

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: P135760

Luminaire Tested: **LD6A10D010TE ERM6A10827 6LM121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P135760
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 ERM6A10827 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 2700K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1126.0 lumens
Efficiency: N/A
Efficacy: 80.4 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

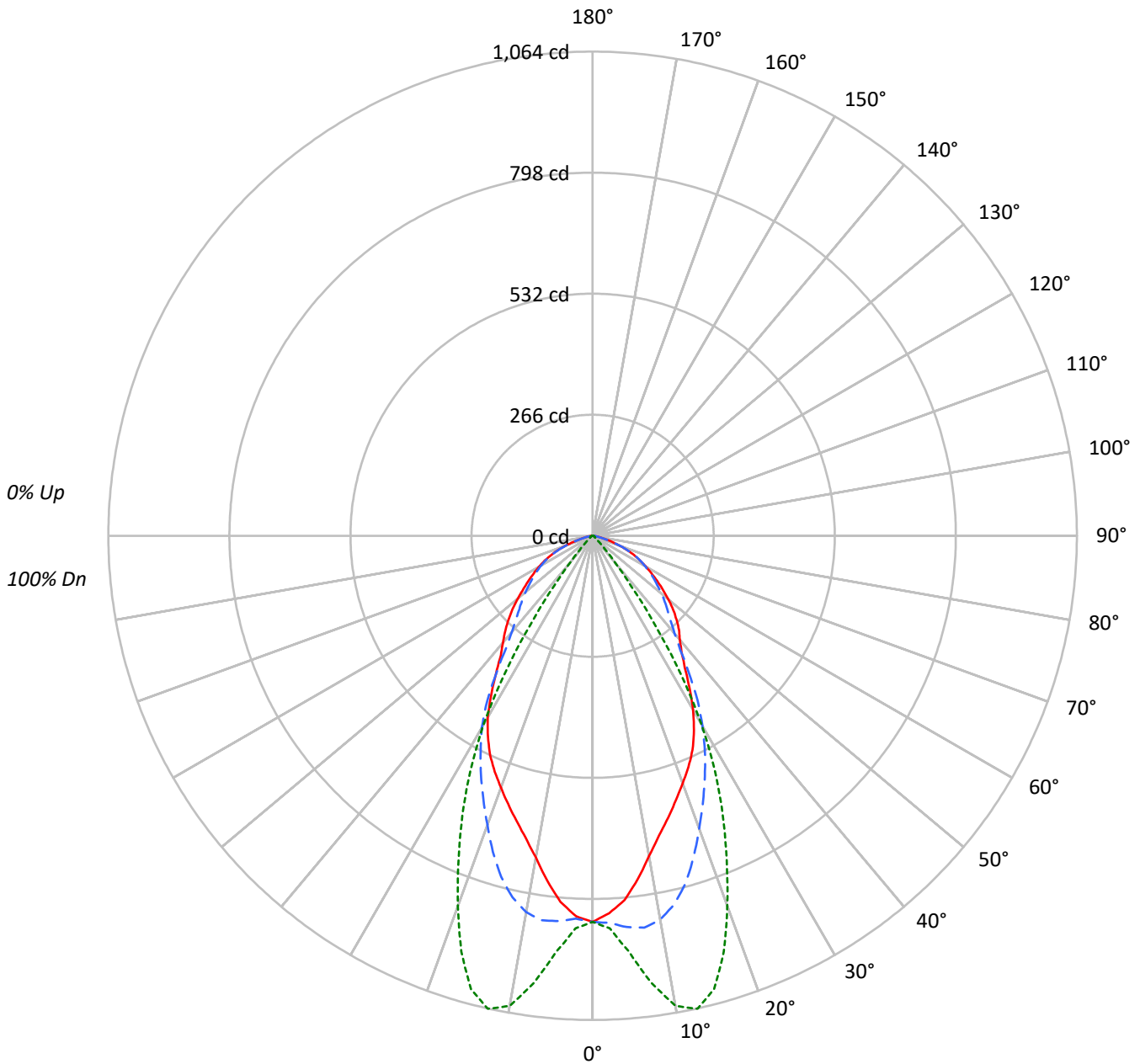
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P135760

CATALOG NUMBER: LD6A10D010TE ERM6A10827 6LM121LI

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								
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°	55357	55357	55357
5°	52641	60113	52890
10°	47320	69500	47572
15°	43294	69656	43713
20°	40164	60090	40865
25°	37367	48698	38310
30°	33237	36032	34691
35°	28075	19043	29428
40°	25354	6370	26078
45°	24053	2205	24127
50°	22004	944	21761
55°	19655	705	19473
60°	17511	705	17719
65°	15484	710	15592
70°	11922	591	11769
75°	7386	378	7008
80°	3757	301	3494
85°	1722	0	1722



TEST NUMBER: P135760

CATALOG NUMBER: LD6A10D010TE ERM6A10827 6LM121LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.3	7.3
10°-20°	224.7	20.0
20°-30°	270.5	24.0
30°-40°	210.2	18.7
40°-50°	140.7	12.5
50°-60°	105.8	9.4
60°-70°	67.9	6.0
70°-80°	21.8	1.9
80°-90°	2.1	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°	577.5	51.3
0°-40°	787.7	70.0
0°-60°	1034.3	91.9
0°-90°	1126.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1126.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	848	848	848	848	848	
5°	804	863	918	850	808	74
15°	641	790	1031	776	647	180
25°	519	583	676	580	532	237
35°	352	369	239	369	370	224
45°	261	233	24	228	262	200
55°	173	164	6	160	171	155
65°	100	101	5	99	101	98
75°	29	28	2	26	28	34
85°	2	2	0	2	2	3
90°	0	0	0	0	0	



TEST NUMBER: P135760

CATALOG NUMBER: LD6A10D010TE ERM6A10827 6LM121LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5
2.5°	830.0	836.9	834.6	845.4	837.7	836.9	842.3	845.4	846.2	851.6	851.6
5°	803.8	811.5	809.2	823.1	820.0	823.1	834.6	843.1	850.8	863.2	870.9
7.5°	760.6	769.8	771.4	785.3	786.8	795.3	813.8	830.8	847.0	868.6	887.1
10°	714.3	723.5	725.9	741.3	745.9	757.5	781.4	803.0	826.1	856.2	884.0
12.5°	674.2	683.4	686.5	701.9	707.3	720.5	745.9	769.8	796.1	829.2	862.4
15°	641.0	649.5	652.6	666.5	671.9	684.2	708.1	731.3	756.7	789.9	822.3
17.5°	608.6	617.1	619.4	631.8	635.6	646.4	668.0	688.1	709.7	739.0	768.3
20°	578.5	586.2	587.8	598.6	600.9	609.4	627.1	643.3	661.1	684.2	708.1
22.5°	550.0	557.7	558.5	567.7	568.5	575.4	590.1	602.4	614.8	633.3	650.3
25°	519.1	526.8	527.6	535.3	536.1	540.7	552.3	561.6	570.0	583.2	594.7
27.5°	482.1	489.8	492.1	497.5	498.3	501.4	511.4	517.6	526.1	534.6	539.2
30°	441.2	448.2	451.3	455.9	456.7	461.3	470.5	475.2	480.6	482.1	483.6
32.5°	395.7	403.4	406.5	410.4	412.7	417.3	425.8	428.1	429.7	428.9	420.4
35°	352.5	359.5	362.5	367.2	368.7	371.8	378.7	378.0	375.7	368.7	353.3
37.5°	320.1	325.5	328.6	331.7	332.5	334.0	337.9	334.8	328.6	317.0	297.0
40°	297.7	303.1	303.9	307.0	306.2	306.2	307.0	301.6	293.9	280.0	256.9
42.5°	280.8	285.4	285.4	288.5	286.2	284.6	284.6	278.5	268.4	253.8	230.6
45°	260.7	264.6	265.4	266.9	264.6	263.0	263.0	256.9	247.6	233.0	209.8
47.5°	239.9	243.8	243.8	246.1	243.8	242.2	242.2	236.8	228.3	215.2	193.6
50°	216.8	220.6	221.4	222.9	221.4	220.6	221.4	216.0	209.0	197.5	178.2
52.5°	194.4	198.2	198.2	199.8	198.2	198.2	199.0	195.2	189.0	179.7	162.8
55°	172.8	175.9	177.4	179.0	176.6	176.6	177.4	175.1	170.5	163.5	148.9
57.5°	152.7	155.8	156.6	158.1	156.6	157.4	158.1	155.8	153.5	148.1	136.5
60°	134.2	137.3	138.1	138.8	138.1	138.1	138.8	138.1	136.5	132.7	122.6
62.5°	117.2	119.6	120.3	121.9	120.3	119.6	121.1	120.3	119.6	117.2	110.3
65°	100.3	101.8	102.6	103.4	101.8	100.3	101.8	101.8	102.6	101.0	95.7
67.5°	81.8	83.3	83.3	83.3	81.0	80.2	81.8	81.8	83.3	82.5	78.7
70°	62.5	63.3	63.3	63.3	60.2	60.2	60.9	60.9	62.5	62.5	60.2
72.5°	44.7	44.0	44.0	43.2	42.4	40.9	40.9	41.7	43.2	43.2	41.7
75°	29.3	28.5	27.8	27.8	27.0	25.5	25.5	26.2	27.0	27.8	27.0
77.5°	17.7	17.0	17.0	16.2	16.2	15.4	15.4	15.4	16.2	16.2	16.2
80°	10.0	9.3	9.3	9.3	8.5	8.5	8.5	8.5	8.5	9.3	8.5
82.5°	5.4	4.6	4.6	4.6	4.6	4.6	3.9	4.6	4.6	4.6	4.6
85°	2.3	2.3	2.3	2.3	1.5	1.5	1.5	1.5	1.5	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



TEST NUMBER: P135760

CATALOG NUMBER: LD6A10D010TE ERM6A10827 6LM121LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5
2.5°	849.3	857.0	851.6	868.6	857.0	863.2	871.6	863.2	865.5	870.9	860.1
5°	875.5	889.4	890.9	914.1	904.8	915.6	927.2	917.9	919.5	923.3	909.4
7.5°	902.5	927.2	938.8	971.2	968.8	986.6	1000.5	991.2	991.2	992.0	971.2
10°	910.2	946.5	968.1	1008.2	1014.4	1039.8	1055.2	1049.1	1047.5	1045.2	1016.7
12.5°	893.2	938.0	965.8	1010.5	1022.8	1052.9	1066.8	1064.5	1062.2	1057.6	1024.4
15°	853.9	900.2	929.5	973.5	988.9	1019.8	1031.3	1031.3	1029.0	1024.4	988.9
17.5°	796.1	839.3	866.2	904.8	920.2	948.8	956.5	958.8	956.5	951.9	919.5
20°	730.5	766.7	788.3	820.0	832.3	857.0	861.6	865.5	863.9	860.1	831.5
22.5°	666.5	695.0	711.2	739.0	743.6	764.4	766.0	769.1	768.3	766.7	743.6
25°	607.8	627.1	636.4	657.2	658.8	674.2	673.4	676.5	675.7	675.7	658.0
27.5°	546.1	557.7	560.0	573.1	570.0	581.6	583.2	581.6	582.4	583.2	570.0
30°	484.4	486.7	479.8	481.3	472.9	479.8	472.9	478.3	478.3	480.6	472.9
32.5°	414.2	407.3	388.8	379.5	364.9	364.9	361.0	361.0	361.0	364.9	363.3
35°	339.4	322.4	293.9	273.8	253.0	247.6	246.8	239.1	240.7	246.1	249.9
37.5°	275.4	249.9	212.1	183.6	158.9	148.1	144.2	138.1	140.4	146.6	155.8
40°	229.9	199.0	155.0	121.9	97.2	84.9	78.7	74.8	77.1	84.9	96.4
42.5°	201.3	167.4	120.3	85.6	62.5	50.9	44.7	41.7	44.0	50.9	64.8
45°	180.5	145.0	97.2	63.3	42.4	31.6	26.2	23.9	25.5	31.6	43.2
47.5°	164.3	128.0	81.0	48.6	30.1	20.8	16.2	13.9	15.4	20.8	30.1
50°	149.6	114.2	68.7	38.6	23.1	15.4	10.8	9.3	10.8	14.7	22.4
52.5°	136.5	101.8	58.6	31.6	17.7	12.3	8.5	6.9	7.7	11.6	17.7
55°	125.0	92.6	51.7	27.0	15.4	10.8	7.7	6.2	7.7	10.0	15.4
57.5°	114.2	83.3	45.5	23.1	13.1	9.3	6.9	6.2	6.9	9.3	13.1
60°	103.4	74.1	40.1	20.1	11.6	8.5	6.2	5.4	6.2	7.7	11.6
62.5°	92.6	65.6	34.7	17.0	10.0	6.9	5.4	4.6	5.4	6.9	10.0
65°	80.2	55.5	29.3	14.7	8.5	6.2	4.6	4.6	4.6	6.2	8.5
67.5°	66.3	45.5	23.1	11.6	6.9	5.4	3.9	3.9	3.9	5.4	6.9
70°	50.9	33.9	17.7	9.3	5.4	3.9	3.1	3.1	3.1	3.9	5.4
72.5°	35.5	23.9	12.3	6.9	3.9	3.1	2.3	2.3	2.3	3.1	3.9
75°	22.4	15.4	8.5	4.6	3.1	2.3	1.5	1.5	1.5	2.3	3.1
77.5°	13.1	9.3	5.4	3.1	1.5	1.5	0.8	0.8	0.8	1.5	1.5
80°	6.9	5.4	3.1	1.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	3.9	2.3	1.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
85°	1.5	0.8	0.8	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: P135760

CATALOG NUMBER: LD6A10D010TE ERM6A10827 6LM121LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5	848.5
2.5°	857.0	860.1	859.3	843.1	841.6	842.3	831.5	835.4	839.3	835.4	836.2
5°	898.6	897.9	888.6	865.5	856.2	850.1	832.3	829.2	826.9	818.4	815.3
7.5°	953.4	942.6	923.3	888.6	869.3	852.4	826.1	813.0	803.8	789.1	780.6
10°	991.2	969.6	941.1	895.6	866.2	840.0	806.1	786.0	770.6	751.3	739.0
12.5°	996.6	966.5	933.4	880.1	846.2	813.8	776.8	754.4	736.7	715.8	704.3
15°	961.9	931.0	896.3	843.1	809.2	776.0	740.5	718.1	700.4	680.3	670.3
17.5°	896.3	867.8	836.9	787.6	758.3	728.2	696.5	677.3	661.8	646.4	636.4
20°	813.0	790.7	765.2	723.5	700.4	675.7	651.0	635.6	624.0	610.9	603.2
22.5°	730.5	713.5	695.0	661.8	644.9	627.1	607.8	597.0	588.6	578.5	573.1
25°	651.0	639.5	627.9	602.4	592.4	580.1	566.2	558.5	553.1	546.1	542.3
27.5°	568.5	564.6	561.6	545.4	541.5	533.0	523.8	519.1	515.3	510.6	507.6
30°	479.0	481.3	493.7	485.2	489.0	486.7	482.9	479.8	478.3	474.4	470.5
32.5°	378.0	394.2	411.9	414.2	425.8	431.2	430.4	431.2	432.0	428.9	425.8
35°	270.8	297.0	324.7	337.1	356.4	368.7	373.3	378.0	381.1	380.3	378.0
37.5°	180.5	216.0	249.2	270.8	296.2	313.2	323.2	330.9	335.5	337.1	337.1
40°	120.3	154.3	198.2	226.0	254.6	275.4	287.0	297.0	303.9	307.0	308.5
42.5°	84.9	121.1	165.8	197.5	226.8	249.2	262.3	273.1	280.0	283.9	285.4
45°	62.5	97.2	143.5	175.9	206.0	227.6	240.7	250.7	257.6	261.5	263.8
47.5°	47.8	81.8	126.5	159.7	189.8	209.8	222.2	231.4	237.6	240.7	242.2
50°	37.8	68.7	112.6	145.8	173.6	192.1	202.9	210.6	216.0	218.3	219.8
52.5°	30.9	59.4	101.0	132.7	158.9	175.1	183.6	189.8	194.4	195.9	197.5
55°	26.2	51.7	91.0	121.9	145.8	159.7	165.8	171.2	173.6	175.1	175.9
57.5°	23.1	45.5	82.5	111.8	133.4	145.0	149.6	153.5	154.3	155.8	156.6
60°	20.1	39.3	73.3	101.0	120.3	130.4	132.7	135.8	135.8	136.5	137.3
62.5°	17.0	33.9	64.0	90.3	107.2	115.7	117.2	118.0	118.0	118.0	118.8
65°	13.9	28.5	54.0	77.9	93.3	98.7	99.5	100.3	98.7	98.7	99.5
67.5°	11.6	22.4	43.2	64.0	76.4	81.0	80.2	80.2	77.9	77.9	78.7
70°	8.5	17.0	32.4	48.6	57.9	60.9	59.4	59.4	57.1	57.1	57.9
72.5°	6.2	12.3	22.4	33.2	40.1	41.7	40.1	40.1	38.6	38.6	39.3
75°	4.6	7.7	14.7	21.6	25.5	26.2	25.5	24.7	23.9	23.9	24.7
77.5°	3.1	5.4	8.5	12.3	14.7	15.4	14.7	14.7	13.9	14.7	14.7
80°	1.5	3.1	4.6	6.9	7.7	8.5	8.5	8.5	7.7	7.7	8.5
82.5°	0.8	1.5	2.3	3.1	3.9	4.6	3.9	3.9	3.9	3.9	3.9
85°	0.0	0.8	0.8	1.5	1.5	2.3	1.5	1.5	1.5	1.5	1.5
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 ERM6A10827 6LM121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	848.5	848.5	848.5	848.5
2.5°	834.6	830.8	825.4	836.9
5°	810.7	803.0	796.8	807.6
7.5°	772.9	762.1	753.6	764.4
10°	729.7	717.4	708.1	718.1
12.5°	691.9	679.6	671.9	679.6
15°	658.8	647.2	640.2	647.2
17.5°	626.4	616.3	610.2	617.9
20°	595.5	587.0	581.6	588.6
22.5°	567.0	559.2	554.6	561.6
25°	536.9	531.5	526.1	532.2
27.5°	503.7	497.5	494.4	498.3
30°	465.9	459.7	457.4	460.5
32.5°	421.2	415.0	412.7	415.0
35°	374.9	369.5	366.4	369.5
37.5°	335.5	330.9	328.6	330.9
40°	307.8	305.5	303.1	306.2
42.5°	286.2	283.9	282.3	284.6
45°	263.8	260.7	259.2	261.5
47.5°	241.4	238.4	236.8	238.4
50°	218.3	214.4	213.7	214.4
52.5°	195.2	192.1	190.5	191.3
55°	174.3	172.0	170.5	171.2
57.5°	155.8	152.7	152.0	152.7
60°	137.3	135.8	135.0	135.8
62.5°	118.8	118.0	118.8	118.8
65°	100.3	100.3	101.0	101.0
67.5°	80.2	81.8	82.5	82.5
70°	59.4	60.9	61.7	61.7
72.5°	40.1	41.7	42.4	43.2
75°	25.5	27.0	27.8	27.8
77.5°	15.4	16.2	16.2	17.0
80°	8.5	9.3	9.3	9.3
82.5°	4.6	4.6	4.6	5.4
85°	2.3	2.3	2.3	2.3
87.5°	0.0	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)