

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P709255

Luminaire Tested: DL2W-BB-M-050U-050D-940-UNV-STD-W-WM-4

Issue Date: 3/5/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P709255  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2303-941-2, G3-2104-222-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/5/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: DL2W-BB-M-050U-050D-940-UNV-STD-W-WM-4  
Description: CORELITE DISCREET DL2W WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4137.6 lumens  
Efficiency: N/A  
Efficacy: 125.4 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.16  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: General Diffuse

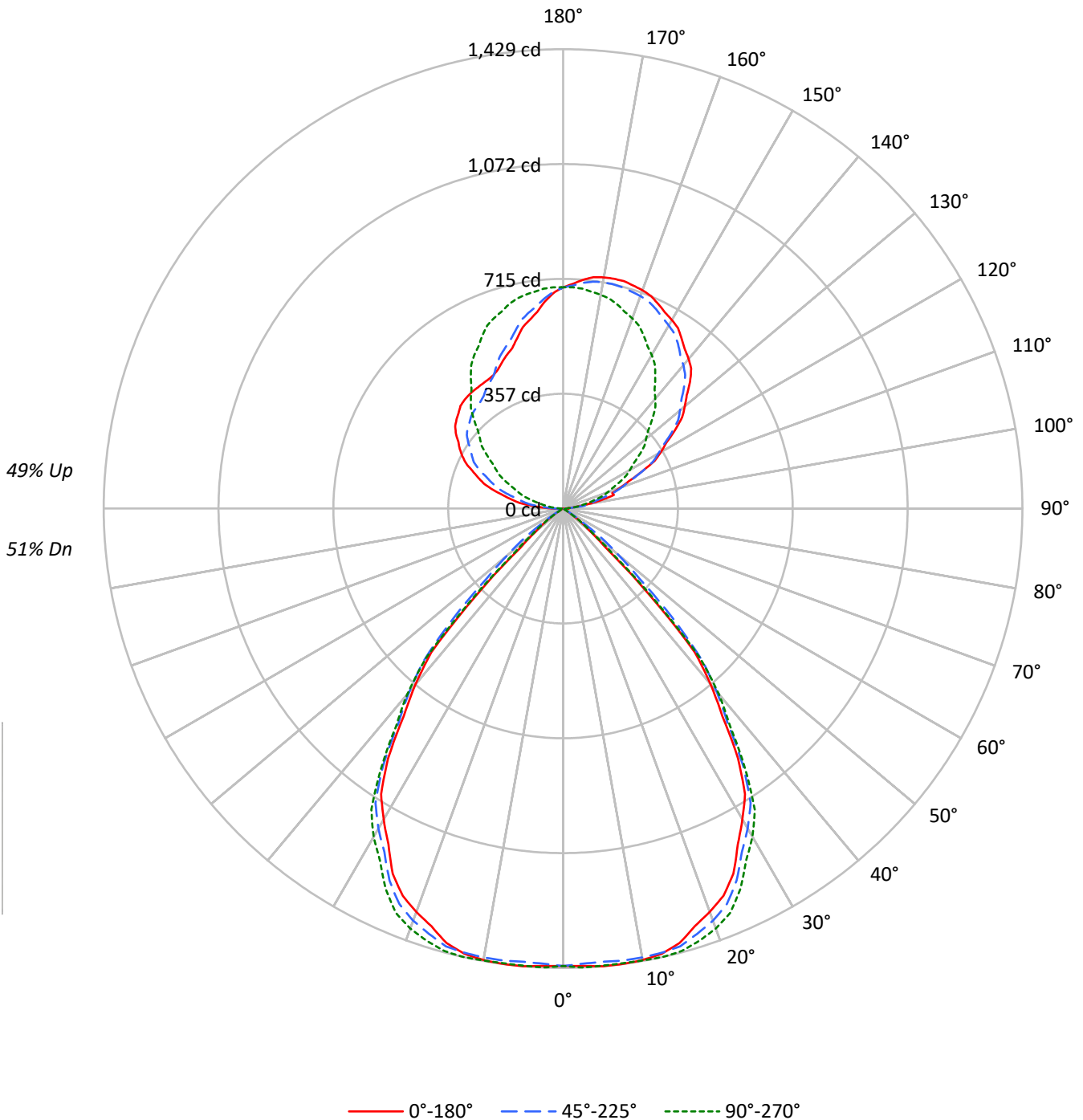
Input Watts (W): 33  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	100	97	93	91	93	90	87	85	77	75	73	65	64	62	54	53	52	47
2	93	87	82	78	86	81	77	73	70	67	64	60	57	56	50	49	47	43
3	86	78	72	67	80	73	68	64	64	60	57	55	52	50	46	45	43	39
4	80	71	64	59	74	66	61	56	58	54	50	50	47	45	43	41	39	36
5	74	64	57	52	69	60	54	50	53	48	45	46	43	40	40	37	36	33
6	69	59	52	46	64	55	49	44	49	44	40	43	39	36	37	34	32	30
7	65	54	47	42	60	51	44	40	45	40	36	39	36	33	34	32	30	27
8	60	49	42	38	56	47	40	36	41	37	33	37	33	30	32	29	27	25
9	56	45	39	34	53	43	37	33	38	34	30	34	30	28	30	27	25	23
10	53	42	35	31	50	40	34	30	36	31	28	32	28	25	28	25	23	21

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°	135°	180°
0°	22972	22972	22972	22972	22972
5°	23164	22931	23130	22931	23164
10°	23379	23241	23397	23241	23379
15°	23395	23561	23818	23561	23395
20°	22938	23435	23883	23435	22938
25°	22333	22749	23256	22749	22333
30°	20806	21412	21971	21412	20806
35°	18703	19248	19474	19248	18703
40°	15051	15664	15898	15664	15051
45°	8720	10990	9373	10990	8720
50°	2816	5669	3162	5669	2816
55°	1132	1996	1072	1996	1132
60°	36	560	103	560	36
65°	0	31	0	31	0
70°	0	0	0	0	0
75°	0	0	0	0	0
80°	0	0	0	0	0
85°	0	0	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 50°  
 Vertical Angle: 45°  
 Luminance: 11036 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.9	3.3
10°-20°	398.0	9.6
20°-30°	585.6	14.2
30°-40°	598.3	14.5
40°-50°	344.0	8.3
50°-60°	60.1	1.5
60°-70°	2.2	0.1
70°-80°	0.0	0.0
80°-90°	3.7	0.1
90°-100°	54.9	1.3
100°-110°	159.9	3.9
110°-120°	260.7	6.3
120°-130°	331.0	8.0
130°-140°	354.0	8.6
140°-150°	330.6	8.0
150°-160°	272.2	6.6
160°-170°	182.5	4.4
170°-180°	64.8	1.6
0°-30°	1119.6	27.1
0°-40°	1717.9	41.5
0°-60°	2121.9	51.3
0°-90°	2127.8	51.4
90°-120°	475.5	11.5
90°-150°	1491.1	36.0
90°-180°	2011.0	48.6
0°-180°	4137.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1423	1423	1423	1423	1423	
5°	1429	1415	1427	1415	1429	136
15°	1400	1410	1425	1410	1400	393
25°	1254	1277	1305	1277	1254	571
35°	949	977	988	977	949	581
45°	382	481	410	481	382	299
55°	40	71	38	71	40	41
65°	0	1	0	1	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	1
90°	15	14	2	20	32	7
95°	16	21	21	71	96	27
105°	164	123	100	182	225	153
115°	267	269	193	289	333	267
125°	425	412	288	360	407	379
135°	559	532	392	405	451	429
145°	644	624	500	430	461	403
155°	702	684	594	489	478	324
165°	732	713	656	573	550	207
175°	714	705	687	657	647	69
180°	688	688	688	688	688	

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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	1422.8	1422.8	1422.8	1422.8	1422.8	1422.8	1422.8	1422.8	1422.8	1422.8	1422.8
2.5°	1423.7	1425.2	1426.7	1422.8	1417.2	1416.8	1421.7	1425.7	1427.2	1428.8	1427.2
5°	1429.2	1430.1	1431.1	1424.6	1415.7	1414.0	1419.7	1424.2	1425.6	1427.1	1425.6
7.5°	1428.5	1430.4	1432.3	1426.9	1419.1	1417.1	1420.9	1424.0	1425.1	1426.2	1425.1
10°	1426.0	1427.9	1429.8	1424.9	1417.9	1417.2	1422.8	1427.1	1427.1	1427.1	1427.1
12.5°	1418.4	1421.0	1423.7	1420.1	1414.6	1416.5	1425.9	1432.5	1430.6	1428.8	1430.6
15°	1399.6	1402.8	1406.1	1406.6	1406.1	1413.0	1427.1	1436.2	1430.6	1424.9	1430.6
17.5°	1362.1	1367.1	1372.1	1376.6	1381.1	1392.9	1412.2	1424.7	1417.1	1409.5	1417.1
20°	1335.0	1339.3	1343.5	1349.8	1356.9	1371.0	1392.2	1406.0	1398.0	1390.0	1398.0
22.5°	1303.7	1308.3	1312.9	1318.5	1324.4	1338.6	1360.8	1375.6	1368.0	1360.4	1368.0
25°	1253.6	1256.4	1259.2	1264.5	1270.6	1283.3	1302.6	1315.7	1310.6	1305.4	1310.6
27.5°	1177.0	1181.7	1186.4	1192.3	1198.6	1210.1	1226.8	1238.7	1236.1	1233.5	1236.1
30°	1116.0	1122.6	1129.2	1136.1	1143.2	1153.8	1167.9	1178.5	1178.5	1178.5	1178.5
32.5°	1053.4	1059.6	1065.8	1073.5	1081.7	1090.4	1099.6	1106.9	1108.4	1109.9	1108.4
35°	948.9	954.1	959.2	965.8	972.9	980.2	987.7	992.7	990.4	988.0	990.4
37.5°	814.8	818.3	821.9	828.9	837.0	844.9	852.6	857.8	855.5	853.3	855.5
40°	714.1	718.8	723.5	731.0	739.4	747.0	753.6	758.0	756.1	754.3	756.1
42.5°	606.6	612.8	619.0	627.5	636.7	644.4	650.6	652.7	642.5	632.4	642.5
45°	381.9	417.2	452.4	469.0	479.3	483.3	481.0	471.6	441.0	410.5	441.0
47.5°	179.8	214.7	249.6	284.2	318.7	324.8	302.5	277.8	245.9	213.9	245.9
50°	112.1	124.8	137.5	175.6	222.2	229.2	196.8	167.3	146.6	125.9	146.6
52.5°	75.7	82.0	88.3	117.5	154.3	156.8	125.1	99.1	90.1	81.0	90.1
55°	40.2	42.1	44.0	55.7	70.8	71.0	56.4	44.7	41.4	38.1	41.4
57.5°	15.4	18.2	20.9	26.2	32.3	32.2	26.0	20.6	17.4	14.2	17.4
60°	1.1	3.4	5.8	10.9	17.0	17.7	13.0	8.8	6.0	3.2	6.0
62.5°	0.2	0.7	1.2	4.7	9.3	9.7	5.7	2.5	1.6	0.6	1.6
65°	0.0	0.0	0.0	0.4	0.8	0.8	0.4	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	3.0	3.0	3.0	2.7	2.7	2.3	1.7	1.1	0.4	1.1
90°	14.8	14.8	14.8	14.8	13.7	13.7	11.6	8.5	5.3	2.1	5.3
92.5°	18.2	18.2	17.3	17.3	16.3	14.6	12.5	11.8	12.9	7.2	13.7
95°	15.9	15.9	15.9	15.9	18.0	24.3	33.8	35.9	24.3	21.1	29.6
97.5°	37.4	39.9	43.5	52.4	61.7	66.6	62.6	45.4	44.0	42.1	56.2
100°	77.1	77.1	82.4	88.8	101.5	83.5	63.4	62.4	59.2	58.1	74.0
102.5°	122.0	124.5	127.2	128.5	99.8	90.3	87.1	81.0	76.1	75.0	91.7
105°	163.8	156.4	134.2	121.5	121.5	123.6	121.5	114.1	103.6	100.4	118.4
107.5°	160.2	157.0	159.8	161.1	166.1	164.7	160.2	146.7	131.9	129.1	145.0
110°	188.1	189.2	190.2	192.3	196.6	193.4	188.1	171.2	152.2	146.9	162.8

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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
112.5°	221.1	220.5	223.2	224.5	224.5	223.0	214.3	193.2	172.5	166.3	180.5
115°	267.4	269.5	270.5	271.6	270.5	268.4	252.6	229.3	204.0	193.4	206.1
117.5°	320.6	315.8	317.3	318.1	318.7	311.1	293.8	266.3	236.9	221.3	231.0
120°	351.9	348.8	347.7	347.7	346.6	338.2	319.2	291.7	258.9	239.9	246.2
122.5°	379.8	379.2	379.0	378.1	377.9	366.1	345.4	316.2	282.6	259.3	261.5
125°	424.8	425.9	422.7	418.5	417.4	406.9	384.7	354.0	318.1	288.5	285.3
127.5°	467.5	469.7	466.3	463.9	458.2	443.7	422.5	391.9	351.7	318.5	308.2
130°	494.6	496.7	492.5	489.3	481.9	468.2	447.0	416.4	376.2	337.1	323.4
132.5°	521.6	522.1	517.8	513.8	505.6	491.8	470.7	440.9	398.2	359.1	341.1
135°	559.1	560.1	554.8	549.5	536.9	526.3	506.2	476.6	433.3	392.1	367.8
137.5°	589.9	590.1	585.5	577.7	569.2	555.7	537.1	509.2	469.2	424.8	394.0
140°	607.7	608.7	602.4	597.1	588.6	576.0	559.1	529.5	490.4	446.0	414.3
142.5°	622.9	623.9	619.3	614.0	605.6	592.9	577.7	549.8	511.5	468.0	433.7
145°	643.6	646.8	642.5	637.3	629.9	618.2	602.4	577.0	542.1	499.9	461.8
147.5°	665.6	665.8	662.6	659.5	651.0	638.5	627.1	601.8	568.6	531.4	491.6
150°	677.4	678.5	675.3	672.1	663.7	652.1	641.5	616.1	585.5	551.7	513.6
152.5°	687.6	689.5	687.1	683.1	675.5	663.1	653.3	629.7	601.5	569.4	533.1
155°	701.7	704.9	702.8	698.6	690.1	678.5	669.0	648.9	622.5	593.9	561.2
157.5°	715.3	718.2	715.9	710.8	702.2	691.8	682.7	663.7	641.3	616.3	586.3
160°	722.9	725.0	721.8	717.6	708.1	698.6	691.2	672.1	653.1	629.9	602.4
162.5°	727.1	730.1	726.9	721.8	712.3	703.6	697.1	679.7	661.6	640.9	616.8
165°	732.4	733.4	731.3	727.1	716.5	709.1	703.8	690.1	673.2	656.3	637.3
167.5°	732.0	736.2	733.0	729.0	717.6	712.3	707.4	695.2	682.7	668.5	654.4
170°	730.3	734.5	731.3	728.2	717.6	712.3	709.1	698.6	686.9	675.3	663.7
172.5°	726.0	729.4	727.1	723.9	714.2	709.8	708.3	699.4	689.5	680.4	670.4
175°	714.4	718.6	717.6	714.4	706.0	703.8	704.9	698.6	692.2	686.9	679.5
177.5°	699.8	704.1	702.4	700.7	694.8	693.9	697.3	693.9	690.5	688.8	685.5
180°	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0

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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°
0°	1422.8	1422.8	1422.8	1422.8	1422.8	1422.8	1422.8	1422.8
2.5°	1425.7	1421.7	1416.8	1417.2	1422.8	1426.7	1425.2	1423.7
5°	1424.2	1419.7	1414.0	1415.7	1424.6	1431.1	1430.1	1429.2
7.5°	1424.0	1420.9	1417.1	1419.1	1426.9	1432.3	1430.4	1428.5
10°	1427.1	1422.8	1417.2	1417.9	1424.9	1429.8	1427.9	1426.0
12.5°	1432.5	1425.9	1416.5	1414.6	1420.1	1423.7	1421.0	1418.4
15°	1436.2	1427.1	1413.0	1406.1	1406.6	1406.1	1402.8	1399.6
17.5°	1424.7	1412.2	1392.9	1381.1	1376.6	1372.1	1367.1	1362.1
20°	1406.0	1392.2	1371.0	1356.9	1349.8	1343.5	1339.3	1335.0
22.5°	1375.6	1360.8	1338.6	1324.4	1318.5	1312.9	1308.3	1303.7
25°	1315.7	1302.6	1283.3	1270.6	1264.5	1259.2	1256.4	1253.6
27.5°	1238.7	1226.8	1210.1	1198.6	1192.3	1186.4	1181.7	1177.0
30°	1178.5	1167.9	1153.8	1143.2	1136.1	1129.2	1122.6	1116.0
32.5°	1106.9	1099.6	1090.4	1081.7	1073.5	1065.8	1059.6	1053.4
35°	992.7	987.7	980.2	972.9	965.8	959.2	954.1	948.9
37.5°	857.8	852.6	844.9	837.0	828.9	821.9	818.3	814.8
40°	758.0	753.6	747.0	739.4	731.0	723.5	718.8	714.1
42.5°	652.7	650.6	644.4	636.7	627.5	619.0	612.8	606.6
45°	471.6	481.0	483.3	479.3	469.0	452.4	417.2	381.9
47.5°	277.8	302.5	324.8	318.7	284.2	249.6	214.7	179.8
50°	167.3	196.8	229.2	222.2	175.6	137.5	124.8	112.1
52.5°	99.1	125.1	156.8	154.3	117.5	88.3	82.0	75.7
55°	44.7	56.4	71.0	70.8	55.7	44.0	42.1	40.2
57.5°	20.6	26.0	32.2	32.3	26.2	20.9	18.2	15.4
60°	8.8	13.0	17.7	17.0	10.9	5.8	3.4	1.1
62.5°	2.5	5.7	9.7	9.3	4.7	1.2	0.7	0.2
65°	0.0	0.4	0.8	0.8	0.4	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	2.3	3.4	4.4	5.3	5.7	6.1	6.3
90°	7.4	11.6	16.9	22.2	26.4	28.5	30.6	31.7
92.5°	19.2	26.0	33.8	39.9	46.7	51.4	53.5	53.7
95°	44.4	53.9	65.5	76.1	84.5	90.9	95.1	96.2
97.5°	68.3	86.0	98.9	111.2	123.4	131.0	135.9	136.5
100°	87.7	104.6	122.6	133.2	148.0	156.4	159.6	162.8
102.5°	108.9	123.2	142.9	158.5	172.5	180.1	186.6	189.8
105°	138.4	156.4	173.3	191.3	207.1	215.6	221.9	225.1
107.5°	166.6	188.5	205.4	223.0	236.9	247.3	254.9	258.1
110°	186.0	207.1	228.3	244.1	258.9	268.4	276.9	280.1



TEST NUMBER: P709255

CATALOG NUMBER: DL2W-BB-M-050U-050D-940-UNV-STD-W-WM-4

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°
112.5°	204.6	226.6	249.4	267.0	280.9	293.0	298.9	304.6
115°	230.4	254.7	277.9	300.1	314.9	323.4	328.7	332.9
117.5°	253.2	277.7	301.6	323.8	339.0	346.0	349.2	353.2
120°	268.4	293.8	316.0	338.2	355.1	364.6	367.8	370.9
122.5°	282.8	307.3	330.4	351.7	368.6	379.0	383.8	386.2
125°	302.3	326.6	349.8	370.9	385.7	398.4	404.8	406.9
127.5°	318.3	342.6	367.1	387.4	403.1	413.6	420.0	422.9
130°	331.8	351.9	377.3	398.4	413.2	423.8	430.1	432.2
132.5°	343.7	360.4	384.0	406.0	421.7	433.1	437.7	440.7
135°	364.6	373.1	393.1	416.4	433.3	442.8	448.1	451.3
137.5°	384.9	387.2	399.9	421.2	438.2	448.7	454.0	456.1
140°	398.4	397.4	405.8	423.8	440.7	451.3	456.5	458.7
142.5°	413.6	410.0	414.3	427.2	442.4	453.0	459.1	460.4
145°	438.6	429.1	425.9	433.3	444.9	454.4	459.7	460.8
147.5°	466.5	451.9	442.8	444.1	450.6	457.4	461.4	462.3
150°	485.1	467.1	455.5	453.4	456.5	460.8	463.9	463.9
152.5°	502.0	484.9	469.0	465.2	464.2	466.7	469.0	468.2
155°	531.6	510.4	492.5	486.1	480.9	479.8	478.7	477.7
157.5°	561.2	538.1	517.8	508.3	502.6	499.2	496.9	494.2
160°	578.1	555.9	534.8	525.2	517.8	513.6	510.4	509.4
162.5°	594.1	574.5	554.2	541.3	534.8	528.8	527.4	523.8
165°	617.2	601.3	579.1	566.5	561.2	556.9	553.8	549.5
167.5°	640.0	625.2	606.6	594.4	588.4	584.2	580.6	578.3
170°	651.0	640.4	623.5	613.0	608.7	604.5	599.2	596.0
172.5°	662.0	653.1	639.6	629.9	628.2	623.1	621.2	617.2
175°	675.3	670.0	659.5	654.2	654.2	652.1	652.1	646.8
177.5°	684.6	682.9	676.2	672.8	675.3	675.3	674.5	671.9
180°	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0

(END OF REPORT)