

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: P252301

Luminaire Tested: **LE_6B50D010R EC6B30508050 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252301
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B50D010R EC6B30508050 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE 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: 6392.5 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

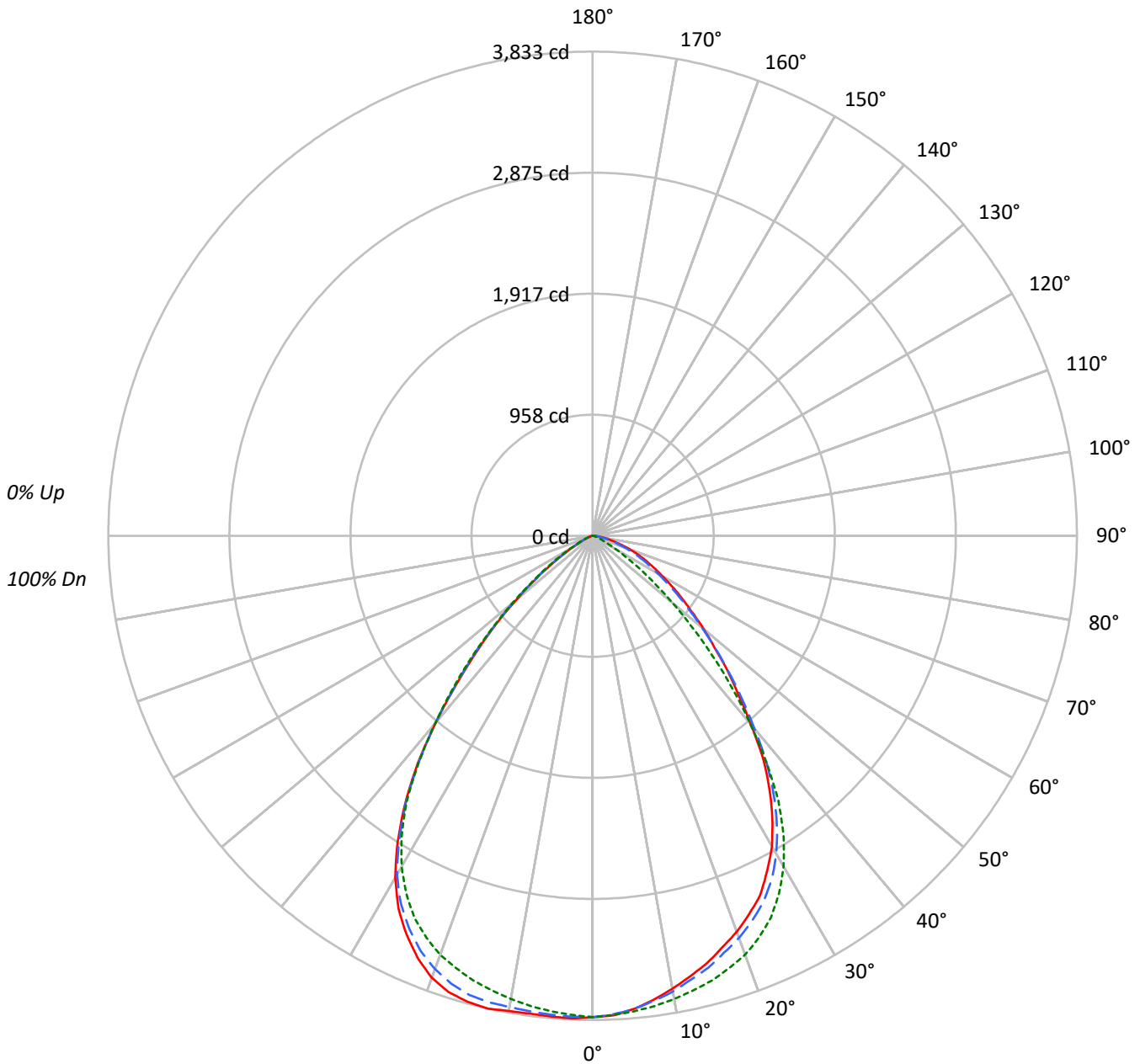
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	248593	248593	248593
5°	246229	247427	250138
10°	241139	246631	253031
15°	236532	246164	257977
20°	231638	245052	258472
25°	225925	240171	250767
30°	213902	227763	235387
35°	194252	204144	205976
40°	165783	165000	164208
45°	139264	123551	119740
50°	116305	83613	79411
55°	97876	51298	46589
60°	82856	27023	23421
65°	71752	14202	11362
70°	59686	8775	6142
75°	44087	5798	3479
80°	34565	3456	1728
85°	27622	3443	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	359.1	5.6
10°-20°	1028.2	16.1
20°-30°	1518.3	23.8
30°-40°	1564.7	24.5
40°-50°	1080.8	16.9
50°-60°	532.7	8.3
60°-70°	215.8	3.4
70°-80°	76.9	1.2
80°-90°	15.9	0.2
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°	2905.6	45.5
0°-40°	4470.4	69.9
0°-60°	6083.8	95.2
0°-90°	6392.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6392.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3810	3810	3810	3810	3810	
5°	3760	3760	3778	3806	3820	355
15°	3502	3539	3645	3764	3820	986
25°	3138	3198	3336	3433	3484	1435
35°	2439	2499	2563	2577	2586	1511
45°	1509	1519	1339	1321	1298	1167
55°	860	828	451	423	410	778
65°	465	419	92	74	74	462
75°	175	147	23	14	14	196
85°	37	28	5	0	0	45
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°	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4
2.5°	3801.1	3787.4	3796.5	3778.1	3801.1	3778.1	3782.8	3787.4	3782.8	3787.4	3791.9
5°	3759.8	3745.9	3759.8	3736.8	3759.8	3745.9	3745.9	3750.5	3750.5	3755.1	3759.8
7.5°	3704.5	3690.6	3704.5	3681.5	3709.1	3695.2	3695.2	3704.5	3699.9	3704.5	3713.6
10°	3640.0	3621.6	3635.5	3621.6	3649.2	3630.9	3640.0	3640.0	3640.0	3653.9	3663.1
12.5°	3571.0	3552.6	3571.0	3548.0	3575.6	3561.9	3566.4	3580.2	3584.9	3594.0	3598.6
15°	3502.0	3479.0	3488.2	3474.4	3502.0	3488.2	3492.8	3511.2	3511.2	3525.0	3538.9
17.5°	3414.6	3396.1	3414.6	3396.1	3419.1	3410.0	3419.1	3433.0	3433.0	3446.8	3460.6
20°	3336.4	3317.9	3331.8	3317.9	3345.5	3331.8	3336.4	3354.8	3359.4	3373.1	3387.0
22.5°	3239.8	3225.9	3235.1	3221.2	3248.9	3239.8	3244.2	3262.8	3267.2	3276.5	3299.5
25°	3138.5	3110.9	3124.6	3115.5	3143.0	3129.2	3138.5	3156.9	3166.1	3179.9	3198.2
27.5°	2991.2	2977.4	2986.6	2986.6	3009.6	2995.8	3000.4	3018.8	3032.6	3046.4	3069.4
30°	2839.4	2816.4	2825.5	2830.1	2848.5	2839.4	2848.5	2867.0	2871.5	2890.0	2908.4
32.5°	2646.0	2636.9	2655.2	2646.0	2655.2	2655.2	2659.9	2673.6	2682.9	2692.1	2715.1
35°	2439.0	2420.6	2439.0	2429.8	2452.8	2439.0	2452.8	2466.6	2466.6	2485.0	2498.8
37.5°	2213.5	2190.5	2199.6	2199.6	2208.9	2204.2	2204.2	2227.2	2231.9	2245.8	2259.5
40°	1946.6	1937.4	1955.8	1951.1	1955.8	1955.8	1960.4	1974.2	1983.4	1988.0	1992.6
42.5°	1707.2	1711.9	1716.5	1716.5	1716.5	1716.5	1716.5	1734.9	1730.2	1744.1	1748.8
45°	1509.4	1491.0	1500.2	1495.6	1509.4	1495.6	1509.4	1523.2	1514.0	1527.8	1518.6
47.5°	1306.9	1306.9	1306.9	1302.4	1311.5	1306.9	1316.1	1320.8	1320.8	1320.8	1316.1
50°	1145.9	1132.0	1136.6	1136.6	1141.2	1136.6	1145.9	1150.5	1150.5	1141.2	1122.9
52.5°	989.4	984.8	984.8	994.0	994.0	989.4	989.4	989.4	989.4	975.6	966.4
55°	860.5	851.4	856.0	856.0	856.0	856.0	860.5	856.0	856.0	842.1	828.4
57.5°	745.5	736.2	736.2	736.2	740.9	736.2	736.2	736.2	731.8	717.9	699.5
60°	635.0	630.5	635.0	635.0	639.6	635.0	635.0	635.0	625.9	612.0	593.6
62.5°	543.0	543.0	543.0	547.6	547.6	543.0	543.0	538.4	533.9	515.4	497.0
65°	464.8	460.1	464.8	464.8	469.4	469.4	464.8	460.1	455.6	437.1	418.8
67.5°	386.5	382.0	386.5	386.5	391.1	386.5	386.5	386.5	372.8	363.5	345.1
70°	312.9	308.4	308.4	308.4	312.9	303.8	308.4	308.4	299.1	285.4	266.9
72.5°	239.2	239.2	239.2	239.2	239.2	239.2	234.8	234.8	225.5	211.6	202.5
75°	174.9	174.9	179.5	179.5	174.9	174.9	174.9	170.2	165.6	156.5	147.2
77.5°	128.9	128.9	128.9	128.9	124.2	124.2	124.2	119.6	115.0	110.5	101.2
80°	92.0	92.0	92.0	87.4	92.0	87.4	87.4	87.4	78.2	73.6	69.0
82.5°	64.4	59.9	59.9	59.9	59.9	59.9	59.9	55.2	55.2	50.6	46.0
85°	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	32.2	27.6	27.6
87.5°	18.4	23.0	23.0	23.0	23.0	23.0	23.0	18.4	18.4	18.4	13.8
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°	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4
2.5°	3791.9	3791.9	3801.1	3787.4	3810.4	3796.5	3791.9	3814.9	3801.1	3796.5	3805.8
5°	3759.8	3764.2	3768.9	3759.8	3782.8	3768.9	3768.9	3791.9	3782.8	3778.1	3791.9
7.5°	3718.2	3722.9	3732.1	3727.5	3745.9	3736.8	3741.2	3764.2	3755.1	3755.1	3768.9
10°	3667.6	3676.9	3686.1	3686.1	3709.1	3699.9	3699.9	3727.5	3718.2	3722.9	3741.2
12.5°	3607.9	3621.6	3635.5	3640.0	3663.1	3649.2	3653.9	3686.1	3681.5	3686.1	3704.5
15°	3543.4	3561.9	3575.6	3575.6	3603.2	3589.4	3603.2	3635.5	3626.2	3644.6	3667.6
17.5°	3469.8	3488.2	3506.6	3511.2	3538.9	3529.6	3548.0	3580.2	3580.2	3589.4	3617.0
20°	3400.8	3423.8	3433.0	3446.8	3474.4	3469.8	3479.0	3515.8	3515.8	3529.6	3557.2
22.5°	3308.8	3331.8	3350.1	3364.0	3387.0	3387.0	3400.8	3433.0	3433.0	3442.1	3469.8
25°	3207.5	3235.1	3248.9	3262.8	3285.8	3281.1	3294.9	3322.5	3327.1	3336.4	3364.0
27.5°	3078.6	3101.6	3120.0	3129.2	3161.5	3143.0	3156.9	3189.1	3184.5	3193.6	3216.6
30°	2917.6	2940.6	2959.0	2959.0	2986.6	2986.6	3000.4	3014.2	3014.2	3023.4	3041.9
32.5°	2728.9	2756.5	2756.5	2770.2	2788.8	2770.2	2788.8	2807.1	2797.9	2811.8	2825.5
35°	2512.6	2526.4	2531.0	2531.0	2544.9	2540.2	2535.6	2549.4	2540.2	2563.2	2577.0
37.5°	2250.2	2268.8	2259.5	2268.8	2264.1	2250.2	2250.2	2273.2	2254.9	2259.5	2273.2
40°	1997.2	1997.2	1992.6	1969.6	1974.2	1960.4	1955.8	1960.4	1942.0	1937.4	1955.8
42.5°	1734.9	1730.2	1716.5	1684.2	1688.9	1665.9	1647.5	1647.5	1638.2	1633.6	1638.2
45°	1500.2	1486.4	1463.4	1426.6	1417.4	1399.0	1362.1	1353.0	1339.1	1339.1	1343.8
47.5°	1283.9	1265.5	1228.8	1187.2	1164.2	1141.2	1104.5	1090.6	1067.6	1058.4	1067.6
50°	1104.5	1072.2	1026.2	966.4	943.4	915.8	879.0	856.0	832.9	823.8	819.1
52.5°	938.8	892.8	846.8	773.1	754.8	727.1	676.5	653.5	630.5	612.0	612.0
55°	796.1	754.8	690.2	621.2	593.6	566.0	515.4	483.2	460.1	451.0	441.8
57.5°	667.2	621.2	561.4	487.8	460.1	432.6	382.0	349.8	326.8	312.9	303.8
60°	561.4	510.8	451.0	386.5	354.4	326.8	276.1	243.9	220.9	207.1	197.9
62.5°	460.1	418.8	359.0	299.1	271.5	243.9	202.5	170.2	147.2	138.0	124.2
65°	386.5	345.1	289.9	239.2	216.2	188.6	151.9	124.2	105.9	92.0	82.9
67.5°	312.9	280.8	234.8	188.6	165.6	147.2	115.0	92.0	73.6	64.4	59.9
70°	248.5	216.2	179.5	142.6	128.9	110.5	87.4	64.4	55.2	46.0	41.4
72.5°	184.1	161.1	133.5	105.9	92.0	82.9	59.9	50.6	36.9	32.2	27.6
75°	133.5	115.0	96.6	73.6	64.4	59.9	46.0	32.2	27.6	23.0	18.4
77.5°	92.0	82.9	64.4	50.6	46.0	41.4	32.2	23.0	18.4	13.8	13.8
80°	59.9	50.6	41.4	32.2	32.2	27.6	18.4	13.8	13.8	9.2	9.2
82.5°	36.9	32.2	27.6	23.0	18.4	18.4	13.8	9.2	9.2	4.6	4.6
85°	23.0	18.4	13.8	13.8	9.2	9.2	9.2	4.6	4.6	4.6	4.6
87.5°	9.2	9.2	9.2	4.6	4.6	4.6	4.6	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4
2.5°	3805.8	3805.8	3814.9	3801.1	3810.4	3810.4	3819.5	3801.1	3810.4	3814.9	3824.1
5°	3787.4	3791.9	3801.1	3796.5	3801.1	3801.1	3810.4	3787.4	3805.8	3805.8	3819.5
7.5°	3768.9	3768.9	3778.1	3773.5	3782.8	3787.4	3796.5	3778.1	3796.5	3796.5	3810.4
10°	3745.9	3745.9	3759.8	3755.1	3768.9	3773.5	3787.4	3768.9	3787.4	3791.9	3805.8
12.5°	3713.6	3718.2	3732.1	3732.1	3745.9	3755.1	3768.9	3759.8	3782.8	3787.4	3805.8
15°	3676.9	3686.1	3704.5	3699.9	3713.6	3727.5	3745.9	3732.1	3764.2	3773.5	3791.9
17.5°	3630.9	3640.0	3653.9	3653.9	3667.6	3676.9	3699.9	3690.6	3718.2	3722.9	3745.9
20°	3561.9	3575.6	3594.0	3589.4	3603.2	3612.5	3630.9	3621.6	3649.2	3658.5	3681.5
22.5°	3479.0	3488.2	3502.0	3502.0	3515.8	3525.0	3543.4	3529.6	3557.2	3561.9	3580.2
25°	3368.5	3377.8	3387.0	3391.5	3405.4	3410.0	3419.1	3410.0	3433.0	3437.6	3460.6
27.5°	3225.9	3230.5	3244.2	3244.2	3253.5	3258.1	3271.9	3253.5	3285.8	3285.8	3299.5
30°	3055.6	3051.0	3069.4	3060.2	3069.4	3069.4	3083.2	3074.0	3097.0	3087.9	3101.6
32.5°	2830.1	2839.4	2839.4	2830.1	2848.5	2843.9	2843.9	2834.8	2848.5	2853.1	2862.4
35°	2567.9	2581.6	2581.6	2586.2	2590.9	2577.0	2581.6	2554.0	2577.0	2581.6	2586.2
37.5°	2282.5	2268.8	2277.9	2264.1	2287.1	2259.5	2259.5	2241.1	2259.5	2259.5	2264.1
40°	1955.8	1951.1	1960.4	1951.1	1946.6	1942.0	1932.8	1919.0	1937.4	1928.1	1942.0
42.5°	1647.5	1642.9	1642.9	1633.6	1629.0	1629.0	1619.9	1610.6	1606.0	1606.0	1629.0
45°	1329.9	1339.1	1329.9	1325.4	1334.5	1325.4	1329.9	1311.5	1320.8	1311.5	1320.8
47.5°	1063.0	1067.6	1058.4	1049.2	1063.0	1049.2	1049.2	1035.4	1053.9	1053.9	1044.6
50°	823.8	819.1	809.9	819.1	814.5	814.5	814.5	800.8	809.9	796.1	805.4
52.5°	607.5	602.9	602.9	598.2	602.9	598.2	598.2	593.6	593.6	589.0	593.6
55°	441.8	437.1	428.0	428.0	428.0	432.6	428.0	423.4	423.4	418.8	423.4
57.5°	299.1	289.9	289.9	289.9	289.9	285.4	285.4	280.8	285.4	280.8	285.4
60°	193.2	193.2	184.1	184.1	184.1	184.1	184.1	179.5	184.1	184.1	184.1
62.5°	119.6	119.6	115.0	110.5	115.0	110.5	110.5	110.5	115.0	110.5	115.0
65°	78.2	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
67.5°	55.2	50.6	50.6	50.6	50.6	50.6	50.6	46.0	50.6	50.6	50.6
70°	36.9	36.9	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2
72.5°	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
75°	18.4	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
77.5°	13.8	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
80°	9.2	9.2	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
82.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
85°	4.6	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	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
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: P252301

CATALOG NUMBER: LE_6B50D010R EC6B30508050 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4	3810.4
2.5°	3810.4	3814.9	3805.8	3810.4	3801.1	3810.4	3814.9	3824.1
5°	3801.1	3805.8	3796.5	3805.8	3796.5	3805.8	3810.4	3819.5
7.5°	3791.9	3801.1	3791.9	3801.1	3791.9	3801.1	3805.8	3814.9
10°	3791.9	3805.8	3796.5	3810.4	3796.5	3805.8	3814.9	3819.5
12.5°	3791.9	3805.8	3801.1	3810.4	3805.8	3814.9	3824.1	3833.4
15°	3782.8	3796.5	3787.4	3801.1	3796.5	3801.1	3819.5	3819.5
17.5°	3732.1	3745.9	3745.9	3755.1	3755.1	3768.9	3778.1	3787.4
20°	3667.6	3681.5	3676.9	3690.6	3690.6	3704.5	3713.6	3722.9
22.5°	3571.0	3589.4	3584.9	3598.6	3594.0	3603.2	3621.6	3617.0
25°	3446.8	3469.8	3465.1	3474.4	3469.8	3469.8	3479.0	3483.6
27.5°	3294.9	3308.8	3304.1	3313.4	3304.1	3313.4	3322.5	3327.1
30°	3097.0	3106.2	3101.6	3106.2	3101.6	3110.9	3115.5	3124.6
32.5°	2857.8	2871.5	2857.8	2867.0	2862.4	2862.4	2880.8	2871.5
35°	2572.4	2577.0	2581.6	2581.6	2572.4	2577.0	2586.2	2586.2
37.5°	2254.9	2277.9	2250.2	2264.1	2259.5	2259.5	2259.5	2273.2
40°	1923.6	1928.1	1919.0	1919.0	1919.0	1914.4	1932.8	1928.1
42.5°	1610.6	1615.2	1610.6	1596.9	1601.5	1601.5	1615.2	1596.9
45°	1306.9	1316.1	1311.5	1311.5	1302.4	1302.4	1306.9	1297.8
47.5°	1035.4	1044.6	1030.8	1035.4	1026.2	1035.4	1030.8	1040.0
50°	786.9	796.1	791.5	796.1	796.1	786.9	800.8	782.4
52.5°	589.0	593.6	589.0	584.4	579.9	579.9	589.0	584.4
55°	418.8	414.1	414.1	414.1	418.8	418.8	414.1	409.6
57.5°	280.8	280.8	276.1	276.1	280.8	271.5	276.1	271.5
60°	179.5	179.5	179.5	179.5	174.9	179.5	179.5	179.5
62.5°	110.5	110.5	110.5	110.5	110.5	110.5	110.5	110.5
65°	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
67.5°	46.0	50.6	50.6	50.6	46.0	46.0	46.0	46.0
70°	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2
72.5°	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
75°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
77.5°	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
80°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
82.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	4.6	4.6	4.6	4.6	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)