

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: P252573

Luminaire Tested: **LE_6B20D010 EC6B10208040 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252573
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 EC6B10208040 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE 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: 2630.0 lumens
Efficiency: N/A
Efficacy: 126.4 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

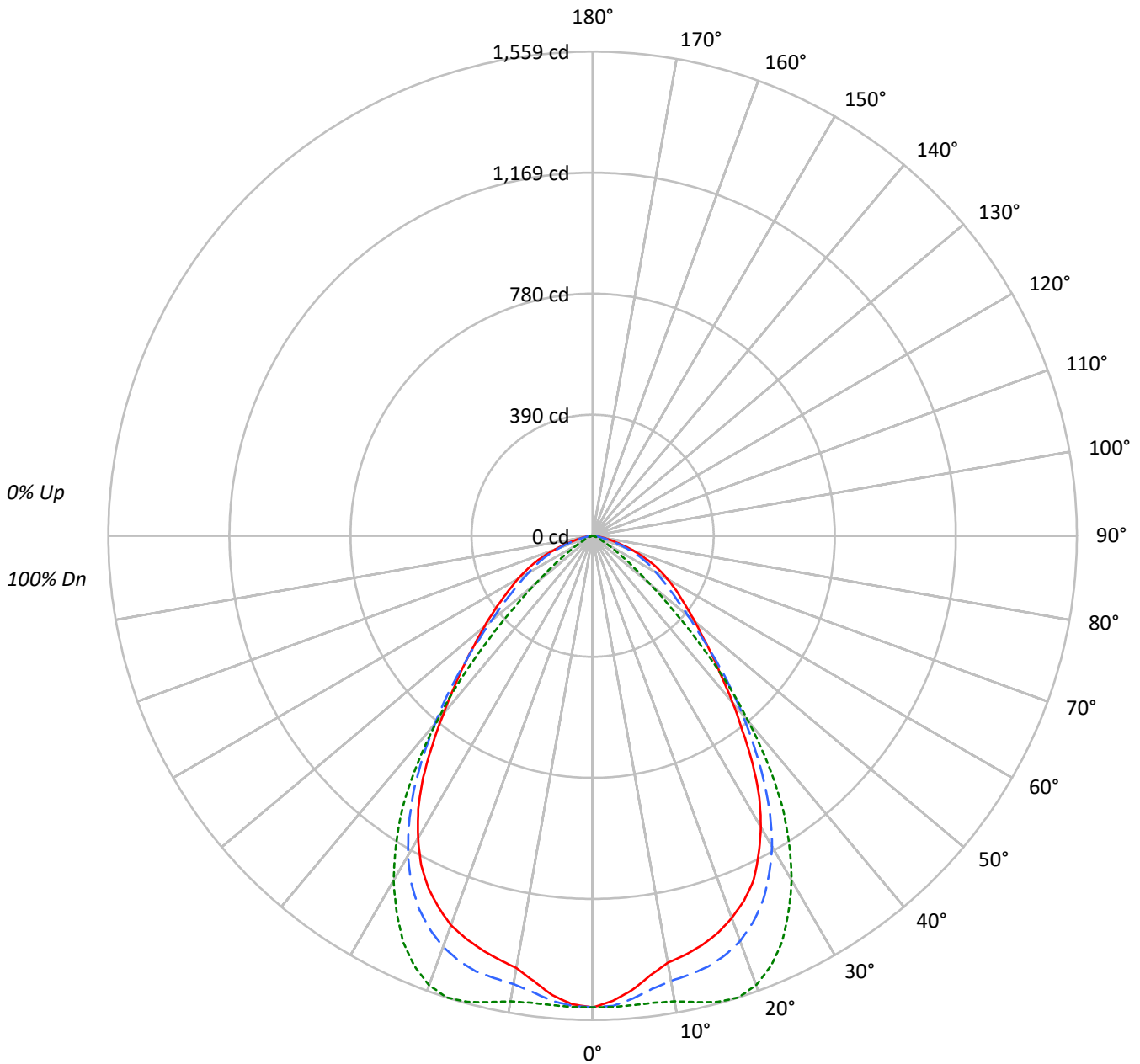
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252573

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252573

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBDW1LI

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°	99061	99061	99061
5°	96106	99322	97259
10°	92448	100828	93614
15°	92127	104927	93195
20°	90915	106884	92623
25°	88196	103874	90097
30°	81594	96540	84637
35°	71584	84861	75773
40°	59650	66523	63534
45°	50201	43899	53605
50°	43481	24055	46140
55°	39344	12785	40333
60°	36195	6641	36195
65°	32789	3535	31971
70°	26438	2003	24435
75°	18149	1311	16838
80°	11872	676	10557
85°	7860	1347	6587



TEST NUMBER: P252573

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	5.4
10°-20°	409.4	15.6
20°-30°	604.9	23.0
30°-40°	611.0	23.2
40°-50°	421.2	16.0
50°-60°	241.9	9.2
60°-70°	140.8	5.4
70°-80°	51.4	2.0
80°-90°	7.8	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°	1155.9	44.0
0°-40°	1767.0	67.2
0°-60°	2430.0	92.4
0°-90°	2630.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2630.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1518	1518	1518	1518	1518	
5°	1468	1496	1517	1503	1485	138
15°	1364	1436	1554	1452	1380	384
25°	1225	1297	1443	1324	1252	558
35°	899	960	1066	1004	951	558
45°	544	551	476	586	581	423
55°	346	304	112	316	355	311
65°	212	179	23	177	207	208
75°	72	58	5	56	67	81
85°	10	5	2	7	9	13
90°	0	0	0	0	0	



TEST NUMBER: P252573

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4
2.5°	1499.1	1500.9	1502.6	1500.9	1502.6	1509.6	1504.4	1507.9	1507.9	1509.6	1514.9
5°	1467.5	1467.5	1471.0	1469.2	1474.5	1481.6	1476.2	1481.6	1483.4	1486.9	1495.6
7.5°	1427.1	1427.1	1428.9	1428.9	1435.9	1443.0	1439.4	1446.5	1453.5	1460.5	1471.0
10°	1395.5	1399.0	1399.0	1400.9	1407.9	1416.6	1414.9	1423.6	1430.6	1441.2	1455.2
12.5°	1381.5	1383.2	1383.2	1386.8	1393.8	1402.6	1400.9	1409.6	1420.1	1432.4	1446.5
15°	1364.0	1367.5	1365.8	1369.2	1376.2	1385.0	1383.2	1392.0	1404.4	1416.6	1435.9
17.5°	1341.1	1342.9	1344.6	1344.6	1351.6	1358.8	1358.8	1367.5	1381.5	1395.5	1416.6
20°	1309.5	1313.0	1313.0	1314.8	1320.1	1330.6	1328.9	1337.6	1351.6	1365.8	1388.5
22.5°	1272.6	1274.4	1274.4	1276.1	1285.0	1290.2	1292.0	1299.0	1311.2	1327.1	1348.1
25°	1225.2	1227.0	1225.2	1230.5	1234.0	1244.6	1241.1	1249.9	1263.9	1276.1	1297.2
27.5°	1156.9	1160.4	1160.4	1162.1	1170.9	1179.6	1179.6	1188.4	1200.8	1209.5	1230.5
30°	1083.1	1088.4	1083.1	1091.9	1095.4	1102.4	1107.6	1112.9	1123.5	1135.8	1155.0
32.5°	998.9	997.1	998.9	1002.4	1012.9	1018.1	1021.6	1026.9	1037.5	1048.0	1063.8
35°	898.8	902.2	904.0	911.0	911.0	919.9	921.6	925.1	940.9	947.9	960.2
37.5°	793.5	797.0	798.8	802.2	809.2	812.8	818.0	823.2	833.9	846.1	853.1
40°	700.4	700.4	702.1	705.6	711.0	712.8	718.0	725.0	732.0	742.5	749.5
42.5°	612.6	614.4	612.6	616.1	621.4	628.4	626.6	635.5	637.2	644.2	649.5
45°	544.1	544.1	540.6	544.1	544.1	551.2	549.5	553.0	551.2	554.8	551.2
47.5°	479.2	481.0	479.2	481.0	481.0	481.0	482.8	479.2	481.0	475.8	465.1
50°	428.4	430.1	426.6	428.4	426.6	424.8	426.6	421.2	419.5	412.5	402.0
52.5°	384.4	382.6	380.9	380.9	380.9	379.1	377.4	372.1	366.9	359.9	347.6
55°	345.9	344.0	342.2	342.2	338.8	337.0	337.0	331.8	326.5	317.8	303.6
57.5°	310.8	309.0	307.2	307.2	305.5	301.9	301.9	296.6	289.6	279.1	266.9
60°	277.4	277.4	277.4	275.6	275.6	272.1	272.1	266.9	259.8	249.2	235.2
62.5°	247.5	245.8	245.8	245.8	245.8	244.0	242.2	238.8	231.8	221.1	208.9
65°	212.4	212.4	212.4	212.4	210.6	210.6	210.6	205.4	201.9	191.4	179.0
67.5°	173.8	173.8	173.8	173.8	172.0	173.8	173.8	170.2	166.8	156.2	145.8
70°	138.6	136.9	135.1	136.9	135.1	135.1	136.9	133.4	131.6	122.9	112.4
72.5°	101.9	103.6	101.9	101.9	101.9	100.0	101.9	100.0	96.5	89.5	82.5
75°	72.0	73.8	73.8	72.0	72.0	72.0	70.2	70.2	66.8	61.5	57.9
77.5°	49.1	49.1	49.1	49.1	47.4	47.4	47.4	45.6	43.9	40.4	36.9
80°	31.6	31.6	31.6	31.6	29.9	29.9	29.9	28.1	28.1	24.6	21.1
82.5°	19.2	19.2	19.2	19.2	19.2	19.2	17.5	17.5	15.8	14.0	12.2
85°	10.5	10.5	10.5	10.5	10.5	10.5	10.5	8.8	8.8	7.0	5.2
87.5°	3.5	3.5	5.2	5.2	5.2	5.2	5.2	5.2	3.5	3.5	3.5
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: P252573

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4
2.5°	1511.4	1513.1	1513.1	1513.1	1518.4	1520.1	1514.9	1509.6	1520.1	1518.4	1522.0
5°	1493.9	1499.1	1502.6	1504.4	1509.6	1513.1	1507.9	1506.1	1514.9	1516.6	1518.4
7.5°	1472.8	1481.6	1490.4	1493.9	1500.9	1504.4	1502.6	1502.6	1513.1	1516.6	1516.6
10°	1458.8	1471.0	1481.6	1490.4	1499.1	1504.4	1504.4	1506.1	1518.4	1522.0	1525.5
12.5°	1455.2	1471.0	1485.1	1497.4	1504.4	1513.1	1514.9	1520.1	1532.5	1537.8	1537.8
15°	1446.5	1467.5	1485.1	1500.9	1511.4	1522.0	1525.5	1536.0	1550.0	1553.5	1557.0
17.5°	1430.6	1451.8	1472.8	1492.1	1506.1	1514.9	1525.5	1536.0	1553.5	1558.8	1560.5
20°	1402.6	1427.1	1448.2	1467.5	1481.6	1493.9	1504.4	1516.6	1532.5	1539.5	1541.2
22.5°	1360.5	1385.0	1406.1	1427.1	1441.2	1451.8	1462.2	1476.2	1492.1	1499.1	1499.1
25°	1309.5	1332.4	1355.1	1371.0	1385.0	1397.2	1402.6	1418.4	1434.1	1443.0	1443.0
27.5°	1244.6	1265.6	1286.8	1304.2	1313.0	1323.6	1332.4	1346.4	1358.8	1365.8	1372.8
30°	1162.1	1183.1	1202.5	1220.0	1230.5	1241.1	1249.9	1260.4	1272.6	1281.5	1283.2
32.5°	1072.5	1090.1	1109.4	1127.0	1137.5	1141.0	1149.8	1160.4	1170.9	1177.9	1179.6
35°	974.2	986.5	998.9	1014.6	1025.1	1025.1	1033.9	1041.0	1049.8	1065.5	1062.0
37.5°	858.4	876.0	884.8	890.0	897.0	904.0	905.8	914.6	925.1	928.6	933.9
40°	749.5	754.9	760.1	760.1	767.1	767.1	767.1	768.9	779.4	781.1	788.1
42.5°	640.8	640.8	635.5	630.2	632.0	630.2	621.4	621.4	626.6	633.8	633.8
45°	538.9	526.6	510.9	498.5	489.8	486.2	475.8	475.8	474.0	475.8	482.8
47.5°	452.9	431.9	405.5	380.9	372.1	365.1	349.4	342.2	338.8	340.5	344.0
50°	380.9	358.1	328.2	298.4	282.6	273.9	254.5	242.2	240.5	237.0	244.0
52.5°	328.2	300.1	268.6	233.5	217.6	203.6	182.6	172.0	165.0	165.0	166.8
55°	282.6	252.8	217.6	182.6	166.8	156.2	135.1	121.1	114.1	112.4	117.6
57.5°	244.0	215.9	180.8	145.8	129.9	117.6	96.5	84.2	79.0	75.5	77.2
60°	214.1	186.1	151.0	117.6	103.6	89.5	72.0	57.9	50.9	50.9	52.6
62.5°	186.1	159.8	128.1	96.5	84.2	72.0	52.6	40.4	35.1	33.4	35.1
65°	158.0	133.4	107.1	80.8	68.5	57.9	42.1	31.6	24.6	22.9	24.6
67.5°	128.1	108.9	86.0	65.0	54.4	45.6	31.6	22.9	17.5	15.8	17.5
70°	100.0	82.5	65.0	47.4	40.4	33.4	22.9	17.5	12.2	10.5	12.2
72.5°	72.0	59.6	45.6	33.4	28.1	22.9	15.8	12.2	8.8	7.0	8.8
75°	49.1	40.4	29.9	21.1	17.5	15.8	10.5	7.0	5.2	5.2	5.2
77.5°	31.6	24.6	19.2	14.0	10.5	8.8	5.2	3.5	3.5	3.5	3.5
80°	17.5	14.0	10.5	7.0	5.2	5.2	3.5	3.5	1.8	1.8	1.8
82.5°	10.5	7.0	5.2	3.5	3.5	1.8	1.8	1.8	1.8	1.8	1.8
85°	5.2	3.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
87.5°	1.8	1.8	1.8	1.8	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



TEST NUMBER: P252573

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4
2.5°	1514.9	1516.6	1511.4	1518.4	1513.1	1520.1	1520.1	1513.1	1514.9	1511.4	1518.4
5°	1511.4	1511.4	1507.9	1513.1	1506.1	1513.1	1511.4	1499.1	1502.6	1495.6	1502.6
7.5°	1511.4	1507.9	1502.6	1507.9	1499.1	1504.4	1497.4	1485.1	1481.6	1472.8	1472.8
10°	1516.6	1511.4	1504.4	1506.1	1497.4	1499.1	1488.6	1471.0	1465.8	1455.2	1451.8
12.5°	1529.0	1523.8	1513.1	1516.6	1504.4	1504.4	1490.4	1469.2	1458.8	1444.8	1441.2
15°	1546.5	1537.8	1525.5	1527.2	1514.9	1507.9	1490.4	1465.8	1451.8	1432.4	1427.1
17.5°	1550.0	1541.2	1525.5	1525.5	1509.6	1500.9	1479.8	1451.8	1434.1	1414.9	1404.4
20°	1530.8	1522.0	1504.4	1502.6	1488.6	1476.2	1453.5	1425.4	1407.9	1386.8	1378.0
22.5°	1490.4	1479.8	1464.0	1462.2	1448.2	1441.2	1416.6	1388.5	1371.0	1349.9	1342.9
25°	1430.6	1425.4	1409.6	1407.9	1395.5	1386.8	1365.8	1339.4	1323.6	1302.5	1295.5
27.5°	1360.5	1355.1	1339.4	1339.4	1325.4	1320.1	1300.8	1276.1	1263.9	1244.6	1235.8
30°	1276.1	1269.1	1260.4	1258.6	1246.4	1241.1	1223.5	1200.8	1188.4	1172.6	1169.1
32.5°	1176.1	1170.9	1165.6	1163.9	1151.5	1146.2	1134.0	1111.1	1100.6	1086.6	1081.4
35°	1060.2	1056.8	1051.5	1049.8	1044.5	1039.2	1026.9	1009.4	1004.1	993.5	988.2
37.5°	926.9	930.4	926.9	926.9	921.6	923.4	912.9	902.2	897.0	890.0	886.5
40°	782.9	789.9	795.2	795.2	793.5	800.5	798.8	789.9	788.1	784.6	782.9
42.5°	637.2	640.8	651.2	658.2	656.5	674.1	675.9	682.9	688.1	684.6	686.4
45°	484.5	495.0	509.1	516.1	524.9	547.8	560.0	574.0	586.2	593.4	591.6
47.5°	349.4	361.6	377.4	388.0	403.8	431.9	463.4	481.0	498.5	507.4	516.1
50°	252.8	265.1	284.4	300.1	310.8	349.4	382.6	405.5	424.8	437.1	445.9
52.5°	177.2	191.4	212.4	226.5	242.2	279.1	317.8	344.0	365.1	380.9	389.8
55°	122.9	138.6	158.0	172.0	189.6	228.2	265.1	293.1	316.0	330.0	340.5
57.5°	86.0	100.0	119.4	131.6	149.2	186.1	222.9	251.0	273.9	287.9	300.1
60°	57.9	72.0	91.2	103.6	117.6	154.5	187.9	217.6	238.8	252.8	265.1
62.5°	40.4	52.6	72.0	84.2	96.5	128.1	159.8	186.1	207.1	222.9	233.5
65°	31.6	42.1	57.9	68.5	80.8	107.1	133.4	156.2	177.2	193.1	200.1
67.5°	22.9	33.4	45.6	54.4	63.2	86.0	108.9	126.4	145.8	158.0	166.8
70°	15.8	22.9	33.4	40.4	47.4	65.0	82.5	98.2	112.4	121.1	128.1
72.5°	12.2	15.8	22.9	28.1	33.4	45.6	59.6	72.0	82.5	89.5	96.5
75°	7.0	10.5	15.8	19.2	22.9	31.6	40.4	49.1	56.1	61.5	65.0
77.5°	3.5	5.2	8.8	10.5	14.0	19.2	26.4	31.6	36.9	40.4	43.9
80°	3.5	3.5	5.2	5.2	7.0	10.5	14.0	17.5	21.1	24.6	26.4
82.5°	1.8	1.8	3.5	3.5	3.5	5.2	7.0	10.5	12.2	14.0	15.8
85°	1.8	1.8	1.8	1.8	1.8	3.5	3.5	5.2	7.0	8.8	8.8
87.5°	0.0	0.0	1.8	1.8	1.8	1.8	1.8	3.5	3.5	3.5	5.2
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: P252573

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4	1518.4
2.5°	1513.1	1516.6	1514.9	1518.4	1513.1	1511.4	1514.9	1509.6
5°	1493.9	1495.6	1493.9	1493.9	1490.4	1486.9	1490.4	1485.1
7.5°	1464.0	1464.0	1458.8	1458.8	1451.8	1448.2	1448.2	1446.5
10°	1439.4	1434.1	1428.9	1430.6	1420.1	1416.6	1414.9	1413.1
12.5°	1427.1	1423.6	1414.9	1414.9	1404.4	1400.9	1399.0	1397.2
15°	1413.1	1406.1	1399.0	1397.2	1388.5	1385.0	1383.2	1379.8
17.5°	1388.5	1383.2	1374.5	1374.5	1365.8	1364.0	1360.5	1358.8
20°	1362.2	1355.1	1348.1	1348.1	1337.6	1337.6	1332.4	1334.1
22.5°	1325.4	1320.1	1313.0	1313.0	1304.2	1302.5	1297.2	1295.5
25°	1281.5	1274.4	1269.1	1267.4	1260.4	1256.9	1255.1	1251.6
27.5°	1223.5	1218.2	1213.0	1209.5	1200.8	1199.0	1193.6	1195.4
30°	1151.5	1148.0	1146.2	1142.8	1132.2	1128.8	1128.8	1123.5
32.5°	1072.5	1067.2	1063.8	1058.5	1049.8	1048.0	1042.8	1044.5
35°	976.0	969.0	963.8	965.5	955.0	953.2	949.6	951.4
37.5°	876.0	868.9	861.9	860.1	851.4	851.4	846.1	846.1
40°	772.4	765.4	761.9	761.9	751.4	753.1	747.8	746.0
42.5°	679.4	672.4	670.6	668.8	663.5	661.8	656.5	658.2
45°	591.6	589.9	589.9	586.2	581.0	579.2	581.0	581.0
47.5°	514.4	516.1	514.4	514.4	510.9	514.4	510.9	512.6
50°	449.4	452.9	452.9	452.9	451.1	452.9	452.9	454.6
52.5°	395.0	400.2	398.5	400.2	398.5	402.0	400.2	402.0
55°	347.6	351.1	352.9	354.6	354.6	354.6	354.6	354.6
57.5°	303.6	309.0	310.8	312.5	312.5	316.0	312.5	312.5
60°	268.6	273.9	275.6	277.4	277.4	279.1	275.6	277.4
62.5°	237.0	242.2	242.2	244.0	244.0	244.0	240.5	242.2
65°	205.4	207.1	208.9	208.9	207.1	207.1	205.4	207.1
67.5°	170.2	172.0	170.2	170.2	168.5	168.5	165.0	166.8
70°	131.6	131.6	133.4	131.6	129.9	131.6	129.9	128.1
72.5°	98.2	98.2	98.2	96.5	96.5	94.8	96.5	96.5
75°	66.8	66.8	68.5	68.5	68.5	68.5	66.8	66.8
77.5°	43.9	43.9	43.9	43.9	45.6	43.9	43.9	43.9
80°	28.1	28.1	29.9	29.9	28.1	28.1	28.1	28.1
82.5°	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
85°	10.5	10.5	10.5	10.5	8.8	8.8	8.8	8.8
87.5°	5.2	5.2	5.2	5.2	5.2	5.2	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)