

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: P252704

Luminaire Tested: **LE_6B40D010 EC6B30508050 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252704
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_6B40D010 EC6B30508050 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5047.5 lumens
Efficiency: N/A
Efficacy: 117.4 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

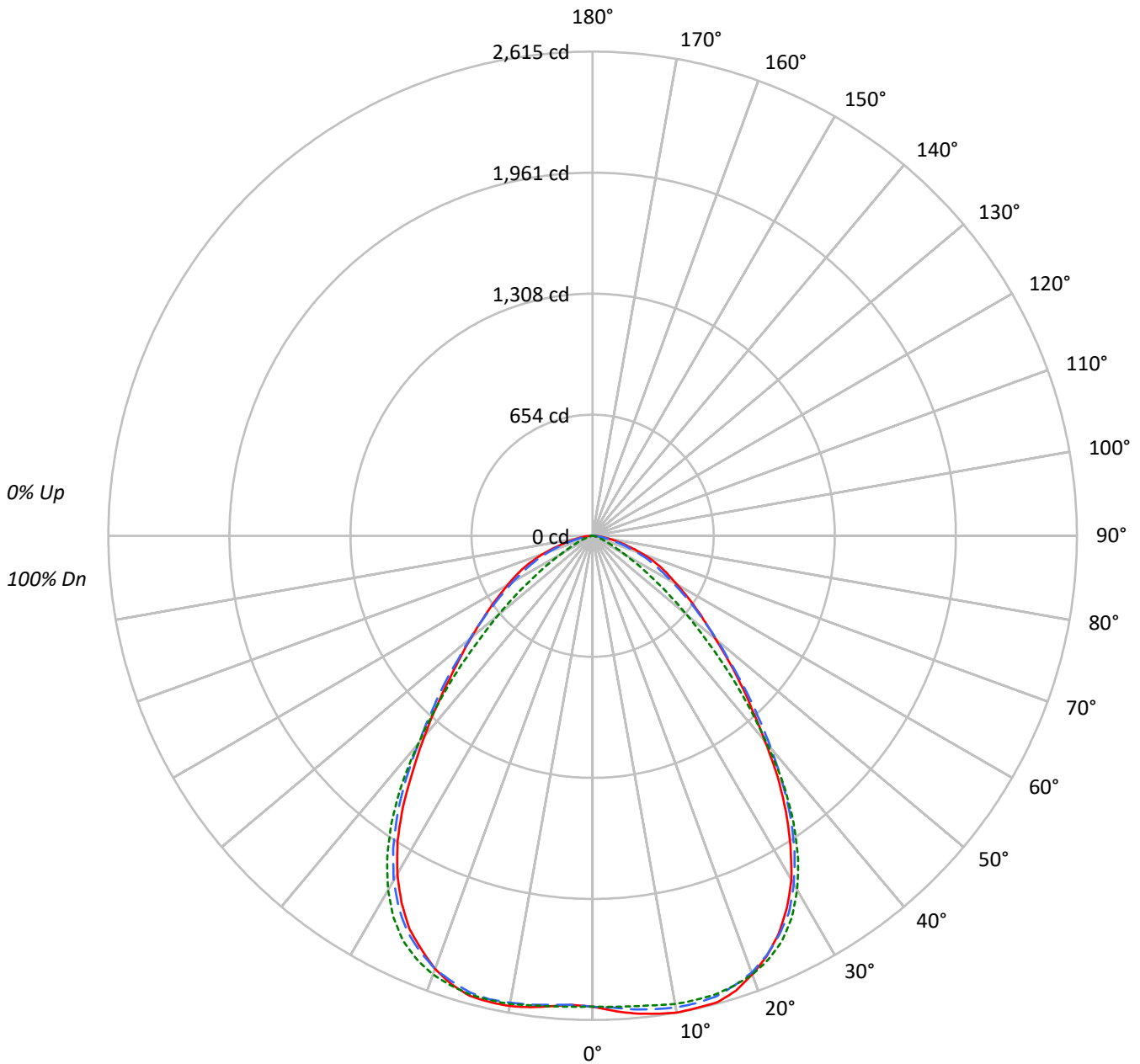
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252704

CATALOG NUMBER: LE_6B40D010 EC6B30508050 6LBDW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252704

CATALOG NUMBER: LE_6B40D010 EC6B30508050 6LBDW1H

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			100
1	111	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89			89
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78			78
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68			68
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61			61
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54			54
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48			48
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44			44
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40			40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36			36
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33			33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	165907	165907	165907
5°	169606	167012	167012
10°	173236	170136	170851
15°	176136	173218	173711
20°	175062	175062	172812
25°	170893	173995	168560
30°	161771	166374	158788
35°	144952	150687	142093
40°	123149	124682	120083
45°	104212	95254	100559
50°	87987	67180	86891
55°	77334	43359	76504
60°	68516	25822	68998
65°	63293	15561	63293
70°	54898	8927	53506
75°	43507	5445	40810
80°	32461	4058	31108
85°	29643	2695	26948



TEST NUMBER: P252704

CATALOG NUMBER: LE_6B40D010 EC6B30508050 6LBDW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.8	4.9
10°-20°	724.6	14.4
20°-30°	1089.8	21.6
30°-40°	1145.8	22.7
40°-50°	856.0	17.0
50°-60°	532.9	10.6
60°-70°	303.0	6.0
70°-80°	124.8	2.5
80°-90°	25.8	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°	2059.2	40.8
0°-40°	3205.0	63.5
0°-60°	4593.8	91.0
0°-90°	5047.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5047.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2543	2543	2543	2543	2543	
5°	2590	2568	2550	2543	2550	248
15°	2608	2575	2565	2554	2572	733
25°	2374	2381	2417	2363	2342	1087
35°	1820	1867	1892	1838	1784	1129
45°	1130	1155	1032	1133	1090	875
55°	680	665	381	655	673	611
65°	410	367	101	367	410	404
75°	173	137	22	133	162	188
85°	40	25	4	22	36	44
90°	0	0	0	0	0	



TEST NUMBER: P252704

CATALOG NUMBER: LE_6B40D010 EC6B30508050 6LBDW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0
2.5°	2568.2	2564.6	2568.2	2561.0	2557.4	2557.4	2561.0	2553.9	2550.2	2553.9	2550.2
5°	2589.8	2582.6	2586.2	2582.6	2575.4	2575.4	2579.0	2568.2	2568.2	2571.9	2568.2
7.5°	2604.1	2604.1	2604.1	2597.0	2593.4	2589.8	2597.0	2586.2	2582.6	2582.6	2579.0
10°	2615.0	2611.4	2615.0	2607.8	2600.6	2597.0	2604.1	2597.0	2589.8	2597.0	2586.2
12.5°	2611.4	2611.4	2611.4	2607.8	2600.6	2597.0	2604.1	2593.4	2589.8	2593.4	2586.2
15°	2607.8	2597.0	2600.6	2597.0	2586.2	2586.2	2589.8	2579.0	2571.9	2582.6	2575.4
17.5°	2575.4	2568.2	2571.9	2564.6	2557.4	2553.9	2557.4	2553.9	2546.6	2553.9	2546.6
20°	2521.5	2521.5	2525.0	2517.9	2510.6	2507.1	2514.2	2507.1	2499.9	2510.6	2510.6
22.5°	2456.8	2456.8	2456.8	2453.1	2449.5	2449.5	2449.5	2445.9	2442.4	2449.5	2453.1
25°	2374.0	2370.4	2374.0	2377.6	2374.0	2370.4	2374.0	2374.0	2366.8	2381.1	2381.1
27.5°	2269.6	2269.6	2276.9	2273.2	2273.2	2269.6	2276.9	2276.9	2273.2	2284.0	2294.9
30°	2147.4	2140.1	2147.4	2147.4	2151.0	2151.0	2154.6	2154.6	2154.6	2165.4	2172.5
32.5°	1989.1	1992.8	2003.5	1999.9	1996.2	2007.1	2007.1	2014.2	2017.9	2025.1	2028.6
35°	1820.0	1823.6	1823.6	1827.2	1834.5	1827.2	1845.2	1841.6	1845.2	1859.6	1866.9
37.5°	1640.2	1629.4	1647.4	1640.2	1643.8	1643.8	1651.0	1654.6	1665.4	1683.4	1683.4
40°	1446.0	1449.6	1456.8	1460.4	1464.0	1464.0	1464.0	1474.8	1478.4	1499.9	1496.4
42.5°	1276.9	1276.9	1284.1	1287.8	1287.8	1287.8	1287.8	1298.5	1305.8	1312.9	1320.1
45°	1129.5	1118.6	1125.9	1125.9	1133.0	1129.5	1136.6	1143.9	1147.4	1158.2	1154.6
47.5°	989.1	985.5	989.1	992.8	989.1	992.8	996.4	1000.0	1003.5	1003.5	1003.5
50°	866.9	866.9	870.5	874.0	874.0	874.0	874.0	877.6	877.6	884.9	877.6
52.5°	766.1	769.8	769.8	766.1	769.8	769.8	773.4	773.4	769.8	769.8	759.0
55°	679.9	676.2	679.9	676.2	679.9	679.9	676.2	676.2	672.6	669.0	665.4
57.5°	597.1	597.1	597.1	597.1	593.5	597.1	593.5	589.9	589.9	582.8	571.9
60°	525.1	525.1	525.1	525.1	525.1	521.5	525.1	521.5	514.4	507.1	492.8
62.5°	464.0	460.4	464.0	460.4	460.4	456.8	456.8	453.2	446.0	438.9	424.5
65°	410.0	413.6	410.0	410.0	406.5	402.9	402.9	399.2	388.5	381.2	366.9
67.5°	352.5	348.9	348.9	348.9	345.2	345.2	345.2	338.1	330.9	320.1	305.8
70°	287.8	287.8	287.8	284.1	284.1	280.5	280.5	277.0	269.8	262.6	244.6
72.5°	226.6	226.6	226.6	219.4	223.0	219.4	219.4	212.2	208.6	197.9	187.0
75°	172.6	172.6	169.0	169.0	165.5	161.9	161.9	158.2	154.6	147.5	136.6
77.5°	125.9	125.9	125.9	122.2	118.8	115.1	115.1	111.5	107.9	104.2	97.1
80°	86.4	86.4	86.4	86.4	82.8	79.1	79.1	75.5	75.5	72.0	64.8
82.5°	57.5	57.5	57.5	57.5	54.0	54.0	54.0	50.4	46.8	46.8	39.6
85°	39.6	39.6	36.0	36.0	36.0	36.0	32.4	32.4	28.8	25.1	25.1
87.5°	21.6	21.6	21.6	21.6	18.0	18.0	18.0	18.0	14.4	14.4	10.8
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: P252704

CATALOG NUMBER: LE_6B40D010 EC6B30508050 6LBDW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0
2.5°	2561.0	2561.0	2557.4	2546.6	2550.2	2546.6	2550.2	2546.6	2535.9	2546.6	2535.9
5°	2575.4	2579.0	2571.9	2557.4	2561.0	2557.4	2557.4	2553.9	2543.0	2550.2	2543.0
7.5°	2589.8	2586.2	2582.6	2568.2	2571.9	2568.2	2568.2	2561.0	2550.2	2557.4	2546.6
10°	2597.0	2597.0	2589.8	2575.4	2575.4	2571.9	2575.4	2571.9	2557.4	2568.2	2561.0
12.5°	2597.0	2593.4	2593.4	2575.4	2579.0	2575.4	2579.0	2571.9	2561.0	2568.2	2564.6
15°	2586.2	2586.2	2582.6	2564.6	2568.2	2568.2	2571.9	2564.6	2553.9	2564.6	2557.4
17.5°	2564.6	2564.6	2561.0	2546.6	2553.9	2553.9	2557.4	2550.2	2539.5	2546.6	2546.6
20°	2521.5	2525.0	2525.0	2514.2	2521.5	2521.5	2525.0	2521.5	2517.9	2521.5	2514.2
22.5°	2471.1	2478.2	2478.2	2467.5	2474.8	2474.8	2485.5	2481.9	2474.8	2478.2	2474.8
25°	2395.6	2402.8	2410.0	2402.8	2410.0	2410.0	2420.8	2417.1	2410.0	2417.1	2406.4
27.5°	2309.2	2312.9	2320.0	2312.9	2323.6	2320.0	2330.9	2327.2	2316.4	2327.2	2323.6
30°	2187.0	2201.4	2212.1	2201.4	2212.1	2212.1	2219.4	2215.8	2212.1	2208.5	2208.5
32.5°	2050.2	2064.6	2064.6	2061.0	2068.2	2068.2	2071.9	2064.6	2061.0	2064.6	2068.2
35°	1881.2	1888.4	1895.6	1892.0	1895.6	1899.1	1895.6	1899.1	1888.4	1892.0	1892.0
37.5°	1697.8	1705.0	1705.0	1694.1	1701.4	1701.4	1694.1	1694.1	1687.0	1694.1	1679.8
40°	1503.5	1496.4	1499.9	1492.8	1485.5	1485.5	1482.0	1467.5	1460.4	1464.0	1467.5
42.5°	1312.9	1312.9	1302.1	1284.1	1266.1	1266.1	1255.4	1248.1	1233.8	1241.0	1237.4
45°	1151.0	1133.0	1118.6	1089.9	1079.1	1071.9	1053.9	1035.9	1028.8	1032.4	1028.8
47.5°	996.4	982.0	946.0	906.4	895.6	884.9	863.2	841.6	834.5	827.2	827.2
50°	866.9	841.6	802.1	759.0	741.0	723.0	694.2	672.6	658.2	661.9	661.9
52.5°	748.1	719.4	672.6	618.6	597.1	575.5	550.4	525.1	514.4	510.8	510.8
55°	643.9	611.5	564.8	503.6	485.6	460.4	428.0	399.2	384.9	381.2	388.5
57.5°	550.4	521.5	467.6	406.5	384.9	359.8	327.4	302.1	284.1	280.5	284.1
60°	474.8	435.2	388.5	330.9	302.1	280.5	244.6	223.0	205.0	197.9	201.4
62.5°	399.2	363.2	316.5	259.0	237.4	215.9	183.5	158.2	143.9	140.2	143.9
65°	341.8	305.8	262.6	212.2	190.6	169.0	140.2	115.1	104.2	100.8	104.2
67.5°	284.1	251.8	215.9	169.0	151.1	133.1	104.2	86.4	72.0	68.4	72.0
70°	230.2	201.4	165.5	133.1	115.1	100.8	79.1	61.1	50.4	46.8	50.4
72.5°	172.6	151.1	125.9	97.1	86.4	75.5	57.5	43.1	36.0	32.4	36.0
75°	125.9	107.9	89.9	68.4	61.1	54.0	39.6	28.8	25.1	21.6	25.1
77.5°	86.4	75.5	61.1	46.8	39.6	36.0	25.1	21.6	18.0	14.4	14.4
80°	57.5	50.4	39.6	32.4	28.8	25.1	18.0	14.4	10.8	10.8	10.8
82.5°	36.0	28.8	25.1	18.0	14.4	14.4	10.8	7.2	7.2	7.2	7.2
85°	21.6	18.0	14.4	10.8	7.2	7.2	3.6	3.6	3.6	3.6	3.6
87.5°	10.8	7.2	7.2	3.6	3.6	3.6	3.6	3.6	0.0	0.0	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: P252704

CATALOG NUMBER: LE_6B40D010 EC6B30508050 6LBDW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0
2.5°	2543.0	2535.9	2535.9	2539.5	2543.0	2546.6	2539.5	2535.9	2535.9	2546.6	2539.5
5°	2543.0	2539.5	2539.5	2539.5	2546.6	2550.2	2543.0	2539.5	2543.0	2553.9	2550.2
7.5°	2553.9	2546.6	2550.2	2550.2	2553.9	2561.0	2553.9	2550.2	2553.9	2564.6	2557.4
10°	2561.0	2553.9	2557.4	2553.9	2564.6	2568.2	2561.0	2557.4	2561.0	2575.4	2571.9
12.5°	2564.6	2561.0	2561.0	2557.4	2568.2	2571.9	2564.6	2561.0	2564.6	2575.4	2571.9
15°	2557.4	2553.9	2553.9	2553.9	2561.0	2568.2	2557.4	2553.9	2553.9	2564.6	2561.0
17.5°	2543.0	2535.9	2535.9	2535.9	2539.5	2543.0	2532.2	2528.6	2525.0	2535.9	2532.2
20°	2517.9	2510.6	2503.5	2503.5	2507.1	2507.1	2499.9	2489.1	2489.1	2492.6	2485.5
22.5°	2471.1	2467.5	2460.2	2456.8	2463.9	2460.2	2445.9	2435.1	2431.5	2435.1	2427.9
25°	2406.4	2399.1	2395.6	2392.0	2395.6	2392.0	2377.6	2363.2	2363.2	2363.2	2352.4
27.5°	2316.4	2309.2	2305.6	2305.6	2309.2	2302.0	2287.6	2273.2	2266.1	2266.1	2255.2
30°	2201.4	2201.4	2197.8	2194.1	2190.5	2190.5	2169.0	2154.6	2147.4	2151.0	2143.8
32.5°	2061.0	2057.5	2053.9	2043.1	2046.6	2043.1	2025.1	2014.2	2003.5	1996.2	1992.8
35°	1881.2	1881.2	1877.6	1877.6	1877.6	1874.0	1856.0	1845.2	1838.0	1834.5	1823.6
37.5°	1683.4	1679.8	1676.1	1676.1	1676.1	1676.1	1665.4	1654.6	1654.6	1651.0	1643.8
40°	1460.4	1464.0	1467.5	1464.0	1474.8	1485.5	1471.1	1464.0	1460.4	1471.1	1456.8
42.5°	1244.5	1241.0	1258.9	1262.5	1262.5	1280.5	1284.1	1287.8	1284.1	1291.2	1291.2
45°	1035.9	1032.4	1050.2	1057.5	1075.5	1097.1	1107.9	1125.9	1133.0	1140.2	1133.0
47.5°	838.1	852.5	866.9	884.9	899.2	935.2	956.8	974.8	982.0	992.8	992.8
50°	672.6	687.0	712.2	726.6	744.6	787.8	823.8	848.9	863.2	874.0	870.5
52.5°	518.0	543.1	575.5	589.9	615.1	665.4	705.0	733.8	751.8	762.5	766.1
55°	399.2	420.9	453.2	474.8	500.0	553.9	604.2	636.6	654.6	669.0	676.2
57.5°	295.0	320.1	356.1	374.1	402.9	464.0	507.1	546.8	568.4	586.2	589.9
60°	215.9	241.0	273.4	295.0	323.8	384.9	435.2	471.2	496.4	510.8	518.0
62.5°	154.6	179.9	212.2	233.8	259.0	312.9	363.2	399.2	424.5	442.4	453.2
65°	111.5	136.6	169.0	187.0	208.6	259.0	305.8	341.8	366.9	388.5	395.6
67.5°	82.8	100.8	129.5	147.5	169.0	208.6	248.2	280.5	305.8	323.8	330.9
70°	61.1	75.5	100.8	111.5	125.9	161.9	194.2	223.0	244.6	259.0	266.1
72.5°	43.1	54.0	72.0	82.8	93.5	122.2	147.5	169.0	183.5	197.9	205.0
75°	28.8	36.0	50.4	57.5	64.8	86.4	104.2	122.2	133.1	143.9	147.5
77.5°	18.0	25.1	36.0	39.6	46.8	57.5	72.0	82.8	89.9	97.1	104.2
80°	10.8	14.4	21.6	25.1	28.8	39.6	46.8	54.0	61.1	68.4	72.0
82.5°	7.2	10.8	14.4	14.4	18.0	21.6	28.8	36.0	39.6	43.1	46.8
85°	3.6	3.6	7.2	7.2	10.8	10.8	14.4	18.0	21.6	25.1	28.8
87.5°	3.6	3.6	3.6	3.6	7.2	7.2	10.8	10.8	10.8	14.4	14.4
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: P252704

CATALOG NUMBER: LE_6B40D010 EC6B30508050 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0	2543.0
2.5°	2532.2	2543.0	2532.2	2539.5	2535.9	2535.9	2532.2	2535.9
5°	2543.0	2557.4	2543.0	2553.9	2546.6	2546.6	2546.6	2550.2
7.5°	2553.9	2568.2	2557.4	2568.2	2564.6	2561.0	2561.0	2568.2
10°	2564.6	2575.4	2568.2	2579.0	2575.4	2571.9	2571.9	2579.0
12.5°	2564.6	2579.0	2571.9	2582.6	2579.0	2575.4	2575.4	2579.0
15°	2553.9	2571.9	2561.0	2571.9	2568.2	2564.6	2564.6	2571.9
17.5°	2521.5	2535.9	2528.6	2535.9	2535.9	2532.2	2535.9	2539.5
20°	2478.2	2489.1	2481.9	2489.1	2489.1	2481.9	2485.5	2489.1
22.5°	2417.1	2427.9	2420.8	2427.9	2424.4	2420.8	2420.8	2417.1
25°	2341.6	2356.0	2345.2	2352.4	2345.2	2338.0	2338.0	2341.6
27.5°	2248.1	2258.9	2244.5	2251.6	2244.5	2237.2	2237.2	2233.8
30°	2125.8	2129.4	2118.6	2125.8	2118.6	2115.0	2107.8	2107.8
32.5°	1978.4	1981.9	1971.1	1971.1	1963.9	1963.9	1949.5	1960.4
35°	1805.6	1809.2	1805.6	1802.1	1791.2	1787.6	1784.1	1784.1
37.5°	1625.9	1625.9	1615.0	1611.4	1604.2	1597.0	1600.6	1589.9
40°	1442.4	1438.8	1428.0	1431.6	1428.0	1417.2	1413.6	1410.0
42.5°	1269.8	1269.8	1258.9	1262.5	1255.4	1251.8	1241.0	1244.5
45°	1118.6	1118.6	1107.9	1107.9	1104.2	1093.5	1097.1	1089.9
47.5°	982.0	982.0	978.4	978.4	967.6	964.0	964.0	964.0
50°	863.2	863.2	863.2	863.2	859.6	856.1	852.5	856.1
52.5°	762.5	769.8	766.1	766.1	762.5	759.0	755.4	755.4
55°	672.6	676.2	676.2	679.9	676.2	672.6	676.2	672.6
57.5°	593.5	600.8	600.8	600.8	600.8	600.8	597.1	593.5
60°	525.1	528.8	528.8	532.4	532.4	532.4	528.8	528.8
62.5°	456.8	464.0	467.6	467.6	471.2	467.6	467.6	467.6
65°	402.9	410.0	413.6	410.0	413.6	413.6	410.0	410.0
67.5°	338.1	345.2	345.2	345.2	345.2	348.9	345.2	345.2
70°	273.4	280.5	277.0	280.5	280.5	280.5	280.5	280.5
72.5°	208.6	212.2	215.9	215.9	219.4	215.9	215.9	215.9
75°	151.1	158.2	158.2	158.2	158.2	161.9	161.9	161.9
77.5°	107.9	111.5	111.5	115.1	115.1	115.1	115.1	118.8
80°	75.5	75.5	79.1	79.1	82.8	82.8	82.8	82.8
82.5°	50.4	54.0	54.0	54.0	54.0	54.0	54.0	54.0
85°	28.8	32.4	32.4	32.4	32.4	36.0	36.0	36.0
87.5°	18.0	18.0	18.0	18.0	18.0	18.0	14.4	14.4
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)