

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: P252682

Luminaire Tested: **LE_6B20D010 EC6B10209035 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252682
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 EC6B10209035 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2060.0 lumens
Efficiency: N/A
Efficacy: 99.0 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

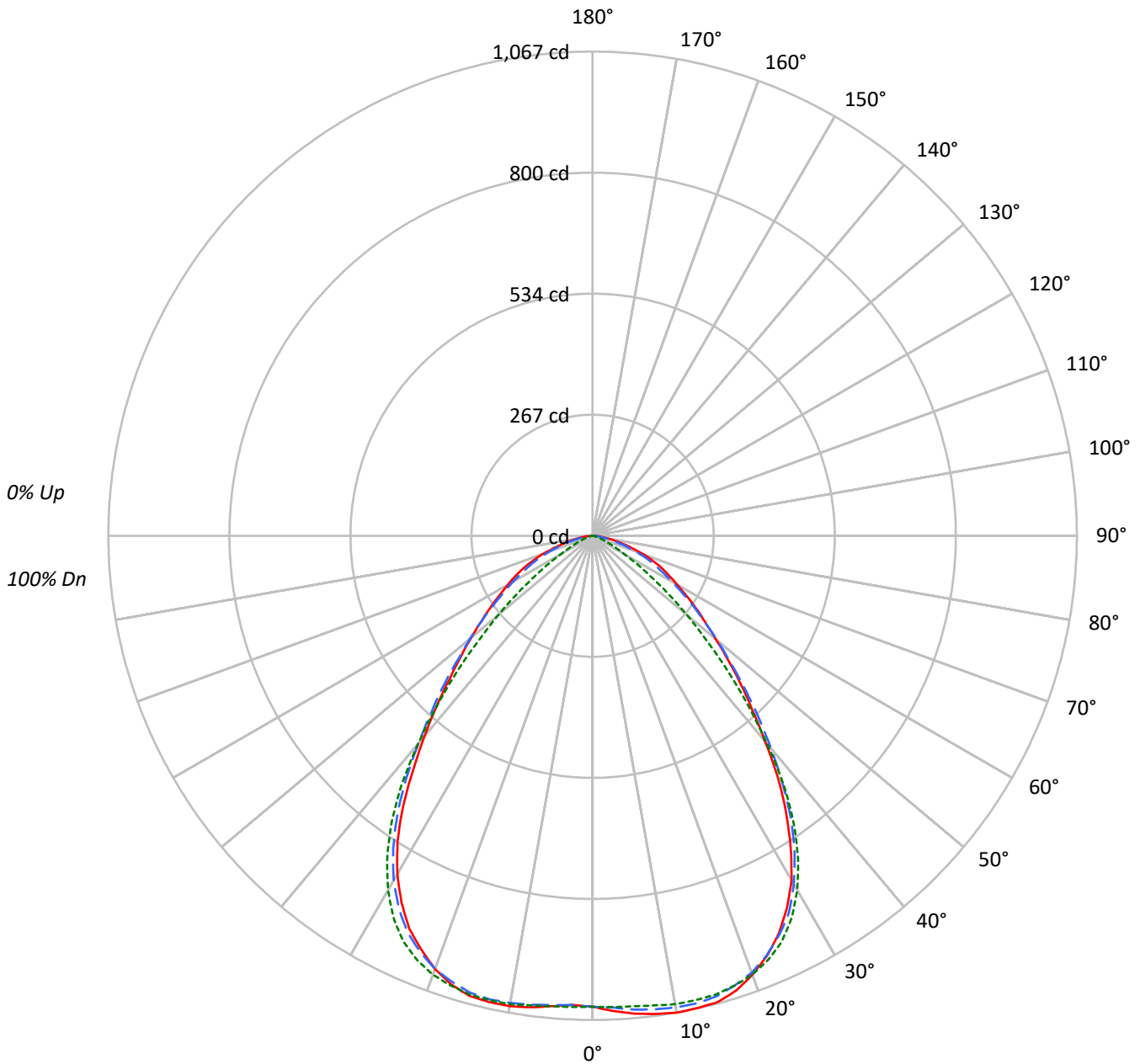
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	67713	67713	67713
5°	69223	68162	68162
10°	70699	69434	69725
15°	71878	70690	70892
20°	71448	71448	70532
25°	69746	71013	68789
30°	66022	67906	64802
35°	59160	61493	57989
40°	50256	50886	49013
45°	42534	38880	41039
50°	35909	27414	35463
55°	31564	17698	31223
60°	27975	10543	28158
65°	25842	6345	25842
70°	22413	3643	21841
75°	17771	2218	16637
80°	13225	1653	12699
85°	12052	1123	10929



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	4.9
10°-20°	295.7	14.4
20°-30°	444.8	21.6
30°-40°	467.6	22.7
40°-50°	349.3	17.0
50°-60°	217.5	10.6
60°-70°	123.7	6.0
70°-80°	50.9	2.5
80°-90°	10.5	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°	840.4	40.8
0°-40°	1308.0	63.5
0°-60°	1874.8	91.0
0°-90°	2060.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2060.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1038	1038	1038	1038	1038	
5°	1057	1048	1041	1038	1041	101
15°	1064	1051	1047	1042	1050	299
25°	969	972	986	964	956	443
35°	743	762	772	750	728	461
45°	461	471	421	462	445	357
55°	278	272	156	267	274	250
65°	167	150	41	150	167	165
75°	70	56	9	54	66	77
85°	16	10	2	9	15	18
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°	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9
2.5°	1048.1	1046.6	1048.1	1045.2	1043.8	1043.8	1045.2	1042.2	1040.8	1042.2	1040.8
5°	1057.0	1054.0	1055.5	1054.0	1051.1	1051.1	1052.5	1048.1	1048.1	1049.6	1048.1
7.5°	1062.9	1062.9	1062.9	1059.9	1058.4	1057.0	1059.9	1055.5	1054.0	1054.0	1052.5
10°	1067.2	1065.8	1067.2	1064.2	1061.4	1059.9	1062.9	1059.9	1057.0	1059.9	1055.5
12.5°	1065.8	1065.8	1065.8	1064.2	1061.4	1059.9	1062.9	1058.4	1057.0	1058.4	1055.5
15°	1064.2	1059.9	1061.4	1059.9	1055.5	1055.5	1057.0	1052.5	1049.6	1054.0	1051.1
17.5°	1051.1	1048.1	1049.6	1046.6	1043.8	1042.2	1043.8	1042.2	1039.4	1042.2	1039.4
20°	1029.1	1029.1	1030.5	1027.6	1024.6	1023.2	1026.1	1023.2	1020.2	1024.6	1024.6
22.5°	1002.6	1002.6	1002.6	1001.1	999.8	999.8	999.8	998.2	996.8	999.8	1001.1
25°	968.9	967.4	968.9	970.4	968.9	967.4	968.9	968.9	966.0	971.8	971.8
27.5°	926.2	926.2	929.2	927.8	927.8	926.2	929.2	929.2	927.8	932.1	936.6
30°	876.4	873.5	876.4	876.4	877.9	877.9	879.4	879.4	879.4	883.8	886.6
32.5°	811.8	813.2	817.6	816.2	814.8	819.1	819.1	822.1	823.5	826.5	828.0
35°	742.8	744.2	744.2	745.8	748.6	745.8	753.1	751.6	753.1	759.0	761.9
37.5°	669.4	665.0	672.4	669.4	670.9	670.9	673.8	675.2	679.6	687.0	687.0
40°	590.1	591.6	594.5	596.0	597.5	597.5	597.5	601.9	603.4	612.1	610.6
42.5°	521.1	521.1	524.1	525.5	525.5	525.5	525.5	530.0	532.9	535.9	538.8
45°	461.0	456.5	459.5	459.5	462.4	461.0	463.9	466.9	468.2	472.8	471.2
47.5°	403.8	402.2	403.8	405.1	403.8	405.1	406.6	408.1	409.6	409.6	409.6
50°	353.8	353.8	355.2	356.8	356.8	356.8	356.8	358.2	358.2	361.1	358.2
52.5°	312.6	314.1	314.1	312.6	314.1	314.1	315.6	315.6	314.1	314.1	309.8
55°	277.5	276.0	277.5	276.0	277.5	277.5	276.0	276.0	274.5	273.0	271.6
57.5°	243.6	243.6	243.6	243.6	242.2	243.6	242.2	240.8	240.8	237.9	233.4
60°	214.4	214.4	214.4	214.4	214.4	212.9	214.4	212.9	209.9	207.0	201.1
62.5°	189.4	187.9	189.4	187.9	187.9	186.4	186.4	185.0	182.0	179.1	173.2
65°	167.4	168.9	167.4	167.4	165.9	164.4	164.4	163.0	158.5	155.6	149.8
67.5°	143.9	142.4	142.4	142.4	140.9	140.9	140.9	138.0	135.0	130.6	124.8
70°	117.5	117.5	117.5	116.0	116.0	114.5	114.5	113.0	110.1	107.1	99.9
72.5°	92.5	92.5	92.5	89.5	91.0	89.5	89.5	86.6	85.1	80.8	76.4
75°	70.5	70.5	69.0	69.0	67.5	66.0	66.0	64.6	63.1	60.2	55.8
77.5°	51.4	51.4	51.4	49.9	48.5	47.0	47.0	45.5	44.0	42.6	39.6
80°	35.2	35.2	35.2	35.2	33.8	32.2	32.2	30.9	30.9	29.4	26.4
82.5°	23.5	23.5	23.5	23.5	22.0	22.0	22.0	20.5	19.1	19.1	16.1
85°	16.1	16.1	14.6	14.6	14.6	14.6	13.2	13.2	11.8	10.2	10.2
87.5°	8.8	8.8	8.8	8.8	7.4	7.4	7.4	7.4	5.9	5.9	4.4
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9
2.5°	1045.2	1045.2	1043.8	1039.4	1040.8	1039.4	1040.8	1039.4	1034.9	1039.4	1034.9
5°	1051.1	1052.5	1049.6	1043.8	1045.2	1043.8	1043.8	1042.2	1037.9	1040.8	1037.9
7.5°	1057.0	1055.5	1054.0	1048.1	1049.6	1048.1	1048.1	1045.2	1040.8	1043.8	1039.4
10°	1059.9	1059.9	1057.0	1051.1	1051.1	1049.6	1051.1	1049.6	1043.8	1048.1	1045.2
12.5°	1059.9	1058.4	1058.4	1051.1	1052.5	1051.1	1052.5	1049.6	1045.2	1048.1	1046.6
15°	1055.5	1055.5	1054.0	1046.6	1048.1	1048.1	1049.6	1046.6	1042.2	1046.6	1043.8
17.5°	1046.6	1046.6	1045.2	1039.4	1042.2	1042.2	1043.8	1040.8	1036.4	1039.4	1039.4
20°	1029.1	1030.5	1030.5	1026.1	1029.1	1029.1	1030.5	1029.1	1027.6	1029.1	1026.1
22.5°	1008.5	1011.5	1011.5	1007.0	1010.0	1010.0	1014.4	1012.9	1010.0	1011.5	1010.0
25°	977.6	980.6	983.5	980.6	983.5	983.5	988.0	986.5	983.5	986.5	982.1
27.5°	942.5	943.9	946.9	943.9	948.4	946.9	951.2	949.8	945.4	949.8	948.4
30°	892.5	898.4	902.9	898.4	902.9	902.9	905.8	904.2	902.9	901.4	901.4
32.5°	836.8	842.6	842.6	841.1	844.1	844.1	845.6	842.6	841.1	842.6	844.1
35°	767.8	770.8	773.6	772.1	773.6	775.1	773.6	775.1	770.8	772.1	772.1
37.5°	692.9	695.9	695.9	691.4	694.4	694.4	691.4	691.4	688.5	691.4	685.5
40°	613.6	610.6	612.1	609.2	606.2	606.2	604.9	599.0	596.0	597.5	599.0
42.5°	535.9	535.9	531.4	524.1	516.8	516.8	512.4	509.4	503.5	506.5	505.0
45°	469.8	462.4	456.5	444.8	440.4	437.5	430.1	422.8	419.9	421.4	419.9
47.5°	406.6	400.8	386.1	369.9	365.5	361.1	352.4	343.5	340.6	337.6	337.6
50°	353.8	343.5	327.4	309.8	302.4	295.1	283.4	274.5	268.6	270.1	270.1
52.5°	305.4	293.6	274.5	252.5	243.6	234.9	224.6	214.4	209.9	208.5	208.5
55°	262.8	249.5	230.5	205.5	198.1	187.9	174.8	163.0	157.1	155.6	158.5
57.5°	224.6	212.9	190.9	165.9	157.1	146.8	133.6	123.2	116.0	114.5	116.0
60°	193.8	177.6	158.5	135.0	123.2	114.5	99.9	91.0	83.6	80.8	82.2
62.5°	163.0	148.2	129.1	105.8	96.9	88.1	74.9	64.6	58.8	57.2	58.8
65°	139.5	124.8	107.1	86.6	77.8	69.0	57.2	47.0	42.6	41.1	42.6
67.5°	116.0	102.8	88.1	69.0	61.6	54.4	42.6	35.2	29.4	27.9	29.4
70°	94.0	82.2	67.5	54.4	47.0	41.1	32.2	25.0	20.5	19.1	20.5
72.5°	70.5	61.6	51.4	39.6	35.2	30.9	23.5	17.6	14.6	13.2	14.6
75°	51.4	44.0	36.8	27.9	25.0	22.0	16.1	11.8	10.2	8.8	10.2
77.5°	35.2	30.9	25.0	19.1	16.1	14.6	10.2	8.8	7.4	5.9	5.9
80°	23.5	20.5	16.1	13.2	11.8	10.2	7.4	5.9	4.4	4.4	4.4
82.5°	14.6	11.8	10.2	7.4	5.9	5.9	4.4	2.9	2.9	2.9	2.9
85°	8.8	7.4	5.9	4.4	2.9	2.9	1.5	1.5	1.5	1.5	1.5
87.5°	4.4	2.9	2.9	1.5	1.5	1.5	1.5	1.5	0.0	0.0	1.5
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°	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9
2.5°	1037.9	1034.9	1034.9	1036.4	1037.9	1039.4	1036.4	1034.9	1034.9	1039.4	1036.4
5°	1037.9	1036.4	1036.4	1036.4	1039.4	1040.8	1037.9	1036.4	1037.9	1042.2	1040.8
7.5°	1042.2	1039.4	1040.8	1040.8	1042.2	1045.2	1042.2	1040.8	1042.2	1046.6	1043.8
10°	1045.2	1042.2	1043.8	1042.2	1046.6	1048.1	1045.2	1043.8	1045.2	1051.1	1049.6
12.5°	1046.6	1045.2	1045.2	1043.8	1048.1	1049.6	1046.6	1045.2	1046.6	1051.1	1049.6
15°	1043.8	1042.2	1042.2	1042.2	1045.2	1048.1	1043.8	1042.2	1042.2	1046.6	1045.2
17.5°	1037.9	1034.9	1034.9	1034.9	1036.4	1037.9	1033.5	1032.0	1030.5	1034.9	1033.5
20°	1027.6	1024.6	1021.8	1021.8	1023.2	1023.2	1020.2	1015.9	1015.9	1017.4	1014.4
22.5°	1008.5	1007.0	1004.1	1002.6	1005.6	1004.1	998.2	993.9	992.4	993.9	990.9
25°	982.1	979.1	977.6	976.2	977.6	976.2	970.4	964.5	964.5	964.5	960.1
27.5°	945.4	942.5	941.0	941.0	942.5	939.5	933.6	927.8	924.9	924.9	920.4
30°	898.4	898.4	897.0	895.5	894.0	894.0	885.2	879.4	876.4	877.9	874.9
32.5°	841.1	839.8	838.2	833.9	835.2	833.9	826.5	822.1	817.6	814.8	813.2
35°	767.8	767.8	766.2	766.2	766.2	764.9	757.5	753.1	750.1	748.6	744.2
37.5°	687.0	685.5	684.1	684.1	684.1	684.1	679.6	675.2	675.2	673.8	670.9
40°	596.0	597.5	599.0	597.5	601.9	606.2	600.4	597.5	596.0	600.4	594.5
42.5°	507.9	506.5	513.8	515.2	515.2	522.6	524.1	525.5	524.1	527.0	527.0
45°	422.8	421.4	428.6	431.6	438.9	447.8	452.1	459.5	462.4	465.4	462.4
47.5°	342.0	347.9	353.8	361.1	367.0	381.6	390.5	397.9	400.8	405.1	405.1
50°	274.5	280.4	290.6	296.5	303.9	321.5	336.1	346.5	352.4	356.8	355.2
52.5°	211.4	221.6	234.9	240.8	251.0	271.6	287.8	299.5	306.8	311.2	312.6
55°	163.0	171.8	185.0	193.8	204.0	226.1	246.6	259.9	267.1	273.0	276.0
57.5°	120.4	130.6	145.4	152.6	164.4	189.4	207.0	223.1	232.0	239.2	240.8
60°	88.1	98.4	111.6	120.4	132.1	157.1	177.6	192.2	202.6	208.5	211.4
62.5°	63.1	73.4	86.6	95.4	105.8	127.8	148.2	163.0	173.2	180.6	185.0
65°	45.5	55.8	69.0	76.4	85.1	105.8	124.8	139.5	149.8	158.5	161.5
67.5°	33.8	41.1	52.9	60.2	69.0	85.1	101.2	114.5	124.8	132.1	135.0
70°	25.0	30.9	41.1	45.5	51.4	66.0	79.2	91.0	99.9	105.8	108.6
72.5°	17.6	22.0	29.4	33.8	38.1	49.9	60.2	69.0	74.9	80.8	83.6
75°	11.8	14.6	20.5	23.5	26.4	35.2	42.6	49.9	54.4	58.8	60.2
77.5°	7.4	10.2	14.6	16.1	19.1	23.5	29.4	33.8	36.8	39.6	42.6
80°	4.4	5.9	8.8	10.2	11.8	16.1	19.1	22.0	25.0	27.9	29.4
82.5°	2.9	4.4	5.9	5.9	7.4	8.8	11.8	14.6	16.1	17.6	19.1
85°	1.5	1.5	2.9	2.9	4.4	4.4	5.9	7.4	8.8	10.2	11.8
87.5°	1.5	1.5	1.5	1.5	2.9	2.9	4.4	4.4	4.4	5.9	5.9
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: P252682

CATALOG NUMBER: LE_6B20D010 EC6B10209035 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9
2.5°	1033.5	1037.9	1033.5	1036.4	1034.9	1034.9	1033.5	1034.9
5°	1037.9	1043.8	1037.9	1042.2	1039.4	1039.4	1039.4	1040.8
7.5°	1042.2	1048.1	1043.8	1048.1	1046.6	1045.2	1045.2	1048.1
10°	1046.6	1051.1	1048.1	1052.5	1051.1	1049.6	1049.6	1052.5
12.5°	1046.6	1052.5	1049.6	1054.0	1052.5	1051.1	1051.1	1052.5
15°	1042.2	1049.6	1045.2	1049.6	1048.1	1046.6	1046.6	1049.6
17.5°	1029.1	1034.9	1032.0	1034.9	1034.9	1033.5	1034.9	1036.4
20°	1011.5	1015.9	1012.9	1015.9	1015.9	1012.9	1014.4	1015.9
22.5°	986.5	990.9	988.0	990.9	989.4	988.0	988.0	986.5
25°	955.6	961.5	957.1	960.1	957.1	954.2	954.2	955.6
27.5°	917.5	921.9	916.0	919.0	916.0	913.1	913.1	911.6
30°	867.6	869.0	864.6	867.6	864.6	863.1	860.2	860.2
32.5°	807.4	808.9	804.5	804.5	801.5	801.5	795.6	800.0
35°	736.9	738.4	736.9	735.5	731.0	729.6	728.1	728.1
37.5°	663.5	663.5	659.1	657.6	654.8	651.8	653.2	648.9
40°	588.6	587.2	582.8	584.2	582.8	578.4	576.9	575.5
42.5°	518.2	518.2	513.8	515.2	512.4	510.9	506.5	507.9
45°	456.5	456.5	452.1	452.1	450.6	446.2	447.8	444.8
47.5°	400.8	400.8	399.2	399.2	394.9	393.4	393.4	393.4
50°	352.4	352.4	352.4	352.4	350.9	349.4	347.9	349.4
52.5°	311.2	314.1	312.6	312.6	311.2	309.8	308.2	308.2
55°	274.5	276.0	276.0	277.5	276.0	274.5	276.0	274.5
57.5°	242.2	245.1	245.1	245.1	245.1	245.1	243.6	242.2
60°	214.4	215.8	215.8	217.2	217.2	217.2	215.8	215.8
62.5°	186.4	189.4	190.9	190.9	192.2	190.9	190.9	190.9
65°	164.4	167.4	168.9	167.4	168.9	168.9	167.4	167.4
67.5°	138.0	140.9	140.9	140.9	140.9	142.4	140.9	140.9
70°	111.6	114.5	113.0	114.5	114.5	114.5	114.5	114.5
72.5°	85.1	86.6	88.1	88.1	89.5	88.1	88.1	88.1
75°	61.6	64.6	64.6	64.6	64.6	66.0	66.0	66.0
77.5°	44.0	45.5	45.5	47.0	47.0	47.0	47.0	48.5
80°	30.9	30.9	32.2	32.2	33.8	33.8	33.8	33.8
82.5°	20.5	22.0	22.0	22.0	22.0	22.0	22.0	22.0
85°	11.8	13.2	13.2	13.2	13.2	14.6	14.6	14.6
87.5°	7.4	7.4	7.4	7.4	7.4	7.4	5.9	5.9
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)