

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: P135766

Luminaire Tested: **LD6A10D010TE ERM6A10935 6LM121LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P135766  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23357-R2)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6A10D010TE ERM6A10935 6LM121LI  
Description: PORTFOLIO 6 INCH 50 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE  
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER  
Light Source: (1) HIGH LUMEN LED 3500K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1109.9 lumens  
Efficiency: N/A  
Efficacy: 79.3 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.02 / 0.97  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

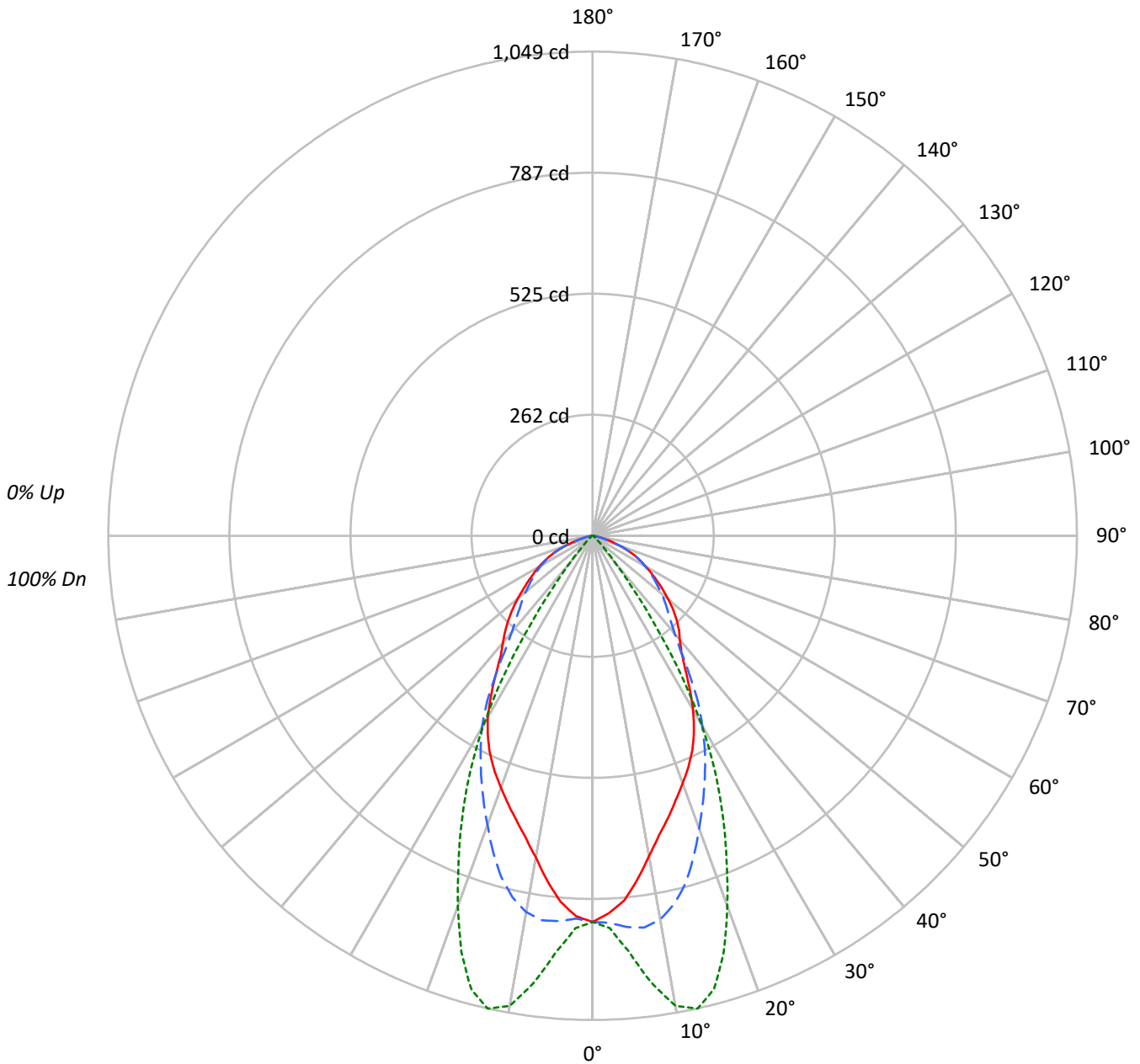
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	97	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	91	87	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	70	66	64																			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58																			
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53																			
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49																			
8	71	59	52	47	69	59	52	47	58	51	47	57	51	47	55	50	47	45																			
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42																			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39																			

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

	0°	90°	180°
0°	54567	54567	54567
5°	51881	59255	52136
10°	46638	68499	46896
15°	42680	68657	43085
20°	39595	59229	40275
25°	36835	48000	37763
30°	32762	35512	34201
35°	27676	18772	29006
40°	24996	6277	25703
45°	23703	2177	23786
50°	21680	924	21446
55°	19371	694	19200
60°	17263	692	17458
65°	15267	710	15375
70°	11750	572	11617
75°	7285	403	6907
80°	3719	263	3419
85°	1722	0	1722



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.2	7.3
10°-20°	221.5	20.0
20°-30°	266.6	24.0
30°-40°	207.2	18.7
40°-50°	138.7	12.5
50°-60°	104.3	9.4
60°-70°	67.0	6.0
70°-80°	21.4	1.9
80°-90°	2.0	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°	569.3	51.3
0°-40°	776.5	70.0
0°-60°	1019.4	91.9
0°-90°	1109.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1109.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	836	836	836	836	836	
5°	792	851	905	838	796	73
15°	632	779	1016	765	638	178
25°	512	575	667	572	525	233
35°	348	363	236	363	364	221
45°	257	230	24	224	258	197
55°	170	161	6	157	169	153
65°	99	100	5	97	100	97
75°	29	27	2	26	27	33
85°	2	2	0	2	2	3
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°	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4
2.5°	818.1	824.9	822.6	833.3	825.7	824.9	830.2	833.3	834.1	839.4	839.4
5°	792.2	799.9	797.6	811.2	808.2	811.2	822.6	831.1	838.6	850.8	858.4
7.5°	749.6	758.8	760.3	774.0	775.5	783.9	802.1	818.9	834.8	856.1	874.4
10°	704.0	713.2	715.5	730.6	735.2	746.6	770.2	791.5	814.3	843.9	871.4
12.5°	664.5	673.6	676.7	691.9	697.2	710.2	735.2	758.8	784.6	817.3	850.1
15°	631.9	640.2	643.2	656.9	662.2	674.4	698.0	720.8	745.9	778.6	810.5
17.5°	599.9	608.3	610.6	622.7	626.5	637.2	658.4	678.2	699.5	728.3	757.3
20°	570.3	577.9	579.3	590.0	592.3	600.6	618.2	634.1	651.6	674.4	698.0
22.5°	542.1	549.7	550.4	559.6	560.3	567.2	581.6	593.8	606.0	624.2	640.9
25°	511.7	519.3	520.0	527.7	528.4	533.0	544.4	553.6	561.9	574.8	586.2
27.5°	475.2	482.8	485.1	490.4	491.1	494.3	504.1	510.1	518.6	526.9	531.4
30°	434.9	441.7	444.8	449.4	450.1	454.7	463.8	468.4	473.7	475.2	476.7
32.5°	390.1	397.7	400.7	404.5	406.8	411.4	419.7	422.0	423.5	422.7	414.4
35°	347.5	354.3	357.4	361.9	363.4	366.5	373.4	372.5	370.2	363.4	348.2
37.5°	315.5	320.8	323.9	326.9	327.7	329.2	333.1	330.0	323.9	312.5	292.8
40°	293.5	298.8	299.5	302.6	301.8	301.8	302.6	297.2	289.7	276.0	253.2
42.5°	276.8	281.3	281.3	284.4	282.1	280.5	280.5	274.5	264.6	250.2	227.3
45°	256.9	260.8	261.5	263.1	260.8	259.2	259.2	253.2	244.1	229.6	206.8
47.5°	236.5	240.2	240.2	242.5	240.2	238.8	238.8	233.4	225.1	212.1	190.9
50°	213.6	217.5	218.2	219.8	218.2	217.5	218.2	212.9	206.1	194.6	175.6
52.5°	191.6	195.4	195.4	196.9	195.4	195.4	196.2	192.3	186.3	177.2	160.5
55°	170.3	173.3	174.9	176.3	174.1	174.1	174.9	172.6	168.0	161.2	146.7
57.5°	150.6	153.6	154.3	155.9	154.3	155.1	155.9	153.6	151.3	146.0	134.6
60°	132.3	135.3	136.1	136.9	136.1	136.1	136.9	136.1	134.6	130.8	120.9
62.5°	115.6	117.9	118.6	120.2	118.6	117.9	119.3	118.6	117.9	115.6	108.7
65°	98.9	100.3	101.2	101.9	100.3	98.9	100.3	100.3	101.2	99.6	94.3
67.5°	80.6	82.1	82.1	82.1	79.9	79.0	80.6	80.6	82.1	81.3	77.6
70°	61.6	62.3	62.3	62.3	59.3	59.3	60.0	60.0	61.6	61.6	59.3
72.5°	44.1	43.3	43.3	42.6	41.9	40.3	40.3	41.0	42.6	42.6	41.0
75°	28.9	28.1	27.4	27.4	26.6	25.1	25.1	25.9	26.6	27.4	26.6
77.5°	17.4	16.7	16.7	16.0	16.0	15.2	15.2	15.2	16.0	16.0	16.0
80°	9.9	9.1	9.1	9.1	8.4	8.4	8.4	8.4	8.4	9.1	8.4
82.5°	5.3	4.6	4.6	4.6	4.6	4.6	3.8	4.6	4.6	4.6	4.6
85°	2.3	2.3	2.3	2.3	1.6	1.6	1.6	1.6	1.6	2.3	2.3
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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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4
2.5°	837.1	844.7	839.4	856.1	844.7	850.8	859.2	850.8	853.1	858.4	847.8
5°	862.9	876.7	878.2	901.0	891.8	902.5	913.9	904.8	906.3	910.1	896.4
7.5°	889.5	913.9	925.3	957.2	955.0	972.4	986.1	977.0	977.0	977.8	957.2
10°	897.2	932.9	954.2	993.7	999.8	1024.9	1040.1	1034.0	1032.5	1030.3	1002.1
12.5°	880.5	924.5	951.9	996.0	1008.1	1037.8	1051.5	1049.3	1047.0	1042.4	1009.7
15°	841.7	887.2	916.2	959.5	974.7	1005.1	1016.5	1016.5	1014.3	1009.7	974.7
17.5°	784.6	827.2	853.8	891.8	907.1	935.2	942.8	945.1	942.8	938.2	906.3
20°	720.0	755.8	777.1	808.2	820.4	844.7	849.2	853.1	851.5	847.8	819.6
22.5°	656.9	685.0	701.0	728.3	732.9	753.5	755.0	758.0	757.3	755.8	732.9
25°	599.1	618.2	627.3	647.8	649.3	664.5	663.7	666.8	666.0	666.0	648.6
27.5°	538.3	549.7	552.0	564.9	561.9	573.3	574.8	573.3	574.0	574.8	561.9
30°	477.5	479.7	473.0	474.4	466.1	473.0	466.1	471.4	471.4	473.7	466.1
32.5°	408.3	401.4	383.2	374.1	359.7	359.7	355.8	355.8	355.8	359.7	358.1
35°	334.5	317.8	289.7	269.9	249.4	244.1	243.3	235.7	237.2	242.5	246.3
37.5°	271.5	246.3	209.1	180.9	156.6	146.0	142.2	136.1	138.3	144.5	153.6
40°	226.6	196.2	152.8	120.2	95.8	83.6	77.6	73.7	76.0	83.6	95.0
42.5°	198.5	165.0	118.6	84.4	61.6	50.2	44.1	41.0	43.3	50.2	63.9
45°	177.9	142.9	95.8	62.3	41.9	31.2	25.9	23.6	25.1	31.2	42.6
47.5°	161.9	126.2	79.9	47.9	29.7	20.6	16.0	13.7	15.2	20.6	29.7
50°	147.5	112.5	67.7	38.0	22.8	15.2	10.6	9.1	10.6	14.4	22.0
52.5°	134.6	100.3	57.7	31.2	17.4	12.2	8.4	6.9	7.6	11.4	17.4
55°	123.2	91.2	50.9	26.6	15.2	10.6	7.6	6.1	7.6	9.9	15.2
57.5°	112.5	82.1	44.9	22.8	12.9	9.1	6.9	6.1	6.9	9.1	12.9
60°	101.9	73.0	39.6	19.7	11.4	8.4	6.1	5.3	6.1	7.6	11.4
62.5°	91.2	64.6	34.2	16.7	9.9	6.9	5.3	4.6	5.3	6.9	9.9
65°	79.0	54.7	28.9	14.4	8.4	6.1	4.6	4.6	4.6	6.1	8.4
67.5°	65.4	44.9	22.8	11.4	6.9	5.3	3.8	3.8	3.8	5.3	6.9
70°	50.2	33.4	17.4	9.1	5.3	3.8	3.0	3.0	3.0	3.8	5.3
72.5°	35.0	23.6	12.2	6.9	3.8	3.0	2.3	2.3	2.3	3.0	3.8
75°	22.0	15.2	8.4	4.6	3.0	2.3	1.6	1.6	1.6	2.3	3.0
77.5°	12.9	9.1	5.3	3.0	1.6	1.6	0.7	0.7	0.7	1.6	1.6
80°	6.9	5.3	3.0	1.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	3.8	2.3	1.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
85°	1.6	0.7	0.7	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



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4	836.4
2.5°	844.7	847.8	846.9	831.1	829.5	830.2	819.6	823.4	827.2	823.4	824.2
5°	885.8	885.0	875.9	853.1	843.9	837.9	820.4	817.3	815.1	806.7	803.6
7.5°	939.8	929.1	910.1	875.9	856.9	840.2	814.3	801.4	792.2	777.8	769.5
10°	977.0	955.7	927.5	882.7	853.8	827.9	794.5	774.8	759.6	740.6	728.3
12.5°	982.4	952.7	920.0	867.5	834.1	802.1	765.6	743.6	726.1	705.6	694.2
15°	948.1	917.7	883.5	831.1	797.6	764.9	729.9	707.9	690.3	670.6	660.7
17.5°	883.5	855.4	824.9	776.3	747.4	717.7	686.6	667.6	652.3	637.2	627.3
20°	801.4	779.3	754.2	713.2	690.3	666.0	641.7	626.5	615.1	602.2	594.6
22.5°	720.0	703.3	685.0	652.3	635.6	618.2	599.1	588.5	580.1	570.3	564.9
25°	641.7	630.3	618.9	593.8	583.9	571.7	558.1	550.4	545.1	538.3	534.5
27.5°	560.3	556.6	553.6	537.6	533.7	525.4	516.3	511.7	507.9	503.3	500.3
30°	472.1	474.4	486.6	478.3	482.0	479.7	476.0	473.0	471.4	467.6	463.8
32.5°	372.5	388.5	406.0	408.3	419.7	425.0	424.3	425.0	425.8	422.7	419.7
35°	266.9	292.8	320.1	332.2	351.2	363.4	368.0	372.5	375.6	374.8	372.5
37.5°	177.9	212.9	245.6	266.9	291.9	308.7	318.5	326.2	330.8	332.2	332.2
40°	118.6	152.0	195.4	222.8	250.9	271.5	282.8	292.8	299.5	302.6	304.1
42.5°	83.6	119.3	163.5	194.6	223.5	245.6	258.5	269.2	276.0	279.8	281.3
45°	61.6	95.8	141.5	173.3	203.0	224.3	237.2	247.1	253.9	257.8	260.1
47.5°	47.2	80.6	124.7	157.3	187.0	206.8	218.9	228.1	234.2	237.2	238.8
50°	37.3	67.7	111.0	143.7	171.1	189.3	199.9	207.6	212.9	215.2	216.6
52.5°	30.4	58.6	99.6	130.8	156.6	172.6	180.9	187.0	191.6	193.1	194.6
55°	25.9	50.9	89.7	120.2	143.7	157.3	163.5	168.8	171.1	172.6	173.3
57.5°	22.8	44.9	81.3	110.3	131.5	142.9	147.5	151.3	152.0	153.6	154.3
60°	19.7	38.7	72.2	99.6	118.6	128.5	130.8	133.8	133.8	134.6	135.3
62.5°	16.7	33.4	63.1	89.0	105.7	114.0	115.6	116.3	116.3	116.3	117.0
65°	13.7	28.1	53.2	76.8	92.0	97.3	98.0	98.9	97.3	97.3	98.0
67.5°	11.4	22.0	42.6	63.1	75.3	79.9	79.0	79.0	76.8	76.8	77.6
70°	8.4	16.7	31.9	47.9	57.0	60.0	58.6	58.6	56.3	56.3	57.0
72.5°	6.1	12.2	22.0	32.7	39.6	41.0	39.6	39.6	38.0	38.0	38.7
75°	4.6	7.6	14.4	21.3	25.1	25.9	25.1	24.3	23.6	23.6	24.3
77.5°	3.0	5.3	8.4	12.2	14.4	15.2	14.4	14.4	13.7	14.4	14.4
80°	1.6	3.0	4.6	6.9	7.6	8.4	8.4	8.4	7.6	7.6	8.4
82.5°	0.7	1.6	2.3	3.0	3.8	4.6	3.8	3.8	3.8	3.8	3.8
85°	0.0	0.7	0.7	1.6	1.6	2.3	1.6	1.6	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: LD6A10D010TE ERM6A10935 6LM121LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	836.4	836.4	836.4	836.4
2.5°	822.6	818.9	813.5	824.9
5°	799.1	791.5	785.4	796.1
7.5°	761.8	751.2	742.8	753.5
10°	719.3	707.1	698.0	707.9
12.5°	682.0	669.9	662.2	669.9
15°	649.3	637.9	631.0	637.9
17.5°	617.4	607.5	601.4	609.0
20°	587.0	578.6	573.3	580.1
22.5°	558.8	551.3	546.7	553.6
25°	529.1	523.9	518.6	524.6
27.5°	496.5	490.4	487.4	491.1
30°	459.3	453.1	450.8	454.0
32.5°	415.1	409.1	406.8	409.1
35°	369.5	364.2	361.1	364.2
37.5°	330.8	326.2	323.9	326.2
40°	303.4	301.1	298.8	301.8
42.5°	282.1	279.8	278.2	280.5
45°	260.1	256.9	255.5	257.8
47.5°	237.9	234.9	233.4	234.9
50°	215.2	211.3	210.6	211.3
52.5°	192.3	189.3	187.8	188.6
55°	171.8	169.6	168.0	168.8
57.5°	153.6	150.6	149.8	150.6
60°	135.3	133.8	133.0	133.8
62.5°	117.0	116.3	117.0	117.0
65°	98.9	98.9	99.6	99.6
67.5°	79.0	80.6	81.3	81.3
70°	58.6	60.0	60.9	60.9
72.5°	39.6	41.0	41.9	42.6
75°	25.1	26.6	27.4	27.4
77.5°	15.2	16.0	16.0	16.7
80°	8.4	9.1	9.1	9.1
82.5°	4.6	4.6	4.6	5.3
85°	2.3	2.3	2.3	2.3
87.5°	0.0	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0



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















(END OF REPORT)