1352	
5°	1357	1356	1350	1340	1329	129
15°	1306	1282	1294	1243	1264	368
25°	1175	1112	1013	1046	1096	538
35°	915	845	757	771	785	569
45°	585	550	500	495	495	453
55°	367	342	286	255	251	330
65°	230	206	144	93	93	229
75°	126	105	51	21	16	135
85°	33	23	5	2	0	40
90°	0	0	0	0	0	



TEST NUMBER: P252365

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBLWW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1
2.5°	1353.9	1360.9	1359.1	1357.4	1359.1	1357.4	1353.9	1353.9	1350.4	1350.4	1359.1
5°	1357.4	1360.9	1359.1	1357.4	1357.4	1359.1	1352.1	1352.1	1348.5	1346.8	1355.6
7.5°	1350.4	1355.6	1352.1	1352.1	1350.4	1352.1	1345.0	1345.0	1339.8	1338.0	1346.8
10°	1338.0	1345.0	1341.5	1341.5	1341.5	1338.0	1334.5	1332.8	1327.5	1325.8	1331.0
12.5°	1324.0	1329.2	1327.5	1324.0	1324.0	1324.0	1317.0	1315.2	1308.1	1304.6	1309.9
15°	1306.4	1309.9	1308.1	1306.4	1302.9	1302.9	1295.9	1292.4	1285.4	1278.4	1281.9
17.5°	1280.1	1285.4	1281.9	1280.1	1274.8	1274.8	1267.8	1264.2	1253.8	1246.8	1248.5
20°	1252.0	1253.8	1252.0	1248.5	1243.2	1241.5	1234.4	1227.4	1218.6	1209.9	1208.1
22.5°	1218.6	1220.4	1215.1	1211.6	1206.4	1204.6	1195.8	1190.5	1176.5	1166.0	1164.1
25°	1174.8	1176.5	1176.5	1167.8	1164.1	1160.6	1151.9	1143.1	1130.9	1116.8	1111.5
27.5°	1122.0	1127.2	1123.8	1115.0	1108.0	1106.2	1097.5	1090.4	1074.6	1062.4	1055.4
30°	1065.9	1064.1	1062.4	1057.1	1046.5	1044.8	1036.0	1027.2	1014.9	999.1	990.4
32.5°	993.9	993.9	992.1	986.9	976.2	972.8	965.8	955.2	941.1	928.9	920.1
35°	914.9	916.6	914.9	904.2	897.2	893.8	890.2	878.0	865.6	851.6	844.6
37.5°	832.4	827.0	828.8	820.0	811.2	814.8	804.2	799.0	784.9	774.4	767.4
40°	742.8	746.2	739.2	735.8	730.5	725.2	725.2	716.4	709.4	697.1	693.6
42.5°	655.0	660.2	658.5	655.0	648.0	649.8	640.9	637.4	628.6	623.4	618.1
45°	584.8	584.8	584.8	581.2	579.5	576.0	570.6	565.4	560.1	553.1	549.6
47.5°	516.2	516.2	518.0	514.5	511.0	509.2	505.8	505.8	496.9	489.9	486.4
50°	460.0	460.0	460.0	456.5	453.0	453.0	449.5	446.0	440.8	435.5	432.0
52.5°	409.1	409.1	409.1	405.6	403.9	402.1	400.4	398.6	391.6	388.0	384.5
55°	367.0	365.2	365.2	363.5	360.0	360.0	358.2	354.8	349.4	344.1	342.4
57.5°	324.9	326.6	324.9	324.9	321.4	321.4	317.9	316.1	310.8	307.2	303.8
60°	291.5	291.5	291.5	289.8	286.2	288.0	284.5	282.8	277.5	272.1	268.6
62.5°	258.1	259.9	259.9	258.1	254.6	254.6	252.9	251.1	245.9	240.6	235.2
65°	230.0	230.0	230.0	228.2	226.5	226.5	224.8	223.0	217.8	210.8	205.5
67.5°	203.8	201.9	201.9	201.9	200.1	198.4	196.6	194.9	189.6	184.4	177.4
70°	177.4	177.4	177.4	175.6	172.1	173.9	172.1	170.4	165.0	159.8	154.5
72.5°	152.8	152.8	151.0	149.2	149.2	147.5	147.5	145.8	140.5	133.5	128.1
75°	126.4	126.4	126.4	126.4	122.9	124.6	121.1	119.4	115.9	110.6	105.4
77.5°	103.6	103.6	103.6	101.9	100.1	100.1	98.4	96.6	91.2	87.8	80.8
80°	80.8	80.8	80.8	80.8	79.0	77.2	75.5	73.8	70.2	65.0	59.8
82.5°	59.8	59.8	58.0	58.0	58.0	56.2	54.4	52.6	49.1	45.6	42.1
85°	33.4	35.1	35.1	31.6	33.4	31.6	31.6	28.1	28.1	24.6	22.9
87.5°	12.2	10.5	10.5	10.5	10.5	10.5	10.5	8.8	8.8	8.8	7.0
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: P252365

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1
2.5°	1352.1	1350.4	1357.4	1357.4	1346.8	1352.1	1353.9	1350.4	1350.4	1352.1	1346.8
5°	1348.5	1345.0	1352.1	1353.9	1343.2	1348.5	1350.4	1346.8	1348.5	1350.4	1343.2
7.5°	1336.2	1336.2	1341.5	1343.2	1332.8	1338.0	1338.0	1334.5	1336.2	1336.2	1331.0
10°	1324.0	1318.8	1324.0	1324.0	1315.2	1317.0	1320.5	1318.8	1325.8	1334.5	1334.5
12.5°	1301.1	1295.9	1304.6	1304.6	1299.4	1306.4	1315.2	1320.5	1327.5	1331.0	1320.5
15°	1273.0	1274.8	1290.6	1302.9	1297.6	1308.1	1317.0	1313.5	1304.6	1294.1	1278.4
17.5°	1236.1	1230.9	1245.0	1252.0	1245.0	1248.5	1255.5	1248.5	1234.4	1225.6	1204.6
20°	1194.0	1180.0	1180.0	1176.5	1164.1	1164.1	1162.4	1150.1	1144.9	1139.6	1130.9
22.5°	1146.6	1130.9	1125.5	1115.0	1104.5	1102.8	1097.5	1085.1	1078.1	1074.6	1064.1
25°	1092.2	1078.1	1069.4	1058.9	1043.0	1039.5	1034.2	1022.0	1018.5	1013.1	1004.4
27.5°	1036.0	1018.5	1006.1	995.6	981.6	979.8	969.2	960.5	953.5	950.0	942.9
30°	971.0	951.8	942.9	928.9	918.4	914.9	906.0	893.8	888.5	885.0	879.8
32.5°	899.0	883.2	874.5	862.1	848.1	849.9	839.4	828.8	825.2	821.8	816.5
35°	828.8	813.0	802.5	791.9	783.1	779.6	772.6	763.9	758.6	756.8	753.2
37.5°	751.5	739.2	730.5	719.9	712.9	709.4	705.9	697.1	693.6	693.6	686.6
40°	676.0	665.5	658.5	653.2	644.4	642.6	639.1	633.9	632.1	630.4	625.1
42.5°	607.5	593.5	588.2	584.8	579.5	576.0	574.2	570.6	568.9	567.1	561.9
45°	542.6	530.2	525.0	521.5	516.2	514.5	512.8	507.5	504.0	500.5	498.6
47.5°	479.4	470.6	468.9	460.0	456.5	453.0	449.5	446.0	444.2	442.5	435.5
50°	424.9	419.6	410.9	405.6	402.1	400.4	393.4	388.0	386.2	384.5	379.2
52.5°	375.8	368.8	363.5	354.8	353.0	349.4	345.9	338.9	335.4	333.6	328.4
55°	331.9	326.6	319.6	312.5	307.2	305.5	300.2	293.2	289.8	286.2	282.8
57.5°	295.0	286.2	279.2	272.1	268.6	263.4	258.1	254.6	249.4	244.1	238.8
60°	259.9	252.9	244.1	237.0	233.5	230.0	223.0	217.8	212.5	207.2	201.9
62.5°	226.5	219.5	210.8	203.8	200.1	196.6	189.6	184.4	179.1	173.9	166.9
65°	196.6	189.6	182.6	175.6	172.1	168.6	161.5	154.5	149.2	144.0	137.0
67.5°	172.1	163.2	156.2	149.2	145.8	142.2	135.2	130.0	122.9	117.6	110.6
70°	145.8	138.8	133.5	126.4	122.9	119.4	112.4	105.4	100.1	94.9	87.8
72.5°	122.9	114.1	108.9	101.9	98.4	96.6	89.5	84.2	79.0	72.0	66.8
75°	98.4	91.2	84.2	79.0	75.5	73.8	66.8	61.5	56.2	50.9	45.6
77.5°	75.5	70.2	63.2	58.0	54.4	52.6	45.6	40.4	35.1	31.6	26.4
80°	56.2	49.1	45.6	40.4	38.6	35.1	31.6	26.4	22.9	17.5	14.0
82.5°	38.6	33.4	29.9	26.4	24.6	22.9	19.4	15.8	12.2	10.5	8.8
85°	21.1	17.5	15.8	14.0	12.2	12.2	10.5	8.8	7.0	5.2	3.5
87.5°	7.0	5.2	5.2	5.2	5.2	3.5	3.5	3.5	1.8	1.8	1.8
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: P252365

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1
2.5°	1350.4	1350.4	1350.4	1348.5	1348.5	1348.5	1346.8	1353.9	1346.8	1345.0	1350.4
5°	1348.5	1345.0	1345.0	1345.0	1345.0	1343.2	1341.5	1345.0	1339.8	1338.0	1338.0
7.5°	1338.0	1336.2	1336.2	1334.5	1332.8	1331.0	1329.2	1331.0	1325.8	1324.0	1324.0
10°	1339.8	1336.2	1336.2	1331.0	1327.5	1322.2	1317.0	1318.8	1311.6	1306.4	1306.4
12.5°	1318.8	1309.9	1304.6	1299.4	1295.9	1294.1	1287.1	1290.6	1283.6	1281.9	1281.9
15°	1271.2	1260.8	1252.0	1248.5	1248.5	1245.0	1239.8	1246.8	1243.2	1245.0	1253.8
17.5°	1197.5	1192.2	1187.0	1185.2	1187.0	1190.5	1194.0	1204.6	1204.6	1209.9	1218.6
20°	1132.6	1129.1	1132.6	1132.6	1134.4	1141.4	1148.4	1157.1	1160.6	1166.0	1178.2
22.5°	1069.4	1069.4	1072.9	1078.1	1076.4	1088.6	1090.4	1106.2	1106.2	1116.8	1127.2
25°	1007.9	1007.9	1011.4	1013.1	1016.6	1023.8	1030.8	1043.0	1046.5	1057.1	1065.9
27.5°	948.2	946.5	946.5	948.2	951.8	960.5	964.0	978.0	983.4	990.4	999.1
30°	881.5	879.8	883.2	886.8	885.0	893.8	899.0	909.6	913.1	920.1	927.1
32.5°	818.2	818.2	818.2	821.8	821.8	828.8	828.8	841.1	841.1	846.4	853.4
35°	753.2	753.2	755.0	756.8	758.6	760.4	762.1	769.1	770.9	772.6	776.1
37.5°	691.9	690.1	691.9	691.9	688.4	695.4	695.4	702.4	697.1	702.4	704.1
40°	628.6	628.6	626.9	626.9	626.9	630.4	626.9	632.1	628.6	632.1	630.4
42.5°	563.6	563.6	560.1	563.6	561.9	561.9	561.9	565.4	560.1	563.6	565.4
45°	498.6	496.9	496.9	495.1	495.1	495.1	496.9	496.9	495.1	498.6	498.6
47.5°	435.5	433.8	433.8	433.8	433.8	435.5	430.2	433.8	430.2	430.2	430.2
50°	381.0	379.2	377.5	375.8	374.0	374.0	372.2	372.2	368.8	367.0	365.2
52.5°	328.4	326.6	323.1	323.1	321.4	319.6	314.2	314.2	309.0	307.2	307.2
55°	281.0	275.6	273.9	270.4	270.4	266.9	263.4	259.9	254.6	251.1	251.1
57.5°	237.0	231.8	228.2	226.5	224.8	221.2	214.2	212.5	205.5	203.8	201.9
60°	198.4	193.1	187.9	184.4	182.6	177.4	170.4	166.9	163.2	158.0	152.8
62.5°	161.5	156.2	149.2	147.5	144.0	138.8	133.5	128.1	124.6	119.4	115.9
65°	130.0	124.6	119.4	115.9	112.4	107.1	101.9	96.6	93.1	91.2	89.5
67.5°	105.4	98.4	93.1	91.2	87.8	84.2	79.0	77.2	73.8	73.8	73.8
70°	82.5	77.2	72.0	70.2	68.5	65.0	61.5	61.5	61.5	61.5	61.5
72.5°	61.5	58.0	52.6	50.9	49.1	47.4	43.9	45.6	43.9	43.9	43.9
75°	38.6	35.1	31.6	29.9	28.1	26.4	24.6	22.9	21.1	19.4	19.4
77.5°	21.1	17.5	15.8	14.0	14.0	12.2	10.5	10.5	8.8	8.8	8.8
80°	12.2	10.5	8.8	7.0	7.0	5.2	5.2	5.2	5.2	3.5	3.5
82.5°	7.0	5.2	3.5	3.5	3.5	3.5	1.8	1.8	1.8	1.8	1.8
85°	3.5	3.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.0
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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: P252365

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1	1352.1
2.5°	1341.5	1346.8	1341.5	1346.8	1346.8	1346.8	1346.8	1341.5
5°	1332.8	1336.2	1331.0	1334.5	1336.2	1334.5	1334.5	1329.2
7.5°	1317.0	1320.5	1315.2	1320.5	1322.2	1320.5	1318.8	1315.2
10°	1301.1	1302.9	1297.6	1301.1	1304.6	1304.6	1302.9	1297.6
12.5°	1276.6	1281.9	1276.6	1280.1	1283.6	1285.4	1285.4	1280.1
15°	1248.5	1257.2	1253.8	1259.0	1264.2	1266.0	1266.0	1264.2
17.5°	1220.4	1229.1	1223.9	1232.6	1237.9	1241.5	1243.2	1239.8
20°	1180.0	1190.5	1187.0	1194.0	1201.0	1206.4	1206.4	1201.0
22.5°	1127.2	1141.4	1139.6	1144.9	1153.6	1155.4	1158.9	1155.4
25°	1069.4	1079.9	1078.1	1083.4	1094.0	1094.0	1095.8	1095.8
27.5°	1002.6	1013.1	1011.4	1014.9	1022.0	1023.8	1025.5	1022.0
30°	930.6	935.9	935.9	941.1	946.5	948.2	948.2	942.9
32.5°	851.6	858.6	862.1	860.4	865.6	869.1	867.4	867.4
35°	779.6	781.4	783.1	784.9	786.6	790.1	786.6	784.9
37.5°	702.4	707.6	704.1	707.6	711.1	709.4	707.6	707.6
40°	632.1	633.9	630.4	633.9	635.6	635.6	635.6	632.1
42.5°	561.9	565.4	561.9	565.4	565.4	565.4	565.4	563.6
45°	491.6	495.1	495.1	496.9	496.9	495.1	495.1	495.1
47.5°	426.8	430.2	426.8	430.2	432.0	428.5	428.5	428.5
50°	365.2	363.5	363.5	365.2	365.2	365.2	365.2	363.5
52.5°	302.0	303.8	303.8	303.8	305.5	303.8	305.5	305.5
55°	247.6	247.6	247.6	249.4	247.6	247.6	249.4	251.1
57.5°	198.4	196.6	194.9	194.9	196.6	194.9	194.9	194.9
60°	152.8	151.0	149.2	149.2	149.2	149.2	149.2	147.5
62.5°	114.1	114.1	114.1	115.9	115.9	115.9	115.9	117.6
65°	91.2	91.2	91.2	91.2	91.2	91.2	91.2	93.1
67.5°	73.8	73.8	73.8	75.5	75.5	75.5	75.5	75.5
70°	61.5	61.5	63.2	61.5	63.2	63.2	63.2	63.2
72.5°	42.1	42.1	42.1	42.1	42.1	40.4	42.1	40.4
75°	17.5	17.5	17.5	17.5	17.5	17.5	17.5	15.8
77.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	1.8	1.8	1.8	1.8	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)