

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: P252574

Luminaire Tested: **LE_6B20D010 EC6B10208050 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252574
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 EC6B10208050 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2628.7 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

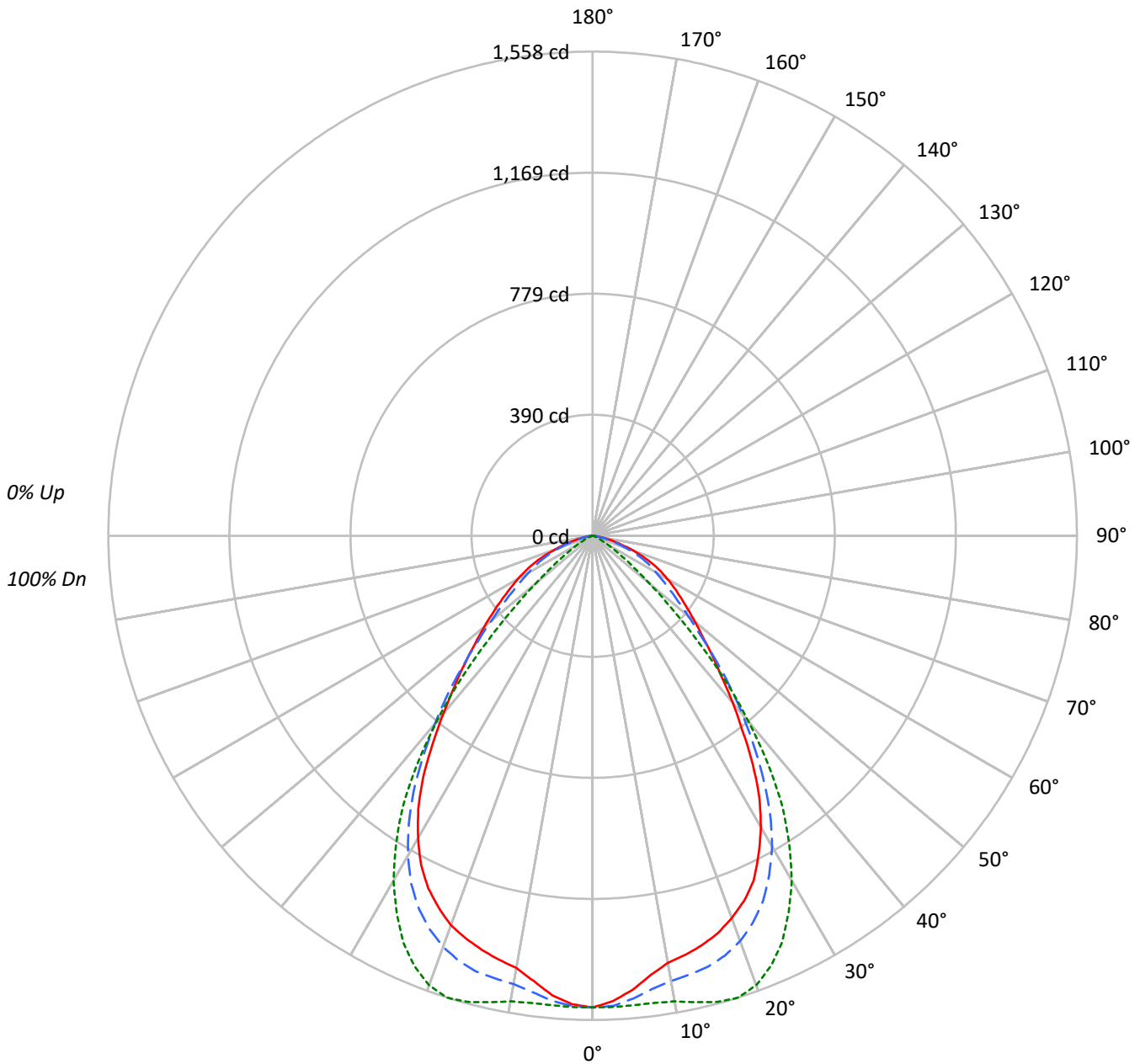
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252574

CATALOG NUMBER: LE_6B20D010 EC6B10208050 6LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252574

CATALOG NUMBER: LE_6B20D010 EC6B10208050 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°	99022	99022	99022
5°	96067	99283	97213
10°	92408	100775	93567
15°	92073	104879	93147
20°	90874	106835	92582
25°	88167	103817	90053
30°	81556	96495	84592
35°	71552	84821	75742
40°	59624	66497	63516
45°	50182	43872	53587
50°	43451	24044	46120
55°	39310	12762	40311
60°	36169	6641	36169
65°	32758	3520	31955
70°	26438	2003	24435
75°	18149	1311	16788
80°	11872	676	10557
85°	7860	1347	6587



TEST NUMBER: P252574

CATALOG NUMBER: LE_6B20D010 EC6B10208050 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.5	5.4
10°-20°	409.2	15.6
20°-30°	604.6	23.0
30°-40°	610.7	23.2
40°-50°	420.9	16.0
50°-60°	241.8	9.2
60°-70°	140.7	5.4
70°-80°	51.3	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°	1155.4	44.0
0°-40°	1766.1	67.2
0°-60°	2428.9	92.4
0°-90°	2628.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2628.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1518	1518	1518	1518	1518	
5°	1467	1495	1516	1502	1484	138
15°	1363	1435	1553	1451	1379	384
25°	1225	1297	1442	1323	1251	558
35°	898	960	1065	1004	951	558
45°	544	551	476	586	581	423
55°	346	304	112	316	354	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: P252574

CATALOG NUMBER: LE_6B20D010 EC6B10208050 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8
2.5°	1498.4	1500.1	1501.9	1500.1	1501.9	1508.9	1503.6	1507.1	1507.1	1508.9	1514.2
5°	1466.9	1466.9	1470.4	1468.6	1473.9	1480.9	1475.6	1480.9	1482.6	1486.1	1494.9
7.5°	1426.5	1426.5	1428.2	1428.2	1435.2	1442.2	1438.8	1445.8	1452.8	1459.8	1470.4
10°	1394.9	1398.4	1398.4	1400.1	1407.1	1416.0	1414.2	1423.0	1430.0	1440.5	1454.5
12.5°	1380.9	1382.6	1382.6	1386.1	1393.1	1401.9	1400.1	1408.9	1419.5	1431.8	1445.8
15°	1363.2	1366.9	1365.0	1368.6	1375.6	1384.4	1382.6	1391.4	1403.6	1416.0	1435.2
17.5°	1340.5	1342.2	1344.0	1344.0	1351.0	1358.0	1358.0	1366.9	1380.9	1394.9	1416.0
20°	1308.9	1312.4	1312.4	1314.1	1319.5	1330.0	1328.2	1337.0	1351.0	1365.0	1387.9
22.5°	1272.1	1273.9	1273.9	1275.6	1284.4	1289.6	1291.4	1298.4	1310.6	1326.5	1347.5
25°	1224.8	1226.5	1224.8	1230.0	1233.5	1244.0	1240.5	1249.2	1263.2	1275.6	1296.6
27.5°	1156.2	1159.8	1159.8	1161.5	1170.2	1179.1	1179.1	1187.9	1200.1	1208.9	1230.0
30°	1082.6	1087.9	1082.6	1091.4	1094.9	1101.9	1107.1	1112.4	1122.9	1135.2	1154.5
32.5°	998.4	996.6	998.4	1001.9	1012.4	1017.6	1021.1	1026.4	1037.0	1047.5	1063.2
35°	898.4	901.9	903.6	910.6	910.6	919.4	921.1	924.6	940.5	947.5	959.8
37.5°	793.1	796.6	798.4	801.9	808.9	812.4	817.6	822.9	833.4	845.8	852.8
40°	700.1	700.1	701.9	705.4	710.6	712.4	717.6	724.6	731.6	742.1	749.2
42.5°	612.4	614.1	612.4	615.9	621.1	628.1	626.4	635.1	636.9	643.9	649.2
45°	543.9	543.9	540.4	543.9	543.9	550.9	549.1	552.8	550.9	554.5	550.9
47.5°	479.0	480.8	479.0	480.8	480.8	480.8	482.5	479.0	480.8	475.5	465.0
50°	428.1	429.9	426.4	428.1	426.4	424.6	426.4	421.1	419.4	412.4	401.8
52.5°	384.2	382.5	380.8	380.8	380.8	379.0	377.2	372.0	366.8	359.8	347.4
55°	345.6	343.9	342.1	342.1	338.6	336.9	336.9	331.6	326.4	317.6	303.5
57.5°	310.5	308.8	307.0	307.0	305.2	301.8	301.8	296.5	289.5	279.0	266.8
60°	277.2	277.2	277.2	275.5	275.5	272.0	272.0	266.8	259.6	249.1	235.1
62.5°	247.4	245.6	245.6	245.6	245.6	243.9	242.1	238.6	231.6	221.1	208.8
65°	212.2	212.2	212.2	212.2	210.5	210.5	210.5	205.2	201.8	191.2	179.0
67.5°	173.8	173.8	173.8	173.8	172.0	173.8	173.8	170.2	166.6	156.1	145.6
70°	138.6	136.9	135.1	136.9	135.1	135.1	136.9	133.4	131.6	122.9	112.2
72.5°	101.8	103.5	101.8	101.8	101.8	100.0	101.8	100.0	96.5	89.5	82.5
75°	72.0	73.8	73.8	72.0	72.0	72.0	70.1	70.1	66.6	61.4	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	21.0
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: P252574

CATALOG NUMBER: LE_6B20D010 EC6B10208050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8
2.5°	1510.8	1512.5	1512.5	1512.5	1517.8	1519.5	1514.2	1508.9	1519.5	1517.8	1521.2
5°	1493.1	1498.4	1501.9	1503.6	1508.9	1512.5	1507.1	1505.4	1514.2	1516.0	1517.8
7.5°	1472.1	1480.9	1489.6	1493.1	1500.1	1503.6	1501.9	1501.9	1512.5	1516.0	1516.0
10°	1458.0	1470.4	1480.9	1489.6	1498.4	1503.6	1503.6	1505.4	1517.8	1521.2	1524.8
12.5°	1454.5	1470.4	1484.4	1496.6	1503.6	1512.5	1514.2	1519.5	1531.8	1537.0	1537.0
15°	1445.8	1466.9	1484.4	1500.1	1510.8	1521.2	1524.8	1535.2	1549.2	1552.8	1556.2
17.5°	1430.0	1451.0	1472.1	1491.4	1505.4	1514.2	1524.8	1535.2	1552.8	1558.1	1559.9
20°	1401.9	1426.5	1447.5	1466.9	1480.9	1493.1	1503.6	1516.0	1531.8	1538.8	1540.5
22.5°	1359.8	1384.4	1405.4	1426.5	1440.5	1451.0	1461.5	1475.6	1491.4	1498.4	1498.4
25°	1308.9	1331.8	1354.5	1370.4	1384.4	1396.6	1401.9	1417.8	1433.5	1442.2	1442.2
27.5°	1244.0	1265.0	1286.1	1303.6	1312.4	1323.0	1331.8	1345.8	1358.0	1365.0	1372.1
30°	1161.5	1182.6	1201.9	1219.4	1230.0	1240.5	1249.2	1259.8	1272.1	1280.9	1282.6
32.5°	1072.0	1089.6	1108.9	1126.5	1137.0	1140.5	1149.2	1159.8	1170.2	1177.4	1179.1
35°	973.8	986.1	998.4	1014.1	1024.6	1024.6	1033.5	1040.5	1049.2	1065.0	1061.5
37.5°	858.0	875.5	884.2	889.6	896.6	903.6	905.4	914.1	924.6	928.1	933.4
40°	749.2	754.5	759.8	759.8	766.8	766.8	766.8	768.5	779.0	780.8	787.8
42.5°	640.4	640.4	635.1	629.9	631.6	629.9	621.1	621.1	626.4	633.4	633.4
45°	538.6	526.4	510.6	498.2	489.5	486.0	475.5	475.5	473.8	475.5	482.5
47.5°	452.6	431.6	405.2	380.8	372.0	365.0	349.1	342.1	338.6	340.4	343.9
50°	380.8	357.9	328.1	298.2	282.5	273.8	254.4	242.1	240.4	236.9	243.9
52.5°	328.1	300.0	268.5	233.4	217.6	203.5	182.5	172.0	164.9	164.9	166.6
55°	282.5	252.6	217.6	182.5	166.6	156.1	135.1	121.1	114.0	112.2	117.5
57.5°	243.9	215.9	180.8	145.6	129.9	117.5	96.5	84.2	79.0	75.5	77.2
60°	214.0	186.0	150.9	117.5	103.5	89.5	72.0	57.9	50.9	50.9	52.6
62.5°	186.0	159.6	128.1	96.5	84.2	72.0	52.6	40.4	35.1	33.4	35.1
65°	157.9	133.4	107.0	80.8	68.4	57.9	42.1	31.6	24.6	22.8	24.6
67.5°	128.1	108.8	86.0	64.9	54.4	45.6	31.6	22.8	17.5	15.8	17.5
70°	100.0	82.5	64.9	47.4	40.4	33.4	22.8	17.5	12.2	10.5	12.2
72.5°	72.0	59.6	45.6	33.4	28.1	22.8	15.8	12.2	8.8	7.0	8.8
75°	49.1	40.4	29.9	21.0	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: P252574

CATALOG NUMBER: LE_6B20D010 EC6B10208050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8
2.5°	1514.2	1516.0	1510.8	1517.8	1512.5	1519.5	1519.5	1512.5	1514.2	1510.8	1517.8
5°	1510.8	1510.8	1507.1	1512.5	1505.4	1512.5	1510.8	1498.4	1501.9	1494.9	1501.9
7.5°	1510.8	1507.1	1501.9	1507.1	1498.4	1503.6	1496.6	1484.4	1480.9	1472.1	1472.1
10°	1516.0	1510.8	1503.6	1505.4	1496.6	1498.4	1487.9	1470.4	1465.1	1454.5	1451.0
12.5°	1528.2	1523.0	1512.5	1516.0	1503.6	1503.6	1489.6	1468.6	1458.0	1444.0	1440.5
15°	1545.8	1537.0	1524.8	1526.5	1514.2	1507.1	1489.6	1465.1	1451.0	1431.8	1426.5
17.5°	1549.2	1540.5	1524.8	1524.8	1508.9	1500.1	1479.1	1451.0	1433.5	1414.2	1403.6
20°	1530.0	1521.2	1503.6	1501.9	1487.9	1475.6	1452.8	1424.8	1407.1	1386.1	1377.4
22.5°	1489.6	1479.1	1463.4	1461.5	1447.5	1440.5	1416.0	1387.9	1370.4	1349.2	1342.2
25°	1430.0	1424.8	1408.9	1407.1	1394.9	1386.1	1365.0	1338.8	1323.0	1301.9	1294.9
27.5°	1359.8	1354.5	1338.8	1338.8	1324.8	1319.5	1300.1	1275.6	1263.2	1244.0	1235.2
30°	1275.6	1268.5	1259.8	1258.0	1245.8	1240.5	1223.0	1200.1	1187.9	1172.0	1168.5
32.5°	1175.6	1170.2	1165.0	1163.2	1151.0	1145.8	1133.5	1110.6	1100.1	1086.1	1080.9
35°	1059.8	1056.2	1051.0	1049.2	1044.0	1038.8	1026.4	1008.9	1003.6	993.1	987.9
37.5°	926.4	929.9	926.4	926.4	921.1	922.9	912.4	901.9	896.6	889.6	886.0
40°	782.5	789.5	794.9	794.9	793.1	800.1	798.4	789.5	787.8	784.2	782.5
42.5°	636.9	640.4	651.0	658.0	656.2	673.8	675.5	682.5	687.8	684.2	686.0
45°	484.2	494.8	508.9	515.9	524.6	547.4	559.8	573.8	586.0	593.0	591.2
47.5°	349.1	361.5	377.2	387.8	403.5	431.6	463.2	480.8	498.2	507.1	515.9
50°	252.6	265.0	284.2	300.0	310.5	349.1	382.5	405.2	424.6	436.9	445.6
52.5°	177.2	191.2	212.2	226.4	242.1	279.0	317.6	343.9	365.0	380.8	389.5
55°	122.9	138.6	157.9	172.0	189.5	228.1	265.0	293.0	315.9	329.9	340.4
57.5°	86.0	100.0	119.2	131.6	149.1	186.0	222.9	250.9	273.8	287.8	300.0
60°	57.9	72.0	91.2	103.5	117.5	154.4	187.8	217.6	238.6	252.6	265.0
62.5°	40.4	52.6	72.0	84.2	96.5	128.1	159.6	186.0	207.0	222.9	233.4
65°	31.6	42.1	57.9	68.4	80.8	107.0	133.4	156.1	177.2	193.0	200.0
67.5°	22.8	33.4	45.6	54.4	63.1	86.0	108.8	126.4	145.6	157.9	166.6
70°	15.8	22.8	33.4	40.4	47.4	64.9	82.5	98.2	112.2	121.1	128.1
72.5°	12.2	15.8	22.8	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	22.8	31.6	40.4	49.1	56.1	61.4	64.9
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	21.0	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: P252574

CATALOG NUMBER: LE_6B20D010 EC6B10208050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8	1517.8
2.5°	1512.5	1516.0	1514.2	1517.8	1512.5	1510.8	1514.2	1508.9
5°	1493.1	1494.9	1493.1	1493.1	1489.6	1486.1	1489.6	1484.4
7.5°	1463.4	1463.4	1458.0	1458.0	1451.0	1447.5	1447.5	1445.8
10°	1438.8	1433.5	1428.2	1430.0	1419.5	1416.0	1414.2	1412.4
12.5°	1426.5	1423.0	1414.2	1414.2	1403.6	1400.1	1398.4	1396.6
15°	1412.4	1405.4	1398.4	1396.6	1387.9	1384.4	1382.6	1379.1
17.5°	1387.9	1382.6	1373.9	1373.9	1365.0	1363.2	1359.8	1358.0
20°	1361.5	1354.5	1347.5	1347.5	1337.0	1337.0	1331.8	1333.5
22.5°	1324.8	1319.5	1312.4	1312.4	1303.6	1301.9	1296.6	1294.9
25°	1280.9	1273.9	1268.5	1266.8	1259.8	1256.2	1254.5	1251.0
27.5°	1223.0	1217.6	1212.4	1208.9	1200.1	1198.4	1193.1	1194.9
30°	1151.0	1147.5	1145.8	1142.2	1131.8	1128.2	1128.2	1122.9
32.5°	1072.0	1066.8	1063.2	1058.0	1049.2	1047.5	1042.2	1044.0
35°	975.5	968.5	963.2	965.0	954.5	952.8	949.2	951.0
37.5°	875.5	868.5	861.5	859.8	851.0	851.0	845.8	845.8
40°	772.0	765.0	761.5	761.5	751.0	752.8	747.5	745.8
42.5°	679.0	672.0	670.2	668.5	663.2	661.5	656.2	658.0
45°	591.2	589.5	589.5	586.0	580.8	579.0	580.8	580.8
47.5°	514.1	515.9	514.1	514.1	510.6	514.1	510.6	512.4
50°	449.1	452.6	452.6	452.6	450.9	452.6	452.6	454.4
52.5°	394.8	400.0	398.2	400.0	398.2	401.8	400.0	401.8
55°	347.4	350.9	352.6	354.4	354.4	354.4	354.4	354.4
57.5°	303.5	308.8	310.5	312.4	312.4	315.9	312.4	312.4
60°	268.5	273.8	275.5	277.2	277.2	279.0	275.5	277.2
62.5°	236.9	242.1	242.1	243.9	243.9	243.9	240.4	242.1
65°	205.2	207.0	208.8	208.8	207.0	207.0	205.2	207.0
67.5°	170.2	172.0	170.2	170.2	168.5	168.5	164.9	166.6
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°	66.6	66.6	68.4	68.4	68.4	68.4	66.6	66.6
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)