

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: P252680

Luminaire Tested: **LE_6B20D010 EC6B10209027 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252680
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B20D010 EC6B10209027 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1952.5 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

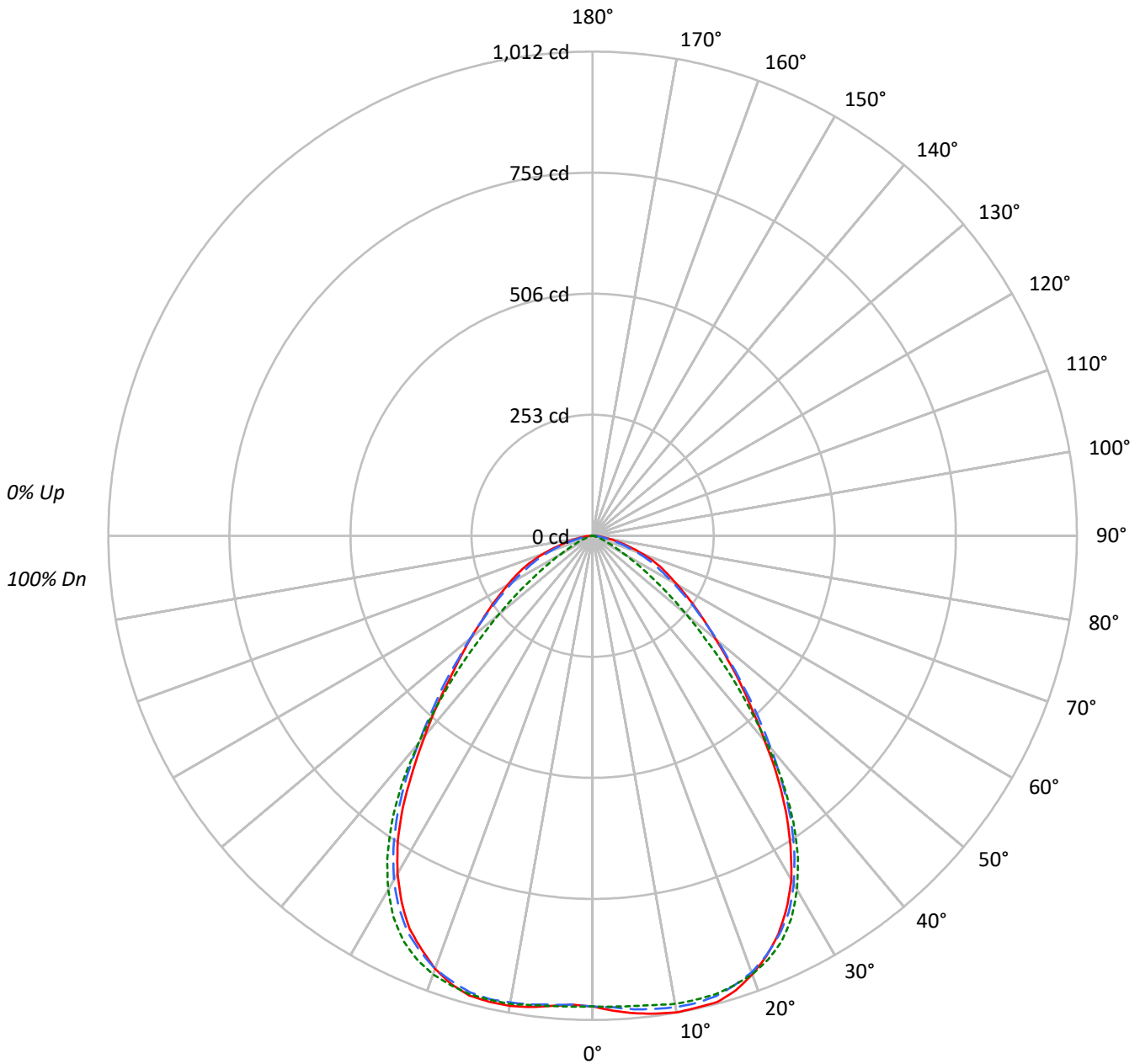
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	64184	64184	64184
5°	65608	64606	64606
10°	67009	65816	66088
15°	68136	67002	67198
20°	67720	67720	66852
25°	66111	67306	65204
30°	62572	64350	61427
35°	56069	58292	54962
40°	47642	48221	46449
45°	40310	36850	38899
50°	34042	25983	33605
55°	29915	16777	29596
60°	26501	9982	26683
65°	24483	6021	24483
70°	21211	3453	20696
75°	16838	2117	15780
80°	12549	1540	12023
85°	11378	1048	10405



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	4.9
10°-20°	280.3	14.4
20°-30°	421.6	21.6
30°-40°	443.2	22.7
40°-50°	331.1	17.0
50°-60°	206.1	10.6
60°-70°	117.2	6.0
70°-80°	48.3	2.5
80°-90°	10.0	0.5
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°	796.6	40.8
0°-40°	1239.8	63.5
0°-60°	1777.0	91.0
0°-90°	1952.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1952.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	984	984	984	984	984	
5°	1002	994	986	984	986	96
15°	1009	996	992	988	995	284
25°	918	921	935	914	906	420
35°	704	722	732	711	690	437
45°	437	447	399	438	422	339
55°	263	257	148	253	260	237
65°	159	142	39	142	159	156
75°	67	53	8	52	63	73
85°	15	10	1	8	14	17
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°	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8
2.5°	993.5	992.0	993.5	990.6	989.2	989.2	990.6	987.9	986.5	987.9	986.5
5°	1001.8	999.0	1000.4	999.0	996.2	996.2	997.6	993.5	993.5	994.9	993.5
7.5°	1007.4	1007.4	1007.4	1004.6	1003.2	1001.8	1004.6	1000.4	999.0	999.0	997.6
10°	1011.5	1010.1	1011.5	1008.8	1006.0	1004.6	1007.4	1004.6	1001.8	1004.6	1000.4
12.5°	1010.1	1010.1	1010.1	1008.8	1006.0	1004.6	1007.4	1003.2	1001.8	1003.2	1000.4
15°	1008.8	1004.6	1006.0	1004.6	1000.4	1000.4	1001.8	997.6	994.9	999.0	996.2
17.5°	996.2	993.5	994.9	992.0	989.2	987.9	989.2	987.9	985.1	987.9	985.1
20°	975.4	975.4	976.8	974.0	971.2	969.8	972.6	969.8	967.0	971.2	971.2
22.5°	950.4	950.4	950.4	948.9	947.5	947.5	947.5	946.1	944.8	947.5	948.9
25°	918.4	916.9	918.4	919.8	918.4	916.9	918.4	918.4	915.5	921.1	921.1
27.5°	878.0	878.0	880.8	879.4	879.4	878.0	880.8	880.8	879.4	883.5	887.8
30°	830.6	827.9	830.6	830.6	832.0	832.0	833.5	833.5	833.5	837.6	840.4
32.5°	769.5	770.9	775.0	773.6	772.2	776.4	776.4	779.1	780.6	783.4	784.8
35°	704.0	705.4	705.4	706.9	709.6	706.9	713.8	712.4	713.8	719.4	722.1
37.5°	634.5	630.2	637.2	634.5	635.9	635.9	638.6	640.0	644.2	651.1	651.1
40°	559.4	560.8	563.5	564.9	566.2	566.2	566.2	570.5	571.9	580.2	578.9
42.5°	494.0	494.0	496.8	498.1	498.1	498.1	498.1	502.2	505.1	507.9	510.6
45°	436.9	432.8	435.5	435.5	438.2	436.9	439.6	442.5	443.9	448.0	446.6
47.5°	382.6	381.2	382.6	384.0	382.6	384.0	385.4	386.8	388.2	388.2	388.2
50°	335.4	335.4	336.8	338.1	338.1	338.1	338.1	339.5	339.5	342.2	339.5
52.5°	296.4	297.8	297.8	296.4	297.8	297.8	299.1	299.1	297.8	297.8	293.6
55°	263.0	261.6	263.0	261.6	263.0	263.0	261.6	261.6	260.2	258.8	257.4
57.5°	231.0	231.0	231.0	231.0	229.6	231.0	229.6	228.2	228.2	225.4	221.2
60°	203.1	203.1	203.1	203.1	203.1	201.8	203.1	201.8	199.0	196.1	190.6
62.5°	179.5	178.1	179.5	178.1	178.1	176.8	176.8	175.4	172.5	169.8	164.1
65°	158.6	160.0	158.6	158.6	157.2	155.9	155.9	154.5	150.2	147.5	141.9
67.5°	136.4	135.0	135.0	135.0	133.6	133.6	133.6	130.8	128.0	123.9	118.2
70°	111.2	111.2	111.2	109.9	109.9	108.5	108.5	107.1	104.4	101.6	94.6
72.5°	87.6	87.6	87.6	84.9	86.2	84.9	84.9	82.1	80.8	76.5	72.4
75°	66.8	66.8	65.4	65.4	64.0	62.6	62.6	61.2	59.9	57.0	52.9
77.5°	48.8	48.8	48.8	47.2	45.9	44.5	44.5	43.1	41.8	40.4	37.6
80°	33.4	33.4	33.4	33.4	32.0	30.6	30.6	29.2	29.2	27.9	25.0
82.5°	22.2	22.2	22.2	22.2	20.9	20.9	20.9	19.5	18.1	18.1	15.2
85°	15.2	15.2	13.9	13.9	13.9	13.9	12.5	12.5	11.1	9.8	9.8
87.5°	8.4	8.4	8.4	8.4	7.0	7.0	7.0	7.0	5.6	5.6	4.1
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°	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8
2.5°	990.6	990.6	989.2	985.1	986.5	985.1	986.5	985.1	980.9	985.1	980.9
5°	996.2	997.6	994.9	989.2	990.6	989.2	989.2	987.9	983.8	986.5	983.8
7.5°	1001.8	1000.4	999.0	993.5	994.9	993.5	993.5	990.6	986.5	989.2	985.1
10°	1004.6	1004.6	1001.8	996.2	996.2	994.9	996.2	994.9	989.2	993.5	990.6
12.5°	1004.6	1003.2	1003.2	996.2	997.6	996.2	997.6	994.9	990.6	993.5	992.0
15°	1000.4	1000.4	999.0	992.0	993.5	993.5	994.9	992.0	987.9	992.0	989.2
17.5°	992.0	992.0	990.6	985.1	987.9	987.9	989.2	986.5	982.4	985.1	985.1
20°	975.4	976.8	976.8	972.6	975.4	975.4	976.8	975.4	974.0	975.4	972.6
22.5°	955.9	958.6	958.6	954.5	957.2	957.2	961.5	960.0	957.2	958.6	957.2
25°	926.6	929.5	932.2	929.5	932.2	932.2	936.4	935.0	932.2	935.0	930.9
27.5°	893.2	894.6	897.5	894.6	898.9	897.5	901.6	900.2	896.0	900.2	898.9
30°	846.0	851.5	855.8	851.5	855.8	855.8	858.5	857.1	855.8	854.2	854.2
32.5°	793.1	798.6	798.6	797.2	800.0	800.0	801.5	798.6	797.2	798.6	800.0
35°	727.8	730.5	733.2	731.9	733.2	734.6	733.2	734.6	730.5	731.9	731.9
37.5°	656.8	659.5	659.5	655.4	658.1	658.1	655.4	655.4	652.5	655.4	649.8
40°	581.6	578.9	580.2	577.4	574.6	574.6	573.2	567.6	564.9	566.2	567.6
42.5°	507.9	507.9	503.6	496.8	489.8	489.8	485.6	482.8	477.2	480.0	478.6
45°	445.2	438.2	432.8	421.6	417.4	414.6	407.6	400.8	397.9	399.4	397.9
47.5°	385.4	379.9	365.9	350.6	346.5	342.2	333.9	325.6	322.8	320.0	320.0
50°	335.4	325.6	310.2	293.6	286.6	279.6	268.5	260.2	254.6	256.0	256.0
52.5°	289.4	278.2	260.2	239.4	231.0	222.6	212.9	203.1	199.0	197.6	197.6
55°	249.0	236.5	218.5	194.8	187.9	178.1	165.6	154.5	148.9	147.5	150.2
57.5°	212.9	201.8	180.9	157.2	148.9	139.1	126.6	116.9	109.9	108.5	109.9
60°	183.6	168.4	150.2	128.0	116.9	108.5	94.6	86.2	79.2	76.5	77.9
62.5°	154.5	140.5	122.5	100.1	91.9	83.5	71.0	61.2	55.6	54.2	55.6
65°	132.1	118.2	101.6	82.1	73.8	65.4	54.2	44.5	40.4	39.0	40.4
67.5°	109.9	97.4	83.5	65.4	58.5	51.5	40.4	33.4	27.9	26.4	27.9
70°	89.0	77.9	64.0	51.5	44.5	39.0	30.6	23.6	19.5	18.1	19.5
72.5°	66.8	58.5	48.8	37.6	33.4	29.2	22.2	16.8	13.9	12.5	13.9
75°	48.8	41.8	34.8	26.4	23.6	20.9	15.2	11.1	9.8	8.4	9.8
77.5°	33.4	29.2	23.6	18.1	15.2	13.9	9.8	8.4	7.0	5.6	5.6
80°	22.2	19.5	15.2	12.5	11.1	9.8	7.0	5.6	4.1	4.1	4.1
82.5°	13.9	11.1	9.8	7.0	5.6	5.6	4.1	2.8	2.8	2.8	2.8
85°	8.4	7.0	5.6	4.1	2.8	2.8	1.4	1.4	1.4	1.4	1.4
87.5°	4.1	2.8	2.8	1.4	1.4	1.4	1.4	1.4	0.0	0.0	1.4
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°	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8
2.5°	983.8	980.9	980.9	982.4	983.8	985.1	982.4	980.9	980.9	985.1	982.4
5°	983.8	982.4	982.4	982.4	985.1	986.5	983.8	982.4	983.8	987.9	986.5
7.5°	987.9	985.1	986.5	986.5	987.9	990.6	987.9	986.5	987.9	992.0	989.2
10°	990.6	987.9	989.2	987.9	992.0	993.5	990.6	989.2	990.6	996.2	994.9
12.5°	992.0	990.6	990.6	989.2	993.5	994.9	992.0	990.6	992.0	996.2	994.9
15°	989.2	987.9	987.9	987.9	990.6	993.5	989.2	987.9	987.9	992.0	990.6
17.5°	983.8	980.9	980.9	980.9	982.4	983.8	979.5	978.1	976.8	980.9	979.5
20°	974.0	971.2	968.4	968.4	969.8	969.8	967.0	962.9	962.9	964.2	961.5
22.5°	955.9	954.5	951.8	950.4	953.1	951.8	946.1	942.0	940.6	942.0	939.1
25°	930.9	928.0	926.6	925.2	926.6	925.2	919.8	914.1	914.1	914.1	910.0
27.5°	896.0	893.2	891.9	891.9	893.2	890.5	884.9	879.4	876.6	876.6	872.4
30°	851.5	851.5	850.1	848.8	847.4	847.4	839.0	833.5	830.6	832.0	829.2
32.5°	797.2	795.9	794.5	790.2	791.8	790.2	783.4	779.1	775.0	772.2	770.9
35°	727.8	727.8	726.2	726.2	726.2	724.9	718.0	713.8	711.0	709.6	705.4
37.5°	651.1	649.8	648.4	648.4	648.4	648.4	644.2	640.0	640.0	638.6	635.9
40°	564.9	566.2	567.6	566.2	570.5	574.6	569.1	566.2	564.9	569.1	563.5
42.5°	481.4	480.0	487.0	488.4	488.4	495.4	496.8	498.1	496.8	499.5	499.5
45°	400.8	399.4	406.2	409.1	416.0	424.4	428.5	435.5	438.2	441.1	438.2
47.5°	324.2	329.8	335.4	342.2	347.9	361.8	370.1	377.1	379.9	384.0	384.0
50°	260.2	265.8	275.5	281.0	288.0	304.8	318.6	328.4	333.9	338.1	336.8
52.5°	200.4	210.1	222.6	228.2	237.9	257.4	272.8	283.9	290.8	295.0	296.4
55°	154.5	162.8	175.4	183.6	193.4	214.2	233.8	246.2	253.2	258.8	261.6
57.5°	114.1	123.9	137.8	144.8	155.9	179.5	196.1	211.5	219.9	226.8	228.2
60°	83.5	93.2	105.8	114.1	125.2	148.9	168.4	182.2	192.0	197.6	200.4
62.5°	59.9	69.6	82.1	90.5	100.1	121.0	140.5	154.5	164.1	171.1	175.4
65°	43.1	52.9	65.4	72.4	80.8	100.1	118.2	132.1	141.9	150.2	153.0
67.5°	32.0	39.0	50.1	57.0	65.4	80.8	96.0	108.5	118.2	125.2	128.0
70°	23.6	29.2	39.0	43.1	48.8	62.6	75.1	86.2	94.6	100.1	103.0
72.5°	16.8	20.9	27.9	32.0	36.1	47.2	57.0	65.4	71.0	76.5	79.2
75°	11.1	13.9	19.5	22.2	25.0	33.4	40.4	47.2	51.5	55.6	57.0
77.5°	7.0	9.8	13.9	15.2	18.1	22.2	27.9	32.0	34.8	37.6	40.4
80°	4.1	5.6	8.4	9.8	11.1	15.2	18.1	20.9	23.6	26.4	27.9
82.5°	2.8	4.1	5.6	5.6	7.0	8.4	11.1	13.9	15.2	16.8	18.1
85°	1.4	1.4	2.8	2.8	4.1	4.1	5.6	7.0	8.4	9.8	11.1
87.5°	1.4	1.4	1.4	1.4	2.8	2.8	4.1	4.1	4.1	5.6	5.6
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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CATALOG NUMBER: LE_6B20D010 EC6B10209027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	983.8	983.8	983.8	983.8	983.8	983.8	983.8	983.8
2.5°	979.5	983.8	979.5	982.4	980.9	980.9	979.5	980.9
5°	983.8	989.2	983.8	987.9	985.1	985.1	985.1	986.5
7.5°	987.9	993.5	989.2	993.5	992.0	990.6	990.6	993.5
10°	992.0	996.2	993.5	997.6	996.2	994.9	994.9	997.6
12.5°	992.0	997.6	994.9	999.0	997.6	996.2	996.2	997.6
15°	987.9	994.9	990.6	994.9	993.5	992.0	992.0	994.9
17.5°	975.4	980.9	978.1	980.9	980.9	979.5	980.9	982.4
20°	958.6	962.9	960.0	962.9	962.9	960.0	961.5	962.9
22.5°	935.0	939.1	936.4	939.1	937.8	936.4	936.4	935.0
25°	905.8	911.4	907.1	910.0	907.1	904.4	904.4	905.8
27.5°	869.6	873.8	868.2	871.0	868.2	865.5	865.5	864.0
30°	822.2	823.8	819.5	822.2	819.5	818.1	815.4	815.4
32.5°	765.2	766.6	762.5	762.5	759.8	759.8	754.1	758.2
35°	698.5	699.9	698.5	697.1	692.9	691.5	690.1	690.1
37.5°	628.9	628.9	624.8	623.4	620.5	617.8	619.1	615.0
40°	558.0	556.5	552.4	553.8	552.4	548.2	546.9	545.4
42.5°	491.1	491.1	487.0	488.4	485.6	484.2	480.0	481.4
45°	432.8	432.8	428.5	428.5	427.1	423.0	424.4	421.6
47.5°	379.9	379.9	378.5	378.5	374.2	372.9	372.9	372.9
50°	333.9	333.9	333.9	333.9	332.5	331.1	329.8	331.1
52.5°	295.0	297.8	296.4	296.4	295.0	293.6	292.2	292.2
55°	260.2	261.6	261.6	263.0	261.6	260.2	261.6	260.2
57.5°	229.6	232.4	232.4	232.4	232.4	232.4	231.0	229.6
60°	203.1	204.5	204.5	205.9	205.9	205.9	204.5	204.5
62.5°	176.8	179.5	180.9	180.9	182.2	180.9	180.9	180.9
65°	155.9	158.6	160.0	158.6	160.0	160.0	158.6	158.6
67.5°	130.8	133.6	133.6	133.6	133.6	135.0	133.6	133.6
70°	105.8	108.5	107.1	108.5	108.5	108.5	108.5	108.5
72.5°	80.8	82.1	83.5	83.5	84.9	83.5	83.5	83.5
75°	58.5	61.2	61.2	61.2	61.2	62.6	62.6	62.6
77.5°	41.8	43.1	43.1	44.5	44.5	44.5	44.5	45.9
80°	29.2	29.2	30.6	30.6	32.0	32.0	32.0	32.0
82.5°	19.5	20.9	20.9	20.9	20.9	20.9	20.9	20.9
85°	11.1	12.5	12.5	12.5	12.5	13.9	13.9	13.9
87.5°	7.0	7.0	7.0	7.0	7.0	7.0	5.6	5.6
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)