

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P857714

Luminaire Tested: **LX4C35D010 EX4C359027 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P857714
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-2)
Test Lab: INNOVATION CENTER
Issue Date: 2/14/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C35D010 EX4C359027 4LBLWWH
Description: 4 INCH 3500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

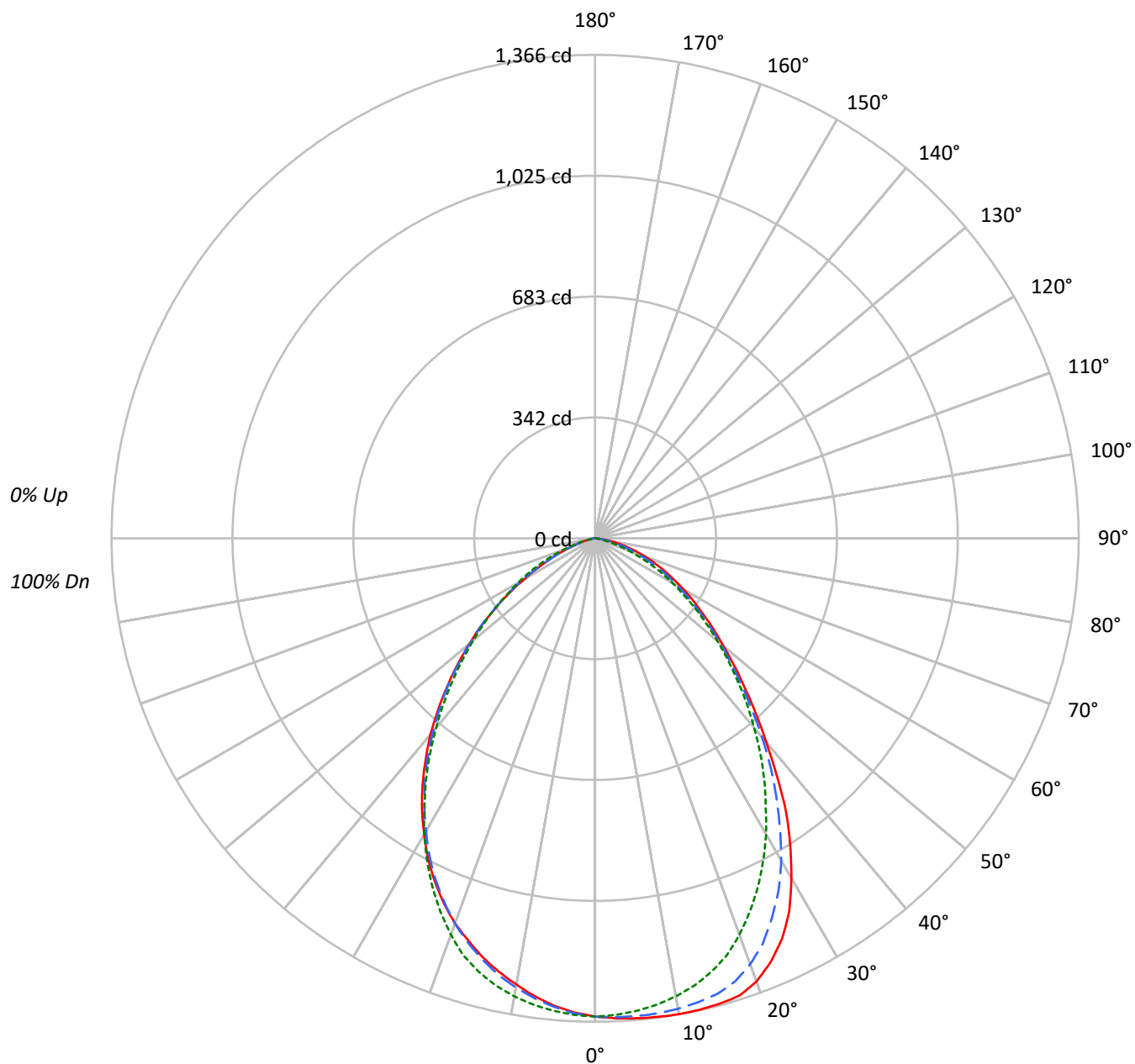
Lumens per Lamp: N/A
Luminaire Lumens: 2547.0 lumens
Efficiency: N/A
Efficacy: 63.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 40.4
Input Voltage (V):
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					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	108	105	102	99	101	98	96	97	95	93	94	92	90	88		
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77		
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68		
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60		
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53		
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47		
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43		
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39		
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	47	41	37	35		
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	166036	166036	166036
5°	167892	165326	163526
10°	170344	163932	159778
15°	173153	161312	155957
20°	174248	155827	151342
25°	169252	147401	145151
30°	157293	137007	137078
35°	140798	124885	127540
40°	120537	111957	116046
45°	103776	98702	102420
50°	90212	85930	88510
55°	79378	73938	73252
60°	70641	61697	56832
65°	61947	49418	41104
70°	53197	34914	27838
75°	43195	20221	16281
80°	30917	8844	8065
85°	11700	3665	3665



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.4	5.0
10°-20°	360.5	14.2
20°-30°	514.8	20.2
30°-40°	538.6	21.1
40°-50°	451.3	17.7
50°-60°	315.8	12.4
60°-70°	172.0	6.8
70°-80°	59.7	2.3
80°-90°	6.9	0.3
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°	1002.8	39.4
0°-40°	1541.4	60.5
0°-60°	2308.5	90.6
0°-90°	2547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2547.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1352	1352	1352	1352	1352	
5°	1361	1355	1341	1329	1326	130
15°	1361	1333	1268	1232	1226	384
25°	1249	1182	1087	1066	1071	570
35°	939	892	833	839	850	582
45°	597	584	568	587	590	464
55°	371	358	345	345	342	335
65°	213	194	170	143	141	212
75°	91	74	43	34	34	98
85°	8	5	3	3	3	15
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°	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5
2.5°	1357.7	1356.2	1356.7	1356.7	1356.7	1356.2	1356.7	1356.2	1356.2	1355.7	1354.6
5°	1361.4	1360.3	1360.3	1360.3	1359.8	1359.3	1359.3	1358.8	1357.7	1357.2	1355.1
7.5°	1364.0	1362.9	1362.9	1362.4	1361.9	1361.4	1360.9	1359.3	1357.7	1356.7	1354.1
10°	1365.5	1364.0	1364.0	1362.9	1361.9	1361.4	1360.3	1358.3	1356.2	1353.6	1349.9
12.5°	1364.5	1362.9	1362.4	1361.4	1359.3	1358.3	1357.2	1354.6	1351.0	1347.3	1342.7
15°	1361.4	1360.3	1359.3	1357.7	1355.1	1353.6	1352.5	1348.4	1343.7	1338.5	1332.8
17.5°	1355.1	1353.6	1351.5	1349.4	1345.8	1344.2	1341.6	1336.4	1329.7	1322.4	1313.6
20°	1332.8	1331.7	1329.7	1326.0	1320.3	1318.2	1314.6	1307.8	1299.0	1290.2	1280.8
22.5°	1295.9	1294.3	1291.2	1288.1	1282.9	1279.2	1276.1	1266.8	1256.9	1247.5	1238.7
25°	1248.6	1247.0	1242.9	1238.7	1233.5	1227.3	1224.1	1216.9	1207.0	1195.0	1182.0
27.5°	1187.8	1182.6	1181.0	1176.3	1168.5	1166.4	1161.8	1152.4	1143.1	1132.7	1121.7
30°	1108.8	1108.8	1105.6	1103.6	1096.3	1094.2	1089.0	1079.1	1073.9	1059.4	1051.1
32.5°	1025.1	1024.0	1021.4	1019.9	1015.7	1012.1	1006.9	1001.7	990.2	983.0	971.5
35°	938.8	932.5	933.6	930.5	927.9	923.7	923.2	917.5	907.1	902.9	892.5
37.5°	840.5	837.9	841.6	836.9	834.3	834.8	830.7	827.0	822.9	815.6	813.5
40°	751.6	753.7	753.2	749.0	751.1	748.5	744.4	740.7	738.6	734.0	732.4
42.5°	672.1	669.0	668.0	668.0	668.5	668.5	666.4	663.8	663.8	659.1	654.4
45°	597.3	597.3	596.2	599.3	594.7	594.7	593.1	592.6	590.5	589.5	583.7
47.5°	532.8	532.3	531.8	531.2	530.7	530.7	527.6	525.0	524.5	521.4	518.2
50°	472.0	475.1	474.1	471.5	470.4	470.9	468.9	467.3	466.8	461.6	462.1
52.5°	421.0	420.5	421.6	420.0	417.4	417.9	415.8	413.8	411.7	409.1	407.0
55°	370.6	373.2	372.2	370.6	370.1	369.1	367.5	364.9	364.4	358.7	358.1
57.5°	328.5	328.0	327.0	324.4	323.8	322.3	322.3	320.2	317.1	314.0	311.4
60°	287.5	287.5	285.9	285.4	283.3	282.8	282.3	280.2	276.5	273.9	269.8
62.5°	247.9	249.0	247.9	246.4	244.8	242.8	241.7	240.2	237.0	234.4	230.8
65°	213.1	212.6	212.1	210.0	209.5	207.4	206.9	203.8	200.6	198.6	194.4
67.5°	179.9	178.3	178.3	177.3	176.2	174.7	173.6	170.5	166.9	164.8	160.6
70°	148.1	147.1	147.1	147.1	144.5	142.9	142.4	140.9	135.7	133.6	129.4
72.5°	119.0	118.5	118.0	116.4	114.9	114.9	112.8	109.7	107.1	104.5	101.4
75°	91.0	92.0	91.0	88.9	88.4	87.3	85.8	83.2	80.6	77.5	73.8
77.5°	66.5	65.5	64.5	64.5	63.4	61.3	60.8	58.7	55.6	53.5	49.9
80°	43.7	43.1	42.1	41.1	40.5	40.0	39.5	37.4	34.3	32.7	29.6
82.5°	23.9	23.4	23.4	22.9	21.3	21.3	20.8	18.7	17.2	16.1	14.6
85°	8.3	8.3	8.3	7.8	7.8	7.8	7.3	6.8	6.2	5.7	4.7
87.5°	1.0	0.5	1.0	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5
2.5°	1353.6	1352.5	1352.0	1351.5	1351.0	1350.5	1349.9	1348.9	1348.4	1347.9	1346.8
5°	1353.6	1351.5	1350.5	1348.9	1347.9	1346.8	1345.3	1343.7	1342.1	1340.6	1339.0
7.5°	1351.5	1348.4	1346.3	1343.2	1342.1	1340.6	1337.5	1335.4	1332.8	1329.7	1326.0
10°	1346.3	1342.7	1338.5	1334.3	1332.8	1330.2	1326.0	1322.4	1318.2	1314.1	1310.4
12.5°	1338.0	1332.3	1327.1	1321.4	1318.2	1315.6	1309.9	1304.7	1299.5	1294.8	1288.6
15°	1325.5	1318.8	1312.0	1304.2	1300.6	1297.4	1289.1	1282.9	1274.6	1268.3	1262.1
17.5°	1305.2	1294.8	1286.5	1276.6	1271.4	1267.8	1260.5	1250.7	1242.9	1236.1	1228.8
20°	1270.4	1260.5	1249.1	1238.2	1232.5	1227.8	1217.4	1207.0	1199.2	1191.9	1184.1
22.5°	1224.7	1212.2	1203.9	1190.4	1185.7	1180.0	1167.5	1158.1	1149.3	1142.0	1134.7
25°	1169.0	1158.1	1146.7	1134.2	1128.5	1121.7	1111.3	1101.5	1095.8	1087.4	1078.6
27.5°	1105.1	1096.3	1082.2	1071.3	1065.6	1060.4	1050.5	1041.7	1033.4	1027.7	1019.3
30°	1037.5	1027.1	1014.7	1003.2	1000.1	993.9	985.0	978.3	969.4	965.8	962.2
32.5°	963.2	951.2	941.9	934.6	928.4	923.2	918.5	907.6	906.0	896.7	895.6
35°	882.1	876.9	868.1	861.8	856.6	853.0	845.2	840.0	834.3	832.7	829.1
37.5°	805.7	799.5	791.1	785.4	781.8	781.3	775.6	772.4	768.3	766.2	762.0
40°	725.7	723.1	715.8	714.7	709.0	708.5	705.4	701.7	698.1	698.1	698.6
42.5°	651.8	648.7	645.6	642.0	638.8	638.8	637.3	636.2	635.2	633.6	636.2
45°	582.7	578.5	576.5	572.8	574.4	571.3	570.2	570.2	568.7	568.1	571.8
47.5°	518.2	513.6	511.5	510.5	510.5	511.0	506.3	507.9	507.3	508.4	509.9
50°	459.5	455.4	452.2	452.2	452.8	450.7	448.6	450.2	448.6	449.6	453.3
52.5°	404.9	400.8	399.2	399.2	396.1	395.6	396.6	394.5	395.1	395.6	397.7
55°	354.5	351.9	349.3	346.7	347.2	346.2	344.1	343.6	344.6	345.2	347.8
57.5°	309.3	305.6	302.0	301.0	299.9	299.9	297.3	296.8	297.8	295.3	295.3
60°	266.1	264.1	259.4	257.8	257.8	255.2	253.1	254.2	251.6	251.1	251.6
62.5°	226.1	224.6	221.4	218.3	217.3	216.2	213.6	212.6	211.6	209.5	206.4
65°	191.3	187.7	184.0	181.9	180.4	177.8	176.2	174.1	171.0	170.0	166.9
67.5°	156.5	152.8	149.2	147.6	146.1	144.5	141.9	139.3	135.7	131.5	127.9
70°	125.8	121.1	119.0	114.9	113.8	111.8	108.1	105.5	101.9	97.2	93.6
72.5°	96.2	93.0	89.9	86.3	83.7	82.1	79.0	74.9	70.7	68.1	64.5
75°	69.1	67.6	63.4	59.3	58.2	56.1	52.5	49.9	46.8	42.6	39.5
77.5°	46.8	43.7	41.1	37.4	36.4	34.3	32.2	29.6	27.5	25.0	22.9
80°	27.5	25.0	23.4	20.8	19.8	18.7	17.2	15.1	13.5	12.5	12.0
82.5°	13.5	11.4	10.9	9.4	8.8	8.3	7.3	6.8	5.7	5.7	5.7
85°	4.7	3.6	3.6	3.1	2.6	2.6	2.6	2.6	2.6	2.6	2.6
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5
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°	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5
2.5°	1346.3	1345.8	1345.3	1344.7	1344.7	1344.2	1344.2	1343.7	1343.7	1343.2	1343.2
5°	1336.9	1335.4	1334.3	1333.3	1333.3	1331.7	1330.7	1329.7	1329.1	1329.1	1328.1
7.5°	1324.0	1321.9	1319.8	1318.2	1317.7	1315.1	1313.0	1313.0	1311.0	1309.9	1308.9
10°	1306.8	1303.2	1300.0	1298.5	1296.4	1294.8	1292.2	1290.7	1289.1	1286.5	1286.0
12.5°	1283.4	1280.8	1276.1	1274.0	1273.0	1269.9	1265.7	1263.7	1263.1	1261.1	1259.5
15°	1256.9	1251.2	1247.0	1244.4	1244.4	1239.2	1237.1	1234.0	1231.9	1230.4	1229.9
17.5°	1222.6	1216.9	1212.7	1209.1	1208.0	1203.9	1200.8	1199.7	1197.1	1198.2	1195.6
20°	1178.4	1173.7	1170.6	1165.9	1165.9	1163.3	1162.3	1159.7	1158.7	1157.6	1158.7
22.5°	1131.1	1125.4	1120.2	1119.7	1119.7	1116.0	1115.5	1115.0	1112.9	1114.5	1113.9
25°	1075.5	1071.3	1068.2	1067.7	1067.7	1065.6	1063.5	1064.6	1066.1	1065.6	1067.2
27.5°	1017.8	1013.6	1012.6	1012.1	1011.0	1010.5	1011.5	1011.5	1013.1	1015.2	1017.3
30°	955.4	954.4	952.8	952.3	951.2	953.8	954.9	956.4	955.9	959.0	961.1
32.5°	893.0	891.0	890.4	891.5	893.0	892.5	895.6	896.7	897.7	901.3	902.9
35°	830.1	829.6	828.6	828.6	829.1	833.3	833.3	836.9	839.0	840.0	844.2
37.5°	762.6	764.6	765.7	767.2	767.8	769.3	770.4	774.0	776.1	778.2	780.2
40°	700.7	699.7	704.3	701.2	702.3	706.9	709.0	708.5	711.6	714.7	716.8
42.5°	634.7	636.2	637.3	638.3	640.9	641.4	644.0	647.7	648.7	652.4	653.4
45°	570.7	571.3	573.3	575.4	577.0	581.1	582.2	583.7	586.9	586.9	588.4
47.5°	510.5	512.5	512.5	515.6	518.2	517.7	521.4	522.4	521.9	524.5	525.5
50°	452.8	455.9	455.4	457.4	458.5	459.0	462.1	463.1	461.1	463.7	464.2
52.5°	397.7	399.2	401.3	401.8	400.8	403.4	402.3	404.4	403.9	406.0	403.9
55°	347.2	346.7	346.7	347.8	346.7	347.8	348.8	346.7	345.2	347.2	346.7
57.5°	296.8	296.8	295.8	297.3	295.8	294.2	293.7	292.1	290.6	290.6	290.1
60°	249.5	248.5	246.4	245.9	245.9	243.3	242.2	240.2	240.2	238.1	236.0
62.5°	205.3	202.7	201.2	201.2	200.1	197.5	192.8	189.7	188.7	185.6	185.1
65°	163.7	161.1	159.6	156.5	153.9	152.8	148.1	144.5	142.9	139.8	140.3
67.5°	125.8	121.6	117.0	114.9	113.3	109.7	108.1	105.5	104.0	104.0	104.0
70°	90.4	86.8	82.1	80.6	79.5	76.4	74.9	74.3	75.9	75.4	75.9
72.5°	60.8	57.2	55.1	54.1	53.0	51.5	52.5	53.0	52.0	52.5	53.0
75°	36.9	35.9	34.3	33.8	33.8	34.3	33.8	33.8	34.3	34.3	34.8
77.5°	21.3	20.3	20.3	19.8	20.8	20.3	20.3	20.3	20.8	20.8	20.8
80°	11.4	11.4	11.4	11.4	12.0	11.4	12.0	12.0	12.0	12.0	12.0
82.5°	5.7	5.7	5.7	6.2	6.2	6.2	6.2	6.2	6.2	6.2	5.7
85°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
87.5°	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5
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: P857714

CATALOG NUMBER: LX4C35D010 EX4C359027 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5	1351.5
2.5°	1342.1	1342.1	1342.1	1341.1	1341.6	1341.6	1341.1	1341.1
5°	1327.6	1327.1	1326.0	1326.0	1325.0	1326.0	1325.5	1326.0
7.5°	1307.8	1307.8	1306.3	1306.3	1305.8	1305.2	1304.7	1305.2
10°	1284.4	1284.4	1283.4	1282.9	1283.4	1281.3	1281.3	1280.8
12.5°	1258.5	1257.4	1256.4	1256.9	1256.4	1254.8	1254.3	1254.8
15°	1228.3	1226.7	1227.3	1225.7	1225.7	1225.2	1226.2	1226.2
17.5°	1195.0	1194.0	1193.0	1193.5	1192.4	1193.0	1192.4	1191.9
20°	1158.1	1157.6	1157.6	1155.5	1156.1	1155.5	1156.1	1157.6
22.5°	1115.5	1115.0	1115.5	1113.9	1115.0	1115.0	1116.5	1116.5
25°	1068.7	1068.2	1069.2	1069.8	1070.3	1071.8	1070.3	1070.8
27.5°	1016.7	1018.3	1019.9	1020.4	1022.5	1020.9	1019.9	1021.4
30°	964.2	964.2	963.7	965.8	967.4	968.9	966.3	966.3
32.5°	903.9	906.5	906.5	907.1	908.6	908.6	908.6	910.7
35°	846.2	847.8	848.3	846.2	847.3	846.8	850.4	850.4
37.5°	781.8	781.8	782.3	785.9	785.9	784.4	785.4	785.4
40°	720.5	721.0	718.9	719.9	722.5	721.5	722.5	723.6
42.5°	653.4	657.0	655.0	656.0	655.5	656.0	656.5	656.5
45°	589.5	590.5	590.5	591.0	592.1	593.1	590.0	589.5
47.5°	527.1	527.6	529.2	526.6	529.7	526.6	529.7	526.0
50°	464.2	466.3	464.7	465.7	464.2	464.2	463.7	463.1
52.5°	404.4	403.9	403.9	403.4	403.4	404.4	403.4	404.9
55°	344.6	345.2	344.1	343.6	343.1	344.6	343.1	342.0
57.5°	288.0	289.0	286.9	288.0	284.3	285.9	286.4	286.9
60°	235.5	233.9	233.9	231.8	231.8	233.4	231.3	231.3
62.5°	182.5	183.5	181.9	184.0	184.0	186.1	185.1	186.1
65°	139.8	140.3	140.9	140.9	140.9	144.0	142.9	141.4
67.5°	105.5	106.0	106.6	106.0	107.6	106.6	106.6	107.1
70°	76.4	76.9	77.5	77.5	76.9	77.5	77.5	77.5
72.5°	53.0	53.5	53.0	53.5	54.1	53.5	53.5	54.1
75°	34.8	34.8	34.3	34.3	34.3	34.3	34.8	34.3
77.5°	20.3	20.8	20.3	20.8	20.8	20.8	20.8	20.8
80°	12.0	12.0	12.0	11.4	12.0	12.0	12.0	11.4
82.5°	6.2	6.2	5.7	5.7	6.2	6.2	6.2	6.2
85°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)