

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: P252677

Luminaire Tested: **LE_6B20D010 EC6B10208040 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252677
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 EC6B10208040 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2463.8 lumens
Efficiency: N/A
Efficacy: 118.5 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

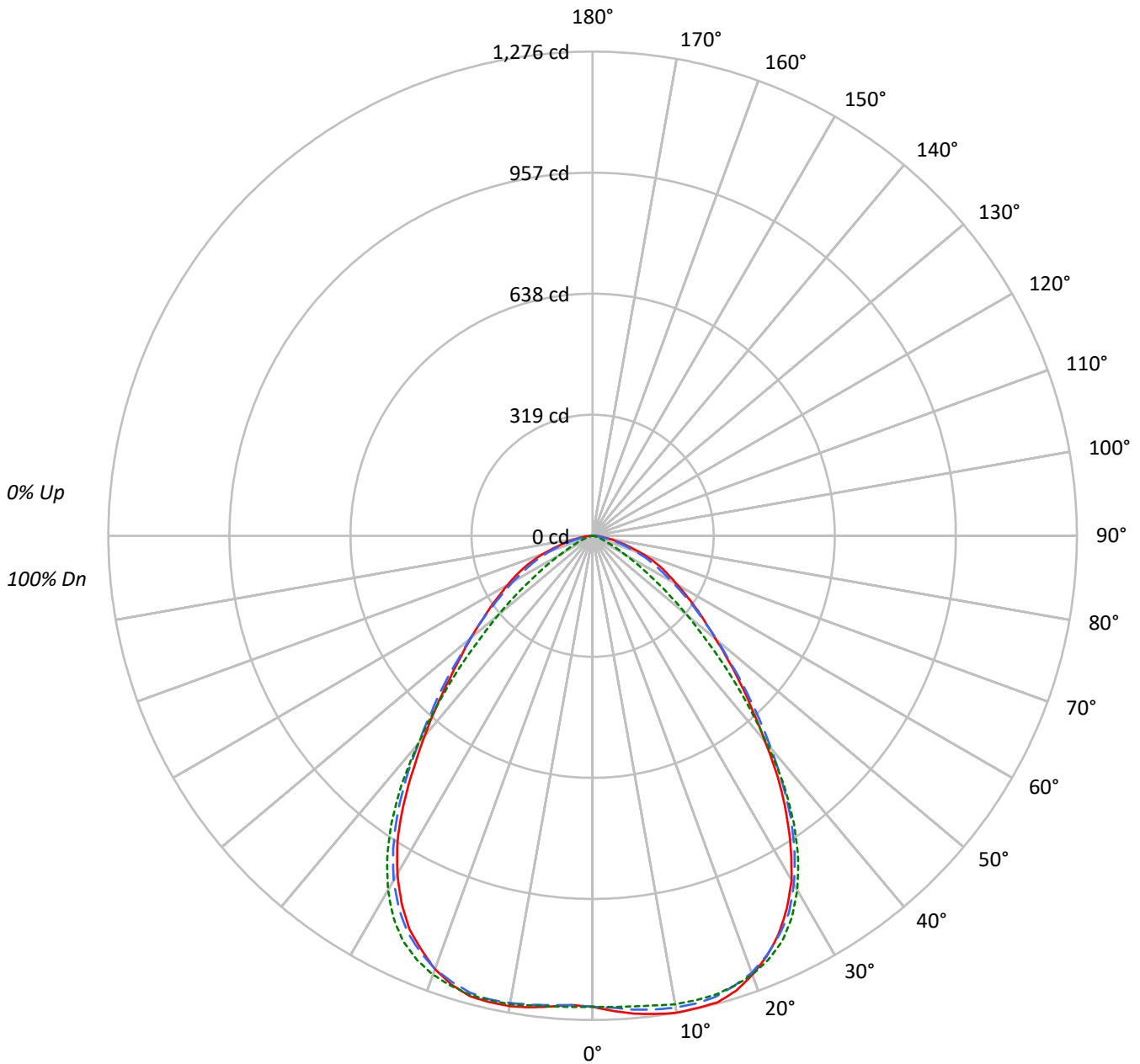
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	80977	80977	80977
5°	82786	81522	81522
10°	84558	83047	83398
15°	85974	84556	84792
20°	85452	85452	84355
25°	83416	84935	82279
30°	78957	81209	77511
35°	70756	73551	69362
40°	60110	60859	58611
45°	50856	46492	49085
50°	42943	32783	42415
55°	37751	21168	37353
60°	33455	12604	33677
65°	30890	7580	30890
70°	26800	4368	26133
75°	21224	2647	19914
80°	15817	1954	15179
85°	14522	1347	13100



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.5	4.9
10°-20°	353.7	14.4
20°-30°	531.9	21.6
30°-40°	559.3	22.7
40°-50°	417.8	17.0
50°-60°	260.1	10.6
60°-70°	147.9	6.0
70°-80°	60.9	2.5
80°-90°	12.6	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°	1005.1	40.8
0°-40°	1564.4	63.5
0°-60°	2242.3	91.0
0°-90°	2463.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2463.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1241	1241	1241	1241	1241	
5°	1264	1254	1245	1241	1245	121
15°	1273	1257	1252	1246	1255	358
25°	1159	1162	1180	1154	1143	530
35°	888	911	924	897	871	551
45°	551	564	504	553	532	427
55°	332	325	186	320	328	298
65°	200	179	49	179	200	197
75°	84	67	10	65	79	92
85°	19	12	2	10	18	22
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°	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2
2.5°	1253.6	1251.9	1253.6	1250.1	1248.4	1248.4	1250.1	1246.5	1244.8	1246.5	1244.8
5°	1264.1	1260.6	1262.4	1260.6	1257.1	1257.1	1258.9	1253.6	1253.6	1255.4	1253.6
7.5°	1271.1	1271.1	1271.1	1267.6	1265.9	1264.1	1267.6	1262.4	1260.6	1260.6	1258.9
10°	1276.4	1274.6	1276.4	1272.9	1269.4	1267.6	1271.1	1267.6	1264.1	1267.6	1262.4
12.5°	1274.6	1274.6	1274.6	1272.9	1269.4	1267.6	1271.1	1265.9	1264.1	1265.9	1262.4
15°	1272.9	1267.6	1269.4	1267.6	1262.4	1262.4	1264.1	1258.9	1255.4	1260.6	1257.1
17.5°	1257.1	1253.6	1255.4	1251.9	1248.4	1246.5	1248.4	1246.5	1243.0	1246.5	1243.0
20°	1230.8	1230.8	1232.5	1229.0	1225.5	1223.8	1227.2	1223.8	1220.2	1225.5	1225.5
22.5°	1199.1	1199.1	1199.1	1197.4	1195.6	1195.6	1195.6	1193.9	1192.1	1195.6	1197.4
25°	1158.8	1157.0	1158.8	1160.5	1158.8	1157.0	1158.8	1158.8	1155.2	1162.2	1162.2
27.5°	1107.9	1107.9	1111.4	1109.6	1109.6	1107.9	1111.4	1111.4	1109.6	1114.9	1120.1
30°	1048.1	1044.6	1048.1	1048.1	1049.9	1049.9	1051.6	1051.6	1051.6	1057.0	1060.5
32.5°	970.9	972.6	977.9	976.1	974.4	979.8	979.8	983.2	985.0	988.5	990.2
35°	888.4	890.1	890.1	891.9	895.4	891.9	900.6	898.9	900.6	907.8	911.2
37.5°	800.6	795.4	804.1	800.6	802.4	802.4	805.9	807.6	812.9	821.6	821.6
40°	705.8	707.5	711.1	712.9	714.6	714.6	714.6	719.9	721.6	732.1	730.4
42.5°	623.2	623.2	626.8	628.5	628.5	628.5	628.5	633.9	637.4	640.9	644.4
45°	551.2	546.0	549.5	549.5	553.0	551.2	554.8	558.4	560.1	565.4	563.6
47.5°	482.9	481.1	482.9	484.6	482.9	484.6	486.4	488.1	489.9	489.9	489.9
50°	423.1	423.1	424.9	426.6	426.6	426.6	426.6	428.4	428.4	431.9	428.4
52.5°	374.0	375.8	375.8	374.0	375.8	375.8	377.5	377.5	375.8	375.8	370.5
55°	331.9	330.1	331.9	330.1	331.9	331.9	330.1	330.1	328.4	326.6	324.8
57.5°	291.5	291.5	291.5	291.5	289.8	291.5	289.8	287.9	287.9	284.4	279.1
60°	256.4	256.4	256.4	256.4	256.4	254.6	256.4	254.6	251.1	247.5	240.5
62.5°	226.5	224.8	226.5	224.8	224.8	223.0	223.0	221.2	217.8	214.2	207.1
65°	200.1	201.9	200.1	200.1	198.4	196.6	196.6	194.9	189.6	186.1	179.1
67.5°	172.0	170.2	170.2	170.2	168.5	168.5	168.5	165.0	161.5	156.2	149.2
70°	140.5	140.5	140.5	138.8	138.8	137.0	137.0	135.2	131.6	128.1	119.4
72.5°	110.6	110.6	110.6	107.1	108.9	107.1	107.1	103.6	101.9	96.6	91.2
75°	84.2	84.2	82.5	82.5	80.8	79.0	79.0	77.2	75.5	72.0	66.8
77.5°	61.5	61.5	61.5	59.8	58.0	56.1	56.1	54.4	52.6	50.9	47.4
80°	42.1	42.1	42.1	42.1	40.4	38.6	38.6	36.9	36.9	35.1	31.6
82.5°	28.1	28.1	28.1	28.1	26.4	26.4	26.4	24.6	22.9	22.9	19.4
85°	19.4	19.4	17.5	17.5	17.5	17.5	15.8	15.8	14.0	12.2	12.2
87.5°	10.5	10.5	10.5	10.5	8.8	8.8	8.8	8.8	7.0	7.0	5.2
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°	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2
2.5°	1250.1	1250.1	1248.4	1243.0	1244.8	1243.0	1244.8	1243.0	1237.8	1243.0	1237.8
5°	1257.1	1258.9	1255.4	1248.4	1250.1	1248.4	1248.4	1246.5	1241.2	1244.8	1241.2
7.5°	1264.1	1262.4	1260.6	1253.6	1255.4	1253.6	1253.6	1250.1	1244.8	1248.4	1243.0
10°	1267.6	1267.6	1264.1	1257.1	1257.1	1255.4	1257.1	1255.4	1248.4	1253.6	1250.1
12.5°	1267.6	1265.9	1265.9	1257.1	1258.9	1257.1	1258.9	1255.4	1250.1	1253.6	1251.9
15°	1262.4	1262.4	1260.6	1251.9	1253.6	1253.6	1255.4	1251.9	1246.5	1251.9	1248.4
17.5°	1251.9	1251.9	1250.1	1243.0	1246.5	1246.5	1248.4	1244.8	1239.5	1243.0	1243.0
20°	1230.8	1232.5	1232.5	1227.2	1230.8	1230.8	1232.5	1230.8	1229.0	1230.8	1227.2
22.5°	1206.1	1209.6	1209.6	1204.4	1207.9	1207.9	1213.2	1211.5	1207.9	1209.6	1207.9
25°	1169.2	1172.9	1176.4	1172.9	1176.4	1176.4	1181.6	1179.9	1176.4	1179.9	1174.6
27.5°	1127.1	1128.9	1132.4	1128.9	1134.2	1132.4	1137.8	1136.0	1130.6	1136.0	1134.2
30°	1067.5	1074.5	1079.8	1074.5	1079.8	1079.8	1083.2	1081.5	1079.8	1078.0	1078.0
32.5°	1000.8	1007.8	1007.8	1006.0	1009.5	1009.5	1011.2	1007.8	1006.0	1007.8	1009.5
35°	918.2	921.8	925.2	923.5	925.2	927.0	925.2	927.0	921.8	923.5	923.5
37.5°	828.8	832.2	832.2	827.0	830.5	830.5	827.0	827.0	823.4	827.0	819.9
40°	733.9	730.4	732.1	728.6	725.1	725.1	723.4	716.4	712.9	714.6	716.4
42.5°	640.9	640.9	635.6	626.8	618.0	618.0	612.8	609.2	602.2	605.8	604.0
45°	561.9	553.0	546.0	532.0	526.8	523.2	514.4	505.6	502.1	503.9	502.1
47.5°	486.4	479.2	461.8	442.5	437.1	431.9	421.4	410.9	407.4	403.9	403.9
50°	423.1	410.9	391.5	370.5	361.6	352.9	338.9	328.4	321.2	323.0	323.0
52.5°	365.2	351.1	328.4	302.0	291.5	280.9	268.6	256.4	251.1	249.2	249.2
55°	314.2	298.5	275.6	245.8	237.0	224.8	208.9	194.9	187.9	186.1	189.6
57.5°	268.6	254.6	228.2	198.4	187.9	175.6	159.8	147.5	138.8	137.0	138.8
60°	231.8	212.5	189.6	161.5	147.5	137.0	119.4	108.9	100.1	96.6	98.4
62.5°	194.9	177.4	154.5	126.4	115.9	105.4	89.5	77.2	70.2	68.5	70.2
65°	166.8	149.2	128.1	103.6	93.0	82.5	68.5	56.1	50.9	49.1	50.9
67.5°	138.8	122.9	105.4	82.5	73.8	65.0	50.9	42.1	35.1	33.4	35.1
70°	112.4	98.4	80.8	65.0	56.1	49.1	38.6	29.9	24.6	22.9	24.6
72.5°	84.2	73.8	61.5	47.4	42.1	36.9	28.1	21.1	17.5	15.8	17.5
75°	61.5	52.6	43.9	33.4	29.9	26.4	19.4	14.0	12.2	10.5	12.2
77.5°	42.1	36.9	29.9	22.9	19.4	17.5	12.2	10.5	8.8	7.0	7.0
80°	28.1	24.6	19.4	15.8	14.0	12.2	8.8	7.0	5.2	5.2	5.2
82.5°	17.5	14.0	12.2	8.8	7.0	7.0	5.2	3.5	3.5	3.5	3.5
85°	10.5	8.8	7.0	5.2	3.5	3.5	1.8	1.8	1.8	1.8	1.8
87.5°	5.2	3.5	3.5	1.8	1.8	1.8	1.8	1.8	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2
2.5°	1241.2	1237.8	1237.8	1239.5	1241.2	1243.0	1239.5	1237.8	1237.8	1243.0	1239.5
5°	1241.2	1239.5	1239.5	1239.5	1243.0	1244.8	1241.2	1239.5	1241.2	1246.5	1244.8
7.5°	1246.5	1243.0	1244.8	1244.8	1246.5	1250.1	1246.5	1244.8	1246.5	1251.9	1248.4
10°	1250.1	1246.5	1248.4	1246.5	1251.9	1253.6	1250.1	1248.4	1250.1	1257.1	1255.4
12.5°	1251.9	1250.1	1250.1	1248.4	1253.6	1255.4	1251.9	1250.1	1251.9	1257.1	1255.4
15°	1248.4	1246.5	1246.5	1246.5	1250.1	1253.6	1248.4	1246.5	1246.5	1251.9	1250.1
17.5°	1241.2	1237.8	1237.8	1237.8	1239.5	1241.2	1236.0	1234.2	1232.5	1237.8	1236.0
20°	1229.0	1225.5	1222.0	1222.0	1223.8	1223.8	1220.2	1215.0	1215.0	1216.8	1213.2
22.5°	1206.1	1204.4	1200.9	1199.1	1202.6	1200.9	1193.9	1188.6	1186.9	1188.6	1185.1
25°	1174.6	1171.0	1169.2	1167.5	1169.2	1167.5	1160.5	1153.5	1153.5	1153.5	1148.2
27.5°	1130.6	1127.1	1125.4	1125.4	1127.1	1123.6	1116.6	1109.6	1106.1	1106.1	1100.9
30°	1074.5	1074.5	1072.8	1071.0	1069.2	1069.2	1058.8	1051.6	1048.1	1049.9	1046.4
32.5°	1006.0	1004.2	1002.5	997.2	999.0	997.2	988.5	983.2	977.9	974.4	972.6
35°	918.2	918.2	916.5	916.5	916.5	914.8	906.0	900.6	897.1	895.4	890.1
37.5°	821.6	819.9	818.1	818.1	818.1	818.1	812.9	807.6	807.6	805.9	802.4
40°	712.9	714.6	716.4	714.6	719.9	725.1	718.1	714.6	712.9	718.1	711.1
42.5°	607.5	605.8	614.5	616.2	616.2	625.0	626.8	628.5	626.8	630.2	630.2
45°	505.6	503.9	512.6	516.1	525.0	535.5	540.8	549.5	553.0	556.5	553.0
47.5°	409.1	416.1	423.1	431.9	438.9	456.5	467.0	475.8	479.2	484.6	484.6
50°	328.4	335.4	347.6	354.6	363.4	384.5	402.0	414.4	421.4	426.6	424.9
52.5°	252.9	265.1	280.9	287.9	300.2	324.8	344.1	358.1	367.0	372.2	374.0
55°	194.9	205.4	221.2	231.8	244.0	270.4	295.0	310.8	319.5	326.6	330.1
57.5°	144.0	156.2	173.9	182.6	196.6	226.5	247.5	266.9	277.4	286.1	287.9
60°	105.4	117.6	133.4	144.0	158.0	187.9	212.5	230.0	242.2	249.2	252.9
62.5°	75.5	87.8	103.6	114.1	126.4	152.8	177.4	194.9	207.1	216.0	221.2
65°	54.4	66.8	82.5	91.2	101.9	126.4	149.2	166.8	179.1	189.6	193.1
67.5°	40.4	49.1	63.2	72.0	82.5	101.9	121.1	137.0	149.2	158.0	161.5
70°	29.9	36.9	49.1	54.4	61.5	79.0	94.8	108.9	119.4	126.4	129.9
72.5°	21.1	26.4	35.1	40.4	45.6	59.8	72.0	82.5	89.5	96.6	100.1
75°	14.0	17.5	24.6	28.1	31.6	42.1	50.9	59.8	65.0	70.2	72.0
77.5°	8.8	12.2	17.5	19.4	22.9	28.1	35.1	40.4	43.9	47.4	50.9
80°	5.2	7.0	10.5	12.2	14.0	19.4	22.9	26.4	29.9	33.4	35.1
82.5°	3.5	5.2	7.0	7.0	8.8	10.5	14.0	17.5	19.4	21.1	22.9
85°	1.8	1.8	3.5	3.5	5.2	5.2	7.0	8.8	10.5	12.2	14.0
87.5°	1.8	1.8	1.8	1.8	3.5	3.5	5.2	5.2	5.2	7.0	7.0
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: P252677

CATALOG NUMBER: LE_6B20D010 EC6B10208040 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2	1241.2
2.5°	1236.0	1241.2	1236.0	1239.5	1237.8	1237.8	1236.0	1237.8
5°	1241.2	1248.4	1241.2	1246.5	1243.0	1243.0	1243.0	1244.8
7.5°	1246.5	1253.6	1248.4	1253.6	1251.9	1250.1	1250.1	1253.6
10°	1251.9	1257.1	1253.6	1258.9	1257.1	1255.4	1255.4	1258.9
12.5°	1251.9	1258.9	1255.4	1260.6	1258.9	1257.1	1257.1	1258.9
15°	1246.5	1255.4	1250.1	1255.4	1253.6	1251.9	1251.9	1255.4
17.5°	1230.8	1237.8	1234.2	1237.8	1237.8	1236.0	1237.8	1239.5
20°	1209.6	1215.0	1211.5	1215.0	1215.0	1211.5	1213.2	1215.0
22.5°	1179.9	1185.1	1181.6	1185.1	1183.4	1181.6	1181.6	1179.9
25°	1143.0	1150.0	1144.8	1148.2	1144.8	1141.2	1141.2	1143.0
27.5°	1097.4	1102.6	1095.6	1099.1	1095.6	1092.0	1092.0	1090.2
30°	1037.6	1039.4	1034.1	1037.6	1034.1	1032.4	1028.9	1028.9
32.5°	965.6	967.4	962.1	962.1	958.6	958.6	951.6	956.9
35°	881.4	883.1	881.4	879.6	874.4	872.6	870.9	870.9
37.5°	793.6	793.6	788.4	786.5	783.0	779.5	781.2	776.0
40°	704.0	702.2	697.0	698.8	697.0	691.8	690.0	688.2
42.5°	619.8	619.8	614.5	616.2	612.8	611.0	605.8	607.5
45°	546.0	546.0	540.8	540.8	539.0	533.8	535.5	532.0
47.5°	479.2	479.2	477.5	477.5	472.2	470.5	470.5	470.5
50°	421.4	421.4	421.4	421.4	419.6	417.9	416.1	417.9
52.5°	372.2	375.8	374.0	374.0	372.2	370.5	368.8	368.8
55°	328.4	330.1	330.1	331.9	330.1	328.4	330.1	328.4
57.5°	289.8	293.2	293.2	293.2	293.2	293.2	291.5	289.8
60°	256.4	258.1	258.1	259.9	259.9	259.9	258.1	258.1
62.5°	223.0	226.5	228.2	228.2	230.0	228.2	228.2	228.2
65°	196.6	200.1	201.9	200.1	201.9	201.9	200.1	200.1
67.5°	165.0	168.5	168.5	168.5	168.5	170.2	168.5	168.5
70°	133.4	137.0	135.2	137.0	137.0	137.0	137.0	137.0
72.5°	101.9	103.6	105.4	105.4	107.1	105.4	105.4	105.4
75°	73.8	77.2	77.2	77.2	77.2	79.0	79.0	79.0
77.5°	52.6	54.4	54.4	56.1	56.1	56.1	56.1	58.0
80°	36.9	36.9	38.6	38.6	40.4	40.4	40.4	40.4
82.5°	24.6	26.4	26.4	26.4	26.4	26.4	26.4	26.4
85°	14.0	15.8	15.8	15.8	15.8	17.5	17.5	17.5
87.5°	8.8	8.8	8.8	8.8	8.8	8.8	7.0	7.0
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)