

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: P274441

Luminaire Tested: **LD6B15DE010W2N2765 EU6B1020W2N902765 6LBLWW0H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274441
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBLWW0H
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, LENSED WALLWASH WITH HAZE FINISH
Light Source: W2N 2700K-6500K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1139.5 lumens
Efficiency: N/A
Efficacy: 51.8 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

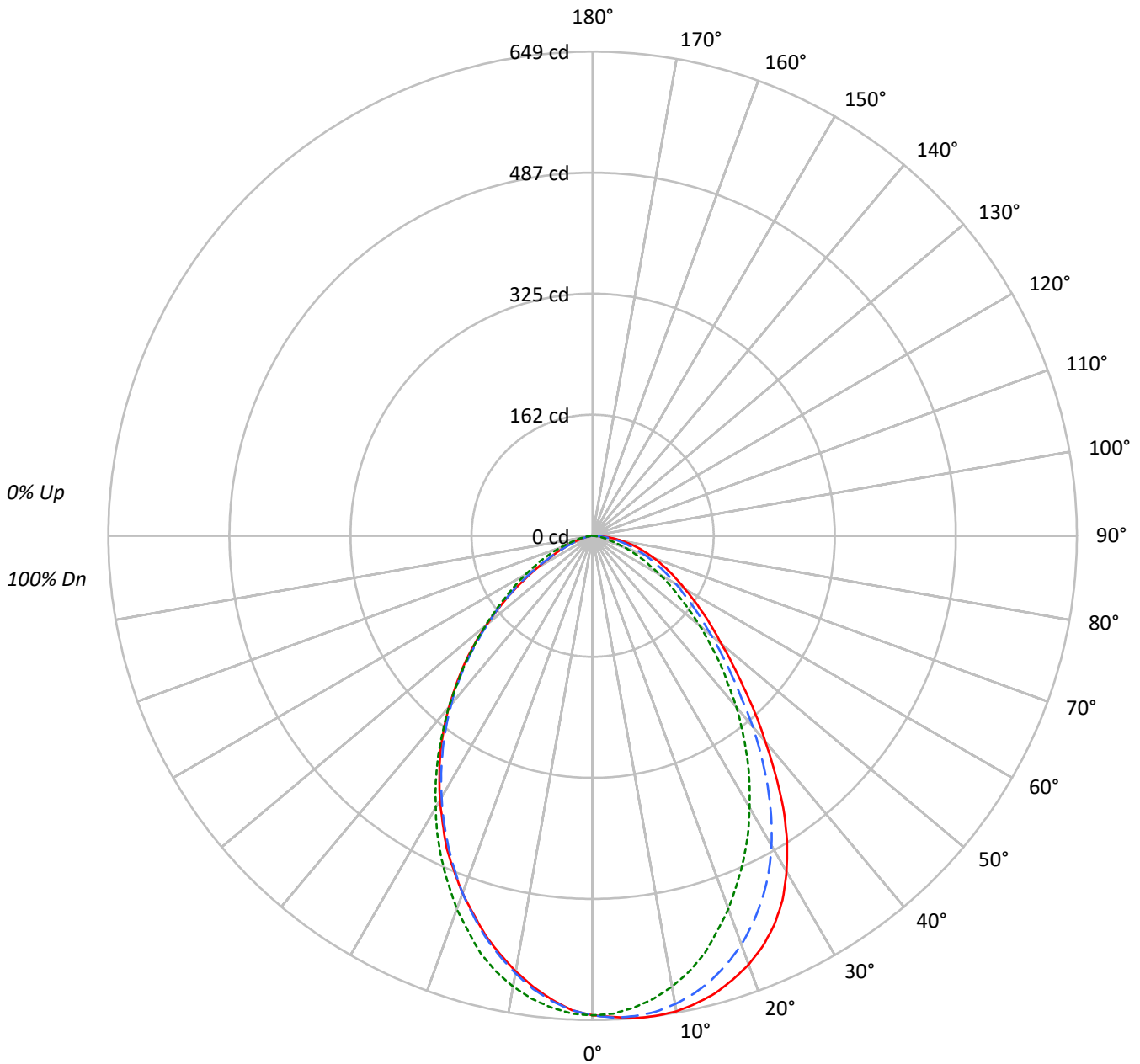
Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P274441

CATALOG NUMBER: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBLWW0H

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				100															
1	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88				88															
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77															
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67				67															
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59				59															
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53				53															
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47				47															
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43				43															
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				39															
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35				35															
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33				33															

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	41937	41937	41937
5°	42509	41573	40872
10°	42882	40636	39271
15°	42876	39134	37445
20°	42462	36942	35394
25°	41456	34452	33293
30°	39143	31678	30804
35°	35481	28728	28369
40°	30643	25550	25473
45°	26277	22245	22411
50°	22837	19031	18757
55°	20519	16049	15026
60°	18646	13518	11065
65°	17506	11161	8135
70°	16691	8679	5951
75°	15981	6302	4058
80°	15103	4358	2668
85°	13399	2695	1347



TEST NUMBER: P274441

CATALOG NUMBER: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBLWW0H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.1	5.3
10°-20°	164.7	14.5
20°-30°	228.6	20.1
30°-40°	236.8	20.8
40°-50°	194.6	17.1
50°-60°	133.8	11.7
60°-70°	76.9	6.7
70°-80°	35.3	3.1
80°-90°	8.6	0.8
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°	453.5	39.8
0°-40°	690.3	60.6
0°-60°	1018.6	89.4
0°-90°	1139.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1139.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	643	643	643	643	643	
5°	649	646	635	626	624	62
15°	635	616	579	556	554	179
25°	576	538	479	458	462	264
35°	446	409	361	350	356	276
45°	285	263	241	238	243	222
55°	180	163	141	133	132	162
65°	113	99	72	51	53	113
75°	63	50	25	16	16	67
85°	18	12	4	2	2	20
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°	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8
2.5°	645.5	650.9	647.3	646.4	648.2	648.2	648.2	645.5	647.3	644.6	646.4
5°	649.1	653.6	650.0	648.2	650.0	650.9	648.2	646.4	649.1	645.5	646.4
7.5°	649.1	653.6	650.0	649.1	650.0	650.0	649.1	645.5	647.3	643.7	643.7
10°	647.3	650.9	647.3	645.5	646.4	645.5	645.5	641.1	641.9	637.5	637.5
12.5°	641.9	646.4	641.9	640.2	640.2	640.2	637.5	633.9	634.8	629.4	628.6
15°	634.8	638.4	633.9	632.1	632.1	631.2	629.4	624.1	624.1	618.7	616.1
17.5°	624.1	627.7	624.1	621.4	620.5	618.7	616.9	611.6	609.8	603.6	600.9
20°	611.6	614.3	610.7	608.0	606.2	604.4	600.9	595.5	593.7	587.5	583.0
22.5°	595.5	599.1	593.7	591.1	589.3	586.6	583.0	577.7	575.0	566.9	561.6
25°	575.9	577.7	573.2	570.5	566.9	565.2	562.5	555.3	552.7	543.7	537.5
27.5°	550.9	552.7	547.3	545.5	541.1	539.3	535.7	529.4	525.9	516.9	510.7
30°	519.6	521.4	517.8	515.2	511.6	508.0	505.3	499.1	493.7	484.8	479.5
32.5°	484.8	487.5	483.9	480.3	474.1	475.0	470.5	464.3	459.8	451.8	445.5
35°	445.5	447.3	442.8	442.0	438.4	434.8	430.3	425.9	423.2	414.3	408.9
37.5°	401.8	406.2	401.8	398.2	396.4	393.7	391.1	384.8	383.0	377.7	370.5
40°	359.8	362.5	359.8	356.2	353.6	353.6	350.0	346.4	342.0	336.6	333.9
42.5°	322.3	320.5	319.6	317.8	314.3	313.4	312.5	308.0	305.3	300.0	295.5
45°	284.8	285.7	283.9	283.0	280.3	278.6	276.8	273.2	272.3	267.0	263.4
47.5°	253.6	252.7	250.9	250.9	249.1	247.3	245.5	242.9	242.0	237.5	233.9
50°	225.0	225.9	225.0	224.1	221.4	220.5	218.7	217.0	215.2	210.7	207.1
52.5°	201.8	200.9	200.0	200.0	197.3	196.4	194.6	192.9	191.1	186.6	183.9
55°	180.4	180.4	179.5	178.6	175.9	175.0	174.1	172.3	169.6	166.1	163.4
57.5°	160.7	160.7	159.8	158.9	157.1	157.1	155.4	153.6	151.8	148.2	144.6
60°	142.9	143.7	142.9	142.0	140.2	140.2	139.3	136.6	135.7	131.2	128.6
62.5°	127.7	127.7	127.7	126.8	125.9	124.1	124.1	121.4	119.6	117.0	113.4
65°	113.4	113.4	113.4	112.5	110.7	109.8	108.9	107.1	105.4	102.7	99.1
67.5°	100.0	100.0	100.0	99.1	97.3	96.4	95.5	94.6	92.0	89.3	85.7
70°	87.5	87.5	86.6	85.7	84.8	83.9	83.0	81.2	79.5	75.9	73.2
72.5°	75.0	75.0	75.0	73.2	72.3	72.3	70.5	69.6	67.9	64.3	61.6
75°	63.4	62.5	62.5	61.6	60.7	59.8	58.9	58.0	55.4	53.6	50.0
77.5°	51.8	51.8	50.9	50.0	50.0	49.1	48.2	46.4	45.5	42.9	40.2
80°	40.2	40.2	40.2	40.2	39.3	38.4	38.4	36.6	35.7	33.0	31.2
82.5°	30.4	29.5	29.5	29.5	28.6	27.7	27.7	26.8	25.9	24.1	22.3
85°	17.9	17.0	17.0	17.0	16.1	16.1	15.2	15.2	14.3	12.5	12.5
87.5°	5.4	5.4	6.2	6.2	5.4	5.4	5.4	5.4	5.4	4.5	4.5
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: P274441

CATALOG NUMBER: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBLWW0H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8
2.5°	644.6	647.3	643.7	642.8	646.4	644.6	643.7	641.9	642.8	641.1	638.4
5°	643.7	647.3	642.8	640.2	644.6	641.9	640.2	638.4	638.4	634.8	633.0
7.5°	641.1	642.8	638.4	635.7	638.4	635.7	633.9	631.2	630.3	625.9	623.2
10°	633.9	635.7	630.3	626.8	629.4	625.9	623.2	620.5	618.7	613.4	609.8
12.5°	624.1	625.0	618.7	614.3	616.1	613.4	608.9	605.3	603.6	598.2	593.7
15°	610.7	611.6	604.4	598.2	600.0	596.4	591.1	587.5	584.8	579.4	573.2
17.5°	594.6	593.7	585.7	579.4	580.3	575.9	570.5	565.2	561.6	555.3	550.9
20°	576.8	574.1	565.2	558.0	558.9	553.6	547.3	541.9	537.5	532.1	525.9
22.5°	554.4	550.9	542.8	533.9	534.8	530.3	521.4	516.9	512.5	505.3	500.0
25°	530.3	525.0	516.9	508.0	508.0	502.7	495.5	490.2	485.7	478.6	472.3
27.5°	501.8	499.1	488.4	481.2	480.3	475.0	468.7	462.5	457.1	450.9	444.6
30°	470.5	466.1	458.0	450.0	448.2	443.7	437.5	430.3	426.8	420.5	415.2
32.5°	437.5	433.0	424.1	416.1	415.2	411.6	406.2	399.1	395.5	391.1	387.5
35°	400.0	398.2	389.3	383.0	383.0	379.5	374.1	367.8	365.2	360.7	356.2
37.5°	364.3	361.6	353.6	348.2	348.2	343.7	338.4	335.7	333.0	329.5	326.8
40°	326.8	325.0	318.7	313.4	314.3	310.7	307.1	303.6	301.8	300.0	297.3
42.5°	292.0	290.2	285.7	281.2	281.2	278.6	275.0	272.3	270.5	267.8	267.0
45°	260.7	258.0	254.5	250.0	250.0	247.3	245.5	243.7	242.9	241.1	238.4
47.5°	230.4	228.6	225.0	220.5	220.5	220.5	217.0	214.3	214.3	212.5	211.6
50°	204.5	201.8	199.1	195.5	195.5	193.7	191.1	188.4	188.4	187.5	185.7
52.5°	180.4	178.6	175.0	171.4	171.4	169.6	167.0	166.1	165.2	162.5	161.6
55°	159.8	158.0	155.4	150.9	150.0	149.1	146.4	144.6	143.7	141.1	141.1
57.5°	141.1	139.3	134.8	132.1	131.2	129.5	126.8	125.0	124.1	122.3	120.5
60°	125.0	122.3	118.7	115.2	114.3	112.5	109.8	108.0	107.1	103.6	101.8
62.5°	109.8	107.1	103.6	100.0	99.1	97.3	93.7	92.0	90.2	86.6	84.8
65°	95.5	92.9	89.3	85.7	83.9	83.0	79.5	76.8	75.0	72.3	68.7
67.5°	82.1	79.5	75.9	71.4	71.4	68.7	66.1	63.4	60.7	58.0	55.4
70°	69.6	67.0	63.4	59.8	58.9	57.1	54.5	50.9	49.1	45.5	42.9
72.5°	58.0	55.4	51.8	48.2	47.3	45.5	42.9	39.3	36.6	33.9	31.2
75°	47.3	44.6	41.1	38.4	37.5	35.7	33.0	29.5	26.8	25.0	22.3
77.5°	37.5	34.8	32.1	29.5	28.6	26.8	24.1	22.3	19.6	17.9	15.2
80°	28.6	26.8	24.1	22.3	21.4	19.6	17.9	15.2	13.4	11.6	10.7
82.5°	20.5	18.7	17.0	14.3	14.3	12.5	11.6	9.8	8.0	7.1	6.2
85°	11.6	9.8	8.9	8.0	7.1	7.1	6.2	5.4	4.5	3.6	3.6
87.5°	3.6	3.6	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8	1.8
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: P274441

CATALOG NUMBER: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBLWW0H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8
2.5°	638.4	639.3	637.5	639.3	637.5	638.4	636.6	638.4	636.6	638.4	634.8
5°	632.1	632.1	629.4	631.2	629.4	630.3	626.8	627.7	625.9	627.7	624.1
7.5°	621.4	622.3	617.8	619.6	616.9	616.9	614.3	615.2	612.5	613.4	610.7
10°	608.9	608.0	603.6	605.3	601.8	601.8	599.1	599.1	595.5	596.4	592.8
12.5°	591.1	590.2	584.8	586.6	583.0	583.0	580.3	580.3	576.8	578.6	575.0
15°	570.5	569.6	564.3	565.2	561.6	561.6	558.0	558.9	556.2	558.0	554.4
17.5°	547.3	546.4	541.1	541.9	537.5	538.4	535.7	534.8	533.0	533.9	531.2
20°	523.2	521.4	516.1	516.9	515.2	512.5	510.7	511.6	509.8	511.6	508.9
22.5°	498.2	494.6	490.2	490.2	488.4	488.4	485.7	487.5	483.9	486.6	484.8
25°	469.6	467.0	463.4	465.2	461.6	461.6	458.9	459.8	458.0	459.8	458.0
27.5°	442.0	440.2	434.8	436.6	433.9	434.8	432.1	433.0	432.1	433.9	432.1
30°	412.5	411.6	408.0	408.0	407.1	406.2	405.3	405.3	404.5	407.1	405.3
32.5°	384.8	382.1	378.6	381.2	376.8	379.5	377.7	379.5	377.7	379.5	378.6
35°	356.2	355.3	350.9	351.8	350.9	350.9	350.0	350.0	350.0	352.7	352.7
37.5°	325.9	325.0	322.3	323.2	321.4	320.5	320.5	322.3	322.3	324.1	324.1
40°	296.4	297.3	294.6	294.6	293.7	293.7	293.7	295.5	294.6	296.4	295.5
42.5°	267.0	267.0	264.3	265.2	264.3	265.2	265.2	267.0	267.0	267.8	267.0
45°	239.3	239.3	238.4	239.3	237.5	238.4	237.5	239.3	238.4	239.3	239.3
47.5°	211.6	211.6	211.6	210.7	210.7	210.7	210.7	210.7	209.8	211.6	210.7
50°	185.7	186.6	185.7	185.7	184.8	185.7	184.8	184.8	183.0	183.9	183.9
52.5°	162.5	162.5	160.7	160.7	160.7	159.8	159.8	159.8	158.9	158.9	157.1
55°	140.2	140.2	138.4	138.4	137.5	136.6	135.7	135.7	133.0	133.0	130.4
57.5°	119.6	118.7	116.1	116.1	114.3	113.4	112.5	111.6	109.8	108.0	107.1
60°	100.9	99.1	97.3	96.4	94.6	92.9	91.1	89.3	87.5	86.6	85.7
62.5°	83.0	80.4	78.6	77.7	75.9	73.2	71.4	69.6	67.9	67.0	65.2
65°	67.0	64.3	61.6	60.7	58.9	57.1	54.5	52.7	50.9	50.0	50.0
67.5°	52.7	50.0	46.4	46.4	44.6	42.9	41.1	39.3	38.4	39.3	39.3
70°	39.3	37.5	34.8	33.9	32.1	30.4	29.5	29.5	29.5	30.4	29.5
72.5°	29.5	26.8	25.0	24.1	23.2	22.3	22.3	22.3	21.4	22.3	22.3
75°	20.5	18.7	17.0	17.0	16.1	16.1	16.1	16.1	16.1	16.1	16.1
77.5°	14.3	12.5	11.6	11.6	11.6	10.7	10.7	10.7	10.7	10.7	10.7
80°	8.9	8.9	8.0	8.0	7.1	7.1	7.1	7.1	7.1	7.1	7.1
82.5°	5.4	5.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
85°	2.7	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8	1.8	1.8
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
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: P274441

CATALOG NUMBER: LD6B15DE010W2N2765 EU6B1020W2N902765 6LBLWW0H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8
2.5°	634.8	637.5	633.9	636.6	635.7	634.8	633.0	636.6
5°	624.1	625.0	621.4	625.0	624.1	622.3	620.5	624.1
7.5°	608.9	611.6	607.1	610.7	609.8	608.0	606.2	609.8
10°	591.9	594.6	591.1	593.7	593.7	591.9	589.3	592.8
12.5°	573.2	575.0	571.4	575.0	574.1	572.3	571.4	574.1
15°	552.7	555.3	551.8	554.4	553.6	552.7	551.8	554.4
17.5°	530.3	533.0	530.3	533.0	533.0	530.3	529.4	531.2
20°	508.0	509.8	507.1	509.8	508.9	508.9	507.1	509.8
22.5°	483.0	485.7	483.9	485.7	484.8	484.8	483.9	485.7
25°	458.0	460.7	458.0	460.7	459.8	459.8	458.0	462.5
27.5°	433.0	434.8	432.1	435.7	434.8	433.0	433.9	434.8
30°	406.2	408.0	406.2	408.9	408.9	408.9	407.1	408.9
32.5°	379.5	382.1	379.5	382.1	381.2	381.2	380.3	382.1
35°	352.7	353.6	351.8	354.5	354.5	355.3	353.6	356.2
37.5°	325.0	325.9	325.0	325.9	327.7	325.0	326.8	327.7
40°	296.4	298.2	297.3	298.2	298.2	299.1	298.2	299.1
42.5°	267.8	269.6	267.8	270.5	269.6	269.6	270.5	270.5
45°	238.4	241.1	239.3	241.1	242.0	241.1	241.1	242.9
47.5°	210.7	212.5	211.6	212.5	212.5	212.5	212.5	214.3
50°	183.0	183.9	183.9	184.8	184.8	185.7	183.9	184.8
52.5°	155.4	157.1	157.1	157.1	156.2	157.1	157.1	157.1
55°	130.4	131.2	129.5	131.2	131.2	130.4	130.4	132.1
57.5°	106.2	106.2	106.2	106.2	106.2	105.4	106.2	106.2
60°	83.9	84.8	83.9	83.9	83.9	83.9	83.0	84.8
62.5°	65.2	65.2	64.3	65.2	65.2	65.2	66.1	66.1
65°	50.9	51.8	50.9	51.8	51.8	51.8	51.8	52.7
67.5°	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2
70°	30.4	30.4	30.4	31.2	30.4	30.4	30.4	31.2
72.5°	22.3	22.3	22.3	22.3	22.3	22.3	23.2	23.2
75°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
77.5°	10.7	10.7	10.7	11.6	10.7	11.6	10.7	10.7
80°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
82.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
87.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9
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)