

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: io LED

Report Number: P136393

Luminaire Tested: **LD6A15D010TE ERW6A15830 6LW111H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P136393  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23375)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6A15D010TE ERW6A15830 6LW111H  
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE  
SEMI-SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER  
Light Source: (1) HIGH LUMEN LED 3000K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

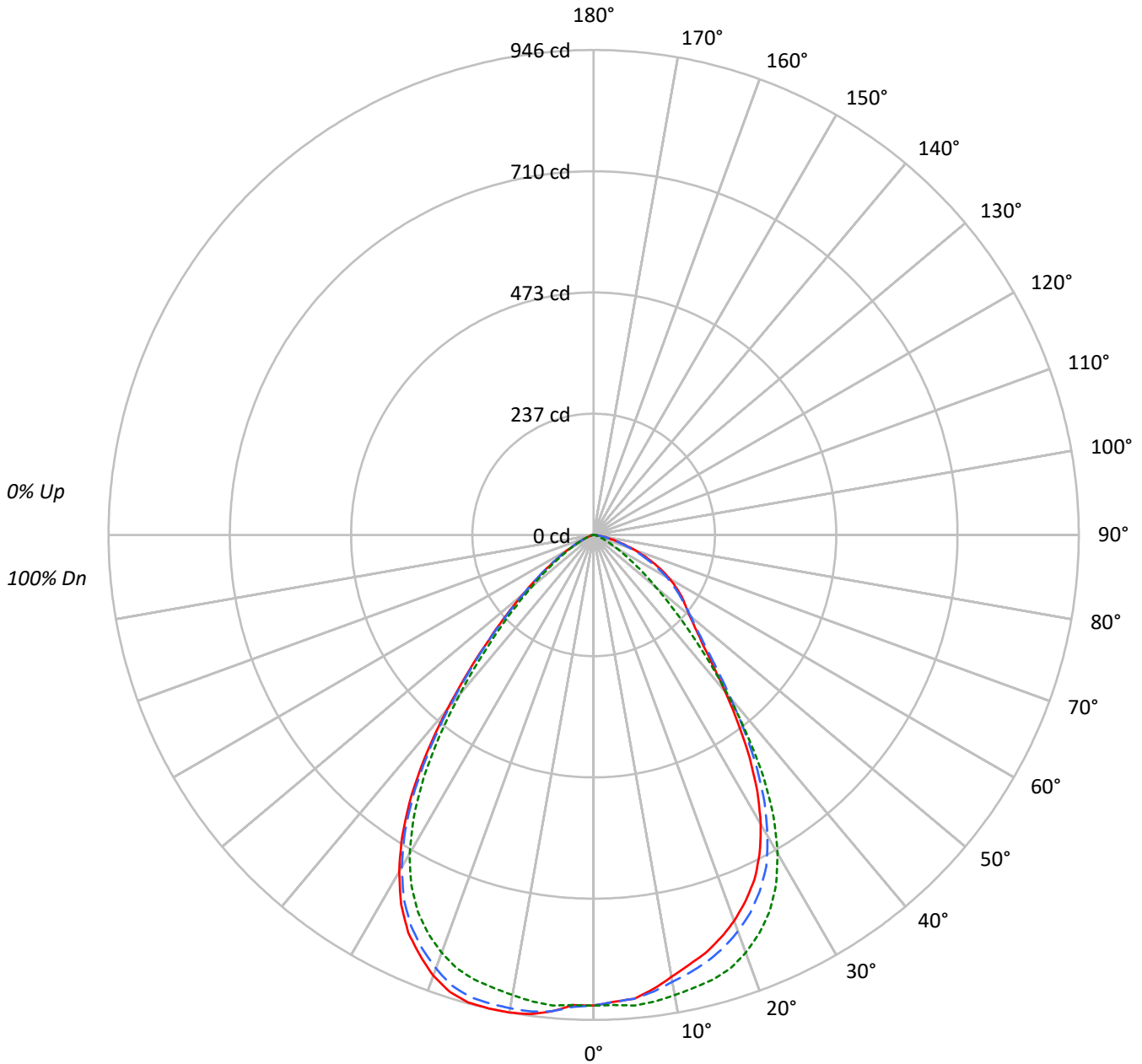
Lumens per Lamp: N/A  
Luminaire Lumens: 1500.0 lumens  
Efficiency: N/A  
Efficacy: 66.4 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 22.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	84	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	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	67	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	56	78	68	61	55	66	60	55	64	59	55	63	58	54	52																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48																			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40																			
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	48	42	39	37																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	59891	59891	59891
5°	59471	60336	61089
10°	57979	60378	62670
15°	57006	60666	63780
20°	55625	60194	63505
25°	53413	58387	61583
30°	49080	54037	57133
35°	42187	45987	49268
40°	33904	34611	37831
45°	27624	23979	26563
50°	24714	16026	18198
55°	23761	10476	11977
60°	22325	6655	7516
65°	19806	4060	4322
70°	16004	2518	2518
75°	11192	1664	1664
80°	7401	1240	1240
85°	3668	1198	1198



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.4	5.8
10°-20°	252.0	16.8
20°-30°	367.0	24.5
30°-40°	356.0	23.7
40°-50°	225.0	15.0
50°-60°	125.3	8.4
60°-70°	62.1	4.1
70°-80°	21.9	1.5
80°-90°	3.4	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°	706.4	47.1
0°-40°	1062.3	70.8
0°-60°	1412.6	94.2
0°-90°	1500.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1500.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	918	918	918	918	918	
5°	908	908	921	933	933	86
15°	844	860	898	933	944	237
25°	742	767	811	842	856	338
35°	530	554	577	609	619	328
45°	299	308	260	285	288	237
55°	209	204	92	105	105	186
65°	128	118	26	28	28	126
75°	44	41	7	7	7	50
85°	5	5	2	2	2	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0
2.5°	911.4	903.2	906.5	904.8	906.5	904.8	909.8	904.8	908.1	911.4	904.8
5°	908.1	899.9	901.5	901.5	901.5	901.5	906.5	901.5	904.8	908.1	903.2
7.5°	893.3	886.7	888.4	888.4	888.4	888.4	893.3	890.0	893.3	898.2	893.3
10°	875.2	868.6	871.9	871.9	871.9	871.9	878.5	875.2	878.5	885.1	880.2
12.5°	858.8	853.8	857.1	857.1	857.1	858.8	863.7	862.1	865.3	873.6	868.6
15°	844.0	839.0	842.3	842.3	842.3	844.0	848.9	850.5	853.8	860.4	857.1
17.5°	824.2	819.3	824.2	824.2	822.6	825.9	832.4	832.4	835.7	844.0	842.3
20°	801.2	796.3	801.2	801.2	799.5	802.8	809.4	811.1	814.3	822.6	820.9
22.5°	773.2	771.6	773.2	776.5	774.9	776.5	783.1	784.7	788.0	797.9	796.3
25°	742.0	740.3	743.6	745.3	743.6	745.3	751.8	753.5	756.8	766.6	766.6
27.5°	700.8	699.2	704.1	704.1	704.1	707.4	712.3	715.6	717.3	728.8	727.2
30°	651.5	649.8	653.1	654.8	654.8	654.8	661.3	666.3	667.9	677.8	677.8
32.5°	593.9	593.9	595.5	598.8	597.2	600.5	605.4	608.7	612.0	620.2	620.2
35°	529.7	531.4	533.0	536.3	534.7	536.3	541.3	544.5	546.2	554.4	552.8
37.5°	462.3	463.9	465.6	467.2	467.2	468.9	473.8	475.4	477.1	483.7	480.4
40°	398.1	398.1	399.8	403.1	401.4	404.7	408.0	409.6	409.6	414.6	411.3
42.5°	342.2	343.8	345.5	347.1	347.1	348.8	352.1	353.7	353.7	355.4	350.4
45°	299.4	301.1	301.1	304.4	304.4	306.0	307.6	309.3	307.6	307.6	302.7
47.5°	268.2	269.8	271.4	273.1	273.1	274.7	276.4	276.4	274.7	273.1	266.5
50°	243.5	246.8	246.8	248.4	250.1	251.7	251.7	251.7	248.4	246.8	236.9
52.5°	225.4	227.0	228.7	230.3	230.3	232.0	233.6	232.0	228.7	223.7	213.9
55°	208.9	210.6	212.2	213.9	213.9	213.9	213.9	212.2	208.9	204.0	194.1
57.5°	190.8	192.5	194.1	195.8	195.8	195.8	195.8	194.1	190.8	184.3	172.7
60°	171.1	172.7	174.4	176.0	176.0	176.0	174.4	172.7	169.5	164.5	153.0
62.5°	149.7	151.4	153.0	153.0	153.0	151.4	151.4	149.7	146.4	141.5	130.0
65°	128.3	128.3	130.0	130.0	130.0	130.0	128.3	126.7	123.4	118.5	110.2
67.5°	105.3	106.9	106.9	106.9	106.9	106.9	105.3	105.3	102.0	97.1	90.5
70°	83.9	83.9	85.5	85.5	85.5	85.5	83.9	83.9	80.6	77.3	70.7
72.5°	62.5	62.5	62.5	64.2	64.2	64.2	62.5	62.5	60.9	57.6	52.6
75°	44.4	44.4	44.4	46.1	46.1	46.1	46.1	44.4	42.8	41.1	37.8
77.5°	29.6	31.3	29.6	29.6	29.6	31.3	29.6	29.6	29.6	28.0	24.7
80°	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	18.1	18.1	16.5
82.5°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	9.9	9.9
85°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
87.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0
2.5°	909.8	913.1	916.3	913.1	908.1	918.0	916.3	918.0	916.3	913.1	922.9
5°	908.1	911.4	916.3	913.1	909.8	919.6	918.0	921.3	921.3	918.0	927.9
7.5°	898.2	901.5	909.8	906.5	903.2	913.1	914.7	918.0	919.6	916.3	927.9
10°	886.7	890.0	898.2	896.6	895.0	906.5	908.1	911.4	913.1	911.4	922.9
12.5°	875.2	880.2	888.4	886.7	886.7	898.2	899.9	904.8	908.1	906.5	919.6
15°	863.7	870.3	880.2	878.5	878.5	891.7	893.3	898.2	901.5	901.5	914.7
17.5°	848.9	855.5	865.3	863.7	867.0	876.9	880.2	886.7	890.0	888.4	903.2
20°	827.5	835.7	845.6	844.0	845.6	858.8	862.1	867.0	870.3	870.3	883.4
22.5°	802.8	811.1	820.9	819.3	822.6	832.4	835.7	842.3	845.6	844.0	857.1
25°	773.2	781.4	789.7	789.7	791.3	802.8	806.1	811.1	816.0	814.3	825.9
27.5°	733.7	742.0	750.2	748.5	750.2	761.7	765.0	769.9	774.9	773.2	784.7
30°	682.7	691.0	697.5	695.9	697.5	709.1	710.7	717.3	722.2	722.2	732.1
32.5°	623.5	631.7	635.0	631.7	635.0	643.3	646.5	653.1	656.4	658.1	667.9
35°	556.1	561.0	562.6	559.3	559.3	567.6	570.9	577.4	580.7	582.4	590.6
37.5°	482.0	485.3	482.0	477.1	478.7	482.0	487.0	491.9	496.8	498.5	506.7
40°	409.6	408.0	403.1	394.8	393.2	398.1	401.4	406.4	409.6	412.9	417.9
42.5°	345.5	342.2	332.3	322.4	320.8	320.8	322.4	327.4	330.7	332.3	338.9
45°	294.5	287.9	273.1	261.6	255.0	256.6	256.6	259.9	261.6	264.9	269.8
47.5°	255.0	243.5	225.4	210.6	204.0	202.4	202.4	204.0	205.6	208.9	212.2
50°	223.7	208.9	187.5	171.1	162.9	159.6	159.6	157.9	161.2	162.9	166.2
52.5°	199.1	181.0	156.3	138.2	128.3	125.0	123.4	123.4	123.4	125.0	128.3
55°	176.0	156.3	130.0	111.9	100.4	97.1	93.8	92.1	93.8	95.4	97.1
57.5°	156.3	134.9	108.6	88.8	79.0	74.0	70.7	69.1	69.1	70.7	72.4
60°	136.5	115.2	88.8	70.7	60.9	55.9	52.6	51.0	51.0	52.6	52.6
62.5°	115.2	95.4	72.4	55.9	46.1	41.1	37.8	37.8	36.2	36.2	37.8
65°	97.1	79.0	59.2	44.4	34.5	31.3	28.0	26.3	26.3	24.7	26.3
67.5°	79.0	64.2	47.7	34.5	26.3	23.0	19.7	19.7	18.1	18.1	18.1
70°	62.5	51.0	37.8	26.3	21.4	16.5	14.8	13.2	13.2	13.2	13.2
72.5°	46.1	37.8	28.0	19.7	14.8	13.2	11.5	9.9	8.2	8.2	8.2
75°	32.9	26.3	19.7	14.8	11.5	9.9	8.2	6.6	6.6	6.6	6.6
77.5°	23.0	18.1	14.8	9.9	8.2	6.6	4.9	4.9	4.9	4.9	3.3
80°	14.8	11.5	9.9	6.6	4.9	4.9	3.3	3.3	3.3	3.3	3.3
82.5°	8.2	6.6	4.9	4.9	3.3	3.3	1.6	1.6	1.6	1.6	1.6
85°	3.3	3.3	3.3	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	1.6	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



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0	918.0
2.5°	913.1	919.6	919.6	922.9	918.0	921.3	926.2	924.6	919.6	921.3	922.9
5°	919.6	926.2	927.9	932.8	927.9	932.8	939.4	937.7	932.8	936.1	937.7
7.5°	919.6	927.9	931.2	936.1	932.8	937.7	946.0	944.3	939.4	942.7	946.0
10°	916.3	924.6	929.5	934.4	931.2	937.7	944.3	944.3	941.0	944.3	949.2
12.5°	913.1	921.3	926.2	931.2	927.9	936.1	944.3	942.7	941.0	944.3	949.2
15°	908.1	916.3	921.3	926.2	924.6	932.8	941.0	941.0	937.7	942.7	947.6
17.5°	896.6	904.8	911.4	914.7	913.1	921.3	929.5	929.5	926.2	931.2	936.1
20°	876.9	885.1	891.7	895.0	893.3	899.9	908.1	909.8	906.5	911.4	916.3
22.5°	852.2	858.8	865.3	868.6	867.0	873.6	881.8	883.4	880.2	885.1	888.4
25°	822.6	827.5	834.1	837.4	835.7	842.3	850.5	850.5	848.9	852.2	855.5
27.5°	781.4	788.0	793.0	796.3	796.3	801.2	807.8	809.4	807.8	811.1	816.0
30°	730.4	733.7	740.3	742.0	743.6	748.5	755.1	755.1	753.5	756.8	761.7
32.5°	666.3	671.2	676.2	677.8	679.4	684.4	689.3	691.0	689.3	692.6	697.5
35°	590.6	595.5	600.5	602.1	603.8	608.7	613.6	615.3	613.6	616.9	621.9
37.5°	506.7	510.0	514.9	516.6	519.9	523.2	526.4	529.7	528.1	531.4	534.7
40°	421.2	422.8	427.7	429.4	432.7	436.0	439.3	440.9	440.9	442.5	444.2
42.5°	340.5	343.8	347.1	348.8	352.1	353.7	357.0	358.6	358.6	360.3	361.9
45°	271.4	274.7	278.0	279.7	283.0	284.6	286.3	287.9	286.3	286.3	289.5
47.5°	213.9	217.2	220.4	222.1	223.7	225.4	227.0	227.0	227.0	228.7	228.7
50°	167.8	169.5	172.7	172.7	176.0	176.0	177.7	177.7	177.7	177.7	179.3
52.5°	130.0	131.6	134.9	134.9	136.5	138.2	138.2	138.2	138.2	139.8	138.2
55°	98.7	100.4	102.0	102.0	105.3	105.3	105.3	105.3	105.3	105.3	105.3
57.5°	74.0	75.7	77.3	77.3	77.3	79.0	77.3	79.0	79.0	79.0	79.0
60°	54.3	55.9	55.9	55.9	57.6	57.6	57.6	57.6	57.6	57.6	57.6
62.5°	37.8	37.8	39.5	39.5	39.5	41.1	39.5	39.5	41.1	41.1	39.5
65°	26.3	26.3	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
67.5°	18.1	18.1	18.1	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7
70°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
72.5°	8.2	8.2	8.2	8.2	9.9	9.9	9.9	9.9	9.9	9.9	9.9
75°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
77.5°	3.3	3.3	4.9	4.9	4.9	3.3	3.3	3.3	4.9	4.9	3.3
80°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6
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





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CATALOG NUMBER: LD6A15D010TE ERW6A15830 6LW111H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	918.0	918.0	918.0	918.0
2.5°	922.9	921.3	922.9	918.0
5°	937.7	936.1	939.4	932.8
7.5°	947.6	946.0	949.2	942.7
10°	949.2	949.2	952.5	946.0
12.5°	949.2	949.2	952.5	946.0
15°	949.2	947.6	950.9	944.3
17.5°	937.7	937.7	941.0	934.4
20°	916.3	916.3	919.6	914.7
22.5°	890.0	890.0	891.7	886.7
25°	857.1	855.5	858.8	855.5
27.5°	816.0	814.3	816.0	812.7
30°	760.1	758.4	761.7	758.4
32.5°	697.5	694.3	697.5	694.3
35°	620.2	616.9	620.2	618.6
37.5°	534.7	531.4	534.7	533.0
40°	444.2	442.5	445.8	444.2
42.5°	361.9	358.6	361.9	360.3
45°	289.5	286.3	289.5	287.9
47.5°	228.7	227.0	230.3	228.7
50°	179.3	177.7	179.3	179.3
52.5°	138.2	136.5	138.2	138.2
55°	105.3	103.6	105.3	105.3
57.5°	79.0	77.3	79.0	79.0
60°	57.6	57.6	57.6	57.6
62.5°	41.1	39.5	41.1	41.1
65°	28.0	28.0	28.0	28.0
67.5°	19.7	19.7	19.7	19.7
70°	13.2	13.2	13.2	13.2
72.5°	9.9	9.9	9.9	8.2
75°	6.6	6.6	6.6	6.6
77.5°	4.9	3.3	4.9	4.9
80°	3.3	3.3	3.3	3.3
82.5°	1.6	1.6	1.6	1.6
85°	1.6	1.6	1.6	1.6
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0



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















(END OF REPORT)