

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: P252188

Luminaire Tested: **LE_6B40D010 EC6B30509035 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252188
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B40D010 EC6B30509035 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5758.7 lumens
Efficiency: N/A
Efficacy: 133.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

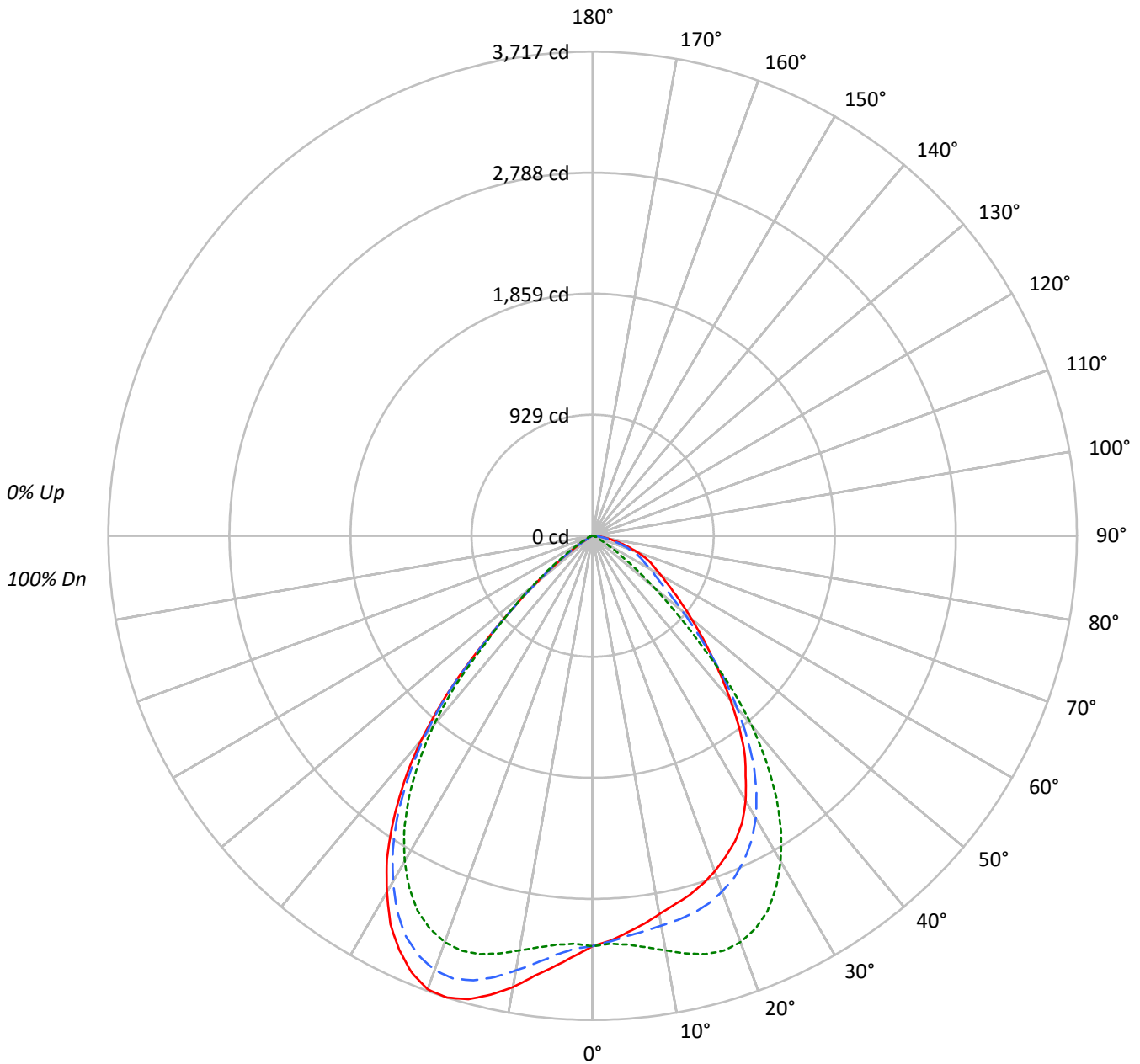
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			100
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80			80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			72
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65			65
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			58
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53			53
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48			48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44			44
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40			40
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37			37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	205541	205541	205541
5°	200209	206326	217171
10°	195349	214104	233057
15°	193062	224584	248798
20°	190294	230437	257215
25°	186240	228740	252588
30°	176988	217374	237790
35°	161916	195988	212299
40°	140055	161857	174172
45°	118107	106150	113937
50°	100268	61446	57772
55°	87014	29460	22271
60°	78602	13753	5493
65°	76260	7904	1852
70°	68365	6314	1717
75°	56186	4562	756
80°	41891	2254	0
85°	36080	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.3	5.3
10°-20°	927.4	16.1
20°-30°	1417.0	24.6
30°-40°	1482.1	25.7
40°-50°	961.4	16.7
50°-60°	381.7	6.6
60°-70°	181.1	3.1
70°-80°	86.1	1.5
80°-90°	17.6	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°	2648.7	46.0
0°-40°	4130.8	71.7
0°-60°	5474.0	95.1
0°-90°	5758.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5758.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3150	3150	3150	3150	3150	
5°	3057	3084	3150	3229	3316	289
15°	2858	2997	3325	3533	3684	806
25°	2587	2750	3178	3392	3509	1185
35°	2033	2156	2461	2605	2666	1257
45°	1280	1268	1150	1220	1235	996
55°	765	651	259	202	196	693
65°	494	410	51	12	12	483
75°	223	181	18	6	3	240
85°	48	30	0	0	0	56
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°	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5
2.5°	3111.4	3117.4	3084.2	3075.2	3099.2	3108.4	3111.4	3102.2	3105.2	3117.4	3117.4
5°	3057.1	3063.1	3033.0	3024.0	3048.1	3054.1	3063.1	3060.1	3069.1	3087.2	3084.2
7.5°	3005.9	3015.0	2981.9	2969.8	2999.9	3015.0	3021.0	3021.0	3033.0	3057.1	3060.1
10°	2948.8	2960.8	2930.6	2924.6	2957.8	2972.8	2975.8	2981.9	2999.9	3033.0	3039.0
12.5°	2900.5	2912.5	2891.5	2882.4	2918.6	2933.6	2939.6	2951.8	2972.8	3015.0	3021.0
15°	2858.4	2867.4	2843.2	2837.2	2873.4	2891.5	2894.5	2912.5	2939.6	2987.9	2996.9
17.5°	2804.1	2810.1	2792.1	2786.0	2822.2	2840.2	2843.2	2864.4	2897.5	2945.6	2960.8
20°	2740.9	2746.9	2728.9	2722.8	2759.0	2780.0	2783.0	2801.1	2840.2	2891.5	2906.5
22.5°	2665.6	2677.6	2656.5	2650.5	2686.6	2704.8	2713.8	2728.9	2768.0	2819.1	2840.2
25°	2587.2	2587.2	2572.2	2569.1	2602.4	2623.4	2620.4	2641.5	2680.6	2731.9	2749.9
27.5°	2484.9	2481.9	2466.8	2463.8	2499.9	2518.0	2512.0	2533.0	2569.1	2620.4	2638.5
30°	2349.4	2355.4	2334.2	2328.2	2358.4	2388.5	2385.5	2406.5	2442.6	2490.9	2502.9
32.5°	2186.6	2192.8	2189.6	2180.6	2207.8	2222.9	2231.9	2246.9	2277.0	2328.2	2340.2
35°	2033.0	2024.0	2012.0	2012.0	2039.1	2063.1	2054.1	2072.2	2102.4	2153.5	2156.5
37.5°	1843.2	1840.2	1834.2	1828.2	1858.4	1864.4	1867.4	1879.5	1906.5	1948.8	1942.8
40°	1644.5	1647.5	1644.5	1632.5	1650.5	1674.6	1671.6	1677.6	1701.8	1731.9	1722.9
42.5°	1457.8	1457.8	1457.8	1445.8	1466.9	1478.9	1484.9	1481.9	1487.9	1515.0	1503.0
45°	1280.1	1283.1	1280.1	1277.1	1280.1	1286.1	1280.1	1277.1	1277.1	1286.1	1268.0
47.5°	1126.5	1126.5	1117.4	1108.4	1117.4	1120.5	1111.4	1102.4	1099.4	1096.4	1066.2
50°	987.9	984.9	981.9	966.9	975.9	978.9	966.9	960.8	948.8	933.8	897.5
52.5°	867.5	864.4	861.4	846.4	852.4	855.4	843.4	831.2	816.2	804.2	759.0
55°	765.0	762.0	762.0	753.0	747.0	753.0	741.0	731.9	710.9	695.8	650.6
57.5°	677.6	677.6	671.6	662.6	665.6	665.6	653.6	641.5	623.5	605.4	569.2
60°	602.4	602.4	602.4	593.4	593.4	593.4	587.4	575.2	560.2	542.1	506.0
62.5°	542.1	542.1	539.1	530.1	533.1	533.1	527.1	515.0	500.0	487.9	451.8
65°	494.0	494.0	494.0	484.9	484.9	487.9	481.9	469.9	457.9	442.8	409.6
67.5°	433.8	430.8	430.8	424.6	427.8	430.8	424.6	415.6	400.6	391.5	361.4
70°	358.4	361.4	364.5	355.4	358.4	358.4	355.4	346.4	337.4	328.2	301.2
72.5°	292.1	292.1	289.1	286.1	286.1	289.1	283.1	274.1	268.1	262.0	241.0
75°	222.9	219.9	222.9	216.9	216.9	216.9	210.9	207.9	204.8	195.8	180.8
77.5°	162.6	159.6	159.6	153.6	156.6	156.6	153.6	147.6	141.5	138.5	126.5
80°	111.5	111.5	111.5	108.4	108.4	105.4	105.4	102.4	96.4	93.4	87.4
82.5°	75.2	75.2	75.2	72.2	72.2	72.2	69.2	66.2	63.2	60.2	54.2
85°	48.2	48.2	48.2	45.1	45.1	45.1	42.1	42.1	39.1	36.1	30.1
87.5°	27.1	27.1	27.1	24.1	24.1	24.1	24.1	24.1	21.1	18.1	15.0
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°	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5
2.5°	3138.5	3096.2	3123.4	3123.4	3114.4	3138.5	3153.5	3165.5	3162.5	3135.4	3132.4
5°	3114.4	3078.2	3108.4	3111.4	3102.2	3135.4	3156.5	3171.6	3174.6	3150.5	3153.5
7.5°	3096.2	3066.1	3105.2	3117.4	3114.4	3144.5	3168.5	3192.6	3204.8	3186.6	3189.6
10°	3087.2	3063.1	3105.2	3123.4	3126.4	3159.5	3195.6	3228.8	3243.9	3231.9	3240.9
12.5°	3075.2	3060.1	3108.4	3135.4	3147.5	3180.6	3225.8	3265.0	3289.0	3283.0	3301.1
15°	3063.1	3051.1	3108.4	3147.5	3162.5	3192.6	3243.9	3301.1	3328.2	3325.1	3349.2
17.5°	3033.0	3030.0	3090.2	3132.4	3153.5	3189.6	3237.9	3307.1	3334.2	3340.2	3370.4
20°	2984.9	2984.9	3051.1	3096.2	3120.4	3153.5	3213.8	3280.0	3313.1	3319.1	3352.2
22.5°	2918.6	2924.6	2987.9	3033.0	3069.1	3093.2	3156.5	3225.8	3255.9	3265.0	3301.1
25°	2831.2	2837.2	2897.5	2942.6	2981.9	3008.9	3069.1	3132.4	3168.5	3177.6	3204.8
27.5°	2716.8	2728.9	2786.0	2831.2	2864.4	2882.4	2945.6	3012.0	3039.0	3048.1	3075.2
30°	2584.2	2587.2	2644.5	2683.6	2716.8	2731.9	2786.0	2855.4	2876.4	2885.5	2924.6
32.5°	2421.6	2418.6	2472.8	2509.0	2536.0	2554.1	2611.4	2656.5	2677.6	2692.6	2713.8
35°	2225.9	2222.9	2262.0	2304.1	2325.2	2331.2	2388.5	2436.6	2448.8	2460.8	2487.9
37.5°	2006.0	2006.0	2039.1	2060.1	2084.2	2093.2	2120.4	2174.6	2195.8	2192.8	2213.8
40°	1774.0	1762.0	1786.1	1807.1	1813.2	1816.2	1843.2	1885.5	1900.5	1900.5	1915.6
42.5°	1530.1	1512.0	1515.0	1527.0	1533.1	1512.0	1530.1	1557.1	1548.1	1560.1	1563.2
45°	1271.0	1243.9	1231.9	1204.8	1210.8	1189.8	1177.6	1183.8	1180.6	1150.5	1156.6
47.5°	1060.2	1012.0	990.9	951.8	942.8	918.6	903.6	876.5	852.4	852.4	837.4
50°	882.5	834.2	792.1	747.0	731.9	710.9	677.6	641.5	623.5	605.4	590.4
52.5°	741.0	689.8	638.5	590.4	569.2	542.1	497.0	460.9	427.8	409.6	391.5
55°	626.5	569.2	515.0	463.9	436.8	409.6	364.5	322.2	283.1	259.0	244.0
57.5°	539.1	484.9	427.8	373.5	349.4	319.2	271.1	225.9	189.8	162.6	147.6
60°	475.9	421.6	370.5	313.2	289.1	259.0	207.9	165.6	129.5	105.4	87.4
62.5°	421.6	373.5	319.2	268.1	244.0	213.9	165.6	123.5	90.4	66.2	51.2
65°	382.5	334.4	289.1	238.0	216.9	186.8	141.5	102.4	72.2	51.2	36.1
67.5°	337.4	295.1	250.0	207.9	186.8	162.6	120.5	87.4	60.2	42.1	30.1
70°	283.1	250.0	210.9	171.6	156.6	135.5	99.4	72.2	48.2	33.1	24.1
72.5°	225.9	198.8	168.6	138.5	126.5	105.4	81.4	57.2	36.1	24.1	18.1
75°	171.6	150.6	126.5	105.4	93.4	81.4	60.2	42.1	27.1	18.1	12.0
77.5°	117.5	108.4	90.4	72.2	66.2	57.2	39.1	27.1	18.1	12.0	6.0
80°	81.4	72.2	60.2	48.2	42.1	36.1	24.1	18.1	9.0	6.0	3.0
82.5°	51.2	42.1	36.1	30.1	27.1	21.1	15.0	9.0	6.0	3.0	3.0
85°	27.1	24.1	21.1	15.0	15.0	12.0	9.0	6.0	3.0	0.0	0.0
87.5°	15.0	12.0	9.0	6.0	6.0	3.0	3.0	3.0	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5
2.5°	3168.5	3168.5	3165.5	3201.8	3159.5	3201.8	3180.6	3201.8	3171.6	3168.5	3171.6
5°	3192.6	3201.8	3204.8	3237.9	3198.6	3249.9	3231.9	3249.9	3228.8	3234.9	3243.9
7.5°	3240.9	3255.9	3252.9	3295.1	3255.9	3313.1	3301.1	3328.2	3307.1	3313.1	3325.1
10°	3295.1	3313.1	3316.1	3358.4	3322.1	3391.5	3376.4	3406.5	3388.4	3397.5	3412.5
12.5°	3358.4	3379.4	3382.4	3430.6	3391.5	3463.8	3454.8	3484.9	3469.8	3478.8	3496.9
15°	3406.5	3436.6	3442.6	3490.9	3448.6	3524.0	3518.0	3557.1	3533.0	3548.1	3563.1
17.5°	3430.6	3457.8	3469.8	3514.9	3478.8	3554.1	3548.1	3581.2	3563.1	3578.1	3596.2
20°	3415.5	3448.6	3457.8	3502.9	3466.8	3542.0	3533.0	3566.1	3548.1	3560.1	3578.1
22.5°	3361.4	3394.5	3406.5	3448.6	3415.5	3484.9	3481.8	3511.9	3487.9	3502.9	3518.0
25°	3265.0	3301.1	3307.1	3346.2	3310.1	3382.4	3376.4	3409.5	3391.5	3400.5	3421.6
27.5°	3126.4	3168.5	3177.6	3210.8	3183.6	3243.9	3243.9	3271.0	3249.9	3249.9	3271.0
30°	2960.8	3002.9	3008.9	3036.0	3012.0	3066.1	3069.1	3096.2	3063.1	3081.2	3084.2
32.5°	2759.0	2786.0	2804.1	2828.2	2792.1	2861.4	2852.2	2873.4	2855.4	2855.4	2870.4
35°	2515.0	2548.1	2557.1	2587.2	2557.1	2611.4	2611.4	2623.4	2605.4	2605.4	2629.4
37.5°	2249.9	2274.0	2277.0	2307.1	2283.0	2328.2	2325.2	2334.2	2316.1	2328.2	2328.2
40°	1939.8	1957.8	1963.8	1978.9	1975.9	2009.0	2006.0	2012.0	2003.0	2006.0	2012.0
42.5°	1578.2	1602.4	1614.4	1626.5	1608.4	1653.5	1644.5	1653.5	1650.5	1653.5	1662.6
45°	1162.6	1180.6	1189.8	1192.8	1186.8	1213.8	1234.9	1216.9	1219.9	1213.8	1225.9
47.5°	840.4	843.4	837.4	855.4	840.4	852.4	858.4	861.4	843.4	840.4	852.4
50°	575.2	590.4	569.2	578.2	575.2	587.4	581.2	584.4	566.2	575.2	569.2
52.5°	382.5	379.5	373.5	376.5	370.5	370.5	370.5	376.5	364.5	358.4	352.4
55°	231.9	225.9	213.9	210.9	210.9	213.9	207.9	201.8	201.8	198.8	198.8
57.5°	135.5	126.5	120.5	117.5	111.5	108.4	105.4	105.4	99.4	99.4	99.4
60°	75.2	66.2	60.2	54.2	54.2	51.2	48.2	45.1	45.1	45.1	42.1
62.5°	39.1	33.1	27.1	24.1	24.1	21.1	18.1	18.1	18.1	18.1	15.0
65°	27.1	21.1	18.1	15.0	15.0	12.0	12.0	12.0	12.0	12.0	12.0
67.5°	21.1	18.1	15.0	12.0	12.0	12.0	9.0	9.0	9.0	9.0	9.0
70°	18.1	12.0	12.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
72.5°	12.0	12.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
75°	9.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
77.5°	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0
80°	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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: P252188

CATALOG NUMBER: LE_6B40D010 EC6B30509035 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5	3150.5
2.5°	3198.6	3195.6	3198.6	3204.8	3192.6	3228.8	3210.8	3228.8
5°	3268.0	3271.0	3274.0	3283.0	3268.0	3313.1	3289.0	3316.1
7.5°	3358.4	3361.4	3364.4	3373.4	3364.4	3409.5	3382.4	3406.5
10°	3451.6	3457.8	3457.8	3472.8	3463.8	3505.9	3487.9	3518.0
12.5°	3539.0	3545.0	3551.1	3560.1	3554.1	3599.2	3584.2	3608.2
15°	3608.2	3620.4	3623.4	3635.4	3629.4	3677.6	3659.5	3683.6
17.5°	3641.4	3653.5	3653.5	3668.5	3662.5	3713.8	3689.6	3716.8
20°	3623.4	3632.4	3635.4	3650.5	3644.5	3695.6	3671.5	3704.8
22.5°	3566.1	3569.1	3572.1	3587.2	3584.2	3629.4	3608.2	3629.4
25°	3460.8	3469.8	3466.8	3478.8	3478.8	3514.9	3490.9	3508.9
27.5°	3310.1	3319.1	3319.1	3334.2	3322.1	3358.4	3334.2	3361.4
30°	3126.4	3135.4	3129.4	3141.5	3129.4	3165.5	3147.5	3156.5
32.5°	2906.5	2906.5	2909.5	2912.5	2906.5	2939.6	2921.6	2939.6
35°	2644.5	2650.5	2653.5	2656.5	2650.5	2674.6	2653.5	2665.6
37.5°	2349.4	2364.4	2361.4	2364.4	2355.4	2385.5	2367.4	2373.4
40°	2033.0	2033.0	2030.0	2036.1	2027.0	2051.1	2039.1	2045.1
42.5°	1665.6	1674.6	1662.6	1677.6	1653.5	1686.6	1674.6	1665.6
45°	1250.0	1237.9	1234.9	1237.9	1228.9	1231.9	1240.9	1234.9
47.5°	852.4	852.4	846.4	837.4	849.4	852.4	840.4	840.4
50°	572.2	572.2	566.2	563.2	569.2	566.2	560.2	569.2
52.5°	364.5	352.4	352.4	358.4	352.4	346.4	355.4	349.4
55°	198.8	192.8	192.8	198.8	192.8	192.8	189.8	195.8
57.5°	96.4	99.4	96.4	96.4	96.4	96.4	93.4	96.4
60°	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1
62.5°	18.1	18.1	15.0	15.0	15.0	15.0	15.0	15.0
65°	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
67.5°	9.0	9.0	9.0	9.0	9.0	12.0	9.0	9.0
70°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
72.5°	9.0	9.0	12.0	12.0	12.0	12.0	12.0	12.0
75°	6.0	6.0	6.0	3.0	3.0	3.0	3.0	3.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



Report Generated By E9808895 / USPTCWHP6082093





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













(END OF REPORT)