

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: P249431

Luminaire Tested: **LD8B175D010 ER8B175835 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B175D010 ER8B175835 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16451.0 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

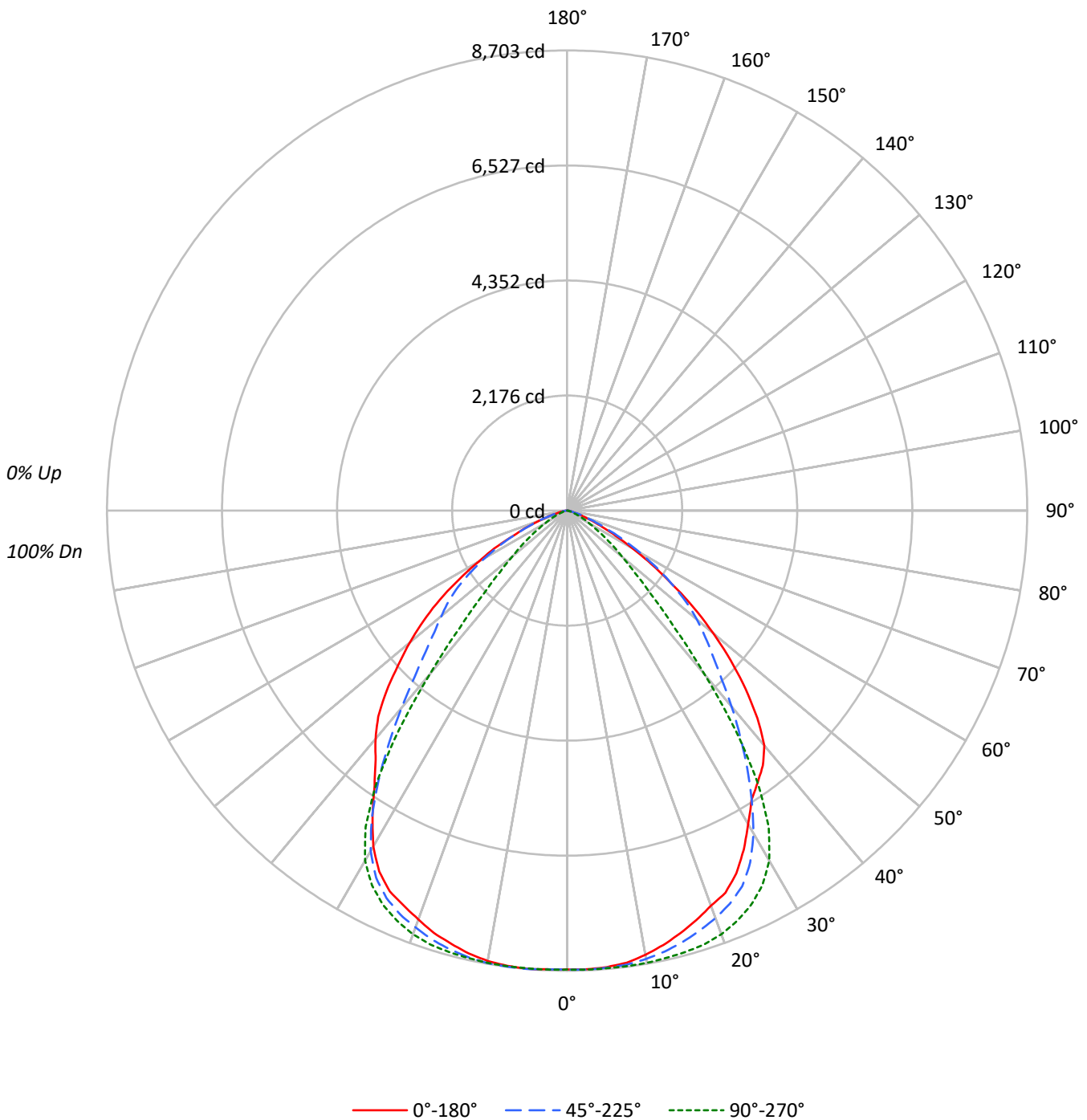
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	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					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	267656	267656	267656
5°	268245	268966	269257
10°	267117	271929	270764
15°	264156	275907	270704
20°	260984	279787	270004
25°	257597	280107	270281
30°	243699	272231	261118
35°	236424	236597	239056
40°	233497	162787	226932
45°	208055	97728	210898
50°	172999	65042	186408
55°	129748	44837	158048
60°	87927	29880	119250
65°	53038	19379	81925
70°	29410	10504	50408
75°	13320	4444	26092
80°	11578	4954	18202
85°	13197	6581	18150



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	828.4	5.0
10°-20°	2405.7	14.6
20°-30°	3651.4	22.2
30°-40°	3835.1	23.3
40°-50°	2875.3	17.5
50°-60°	1844.8	11.2
60°-70°	789.2	4.8
70°-80°	186.4	1.1
80°-90°	34.7	0.2
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°	6885.5	41.9
0°-40°	10720.5	65.2
0°-60°	15440.7	93.9
0°-90°	16451.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16451.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8680	8680	8680	8680	8680	
5°	8666	8680	8689	8703	8699	823
15°	8274	8447	8643	8587	8480	2334
25°	7571	7837	8233	8084	7944	3459
35°	6280	5931	6285	6210	6350	3942
45°	4771	3900	2241	3788	4836	3654
55°	2413	2413	834	2516	2940	2189
65°	727	857	266	1104	1123	776
75°	112	130	37	224	219	163
85°	37	23	19	37	51	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9
2.5°	8684.5	8693.9	8689.2	8689.2	8684.5	8689.2	8689.2	8698.6	8698.6	8689.2	8684.5
5°	8665.9	8675.2	8675.2	8665.9	8665.9	8689.2	8675.2	8684.5	8684.5	8679.9	8679.9
7.5°	8624.0	8624.0	8642.6	8628.7	8628.7	8642.6	8637.9	8647.3	8656.6	8661.3	8661.3
10°	8530.8	8540.1	8544.8	8544.8	8549.5	8563.4	8572.7	8591.4	8600.6	8610.0	8614.7
12.5°	8414.4	8428.3	8432.9	8428.3	8442.3	8460.9	8484.2	8507.5	8521.5	8540.1	8554.1
15°	8274.5	8274.5	8283.8	8297.9	8307.2	8335.1	8358.4	8386.3	8423.6	8447.0	8470.2
17.5°	8120.8	8130.2	8144.1	8144.1	8162.8	8209.3	8223.3	8265.3	8307.2	8330.5	8377.1
20°	7953.1	7962.4	7976.4	7985.7	8009.0	8046.3	8074.2	8111.5	8158.1	8200.0	8246.6
22.5°	7822.6	7804.0	7813.2	7822.6	7846.0	7878.6	7911.2	7957.7	8004.3	8046.3	8092.9
25°	7571.0	7575.7	7589.7	7598.9	7627.0	7654.9	7692.2	7748.0	7790.0	7836.6	7887.8
27.5°	7230.9	7235.6	7258.9	7258.9	7282.1	7328.7	7352.0	7398.6	7454.6	7501.1	7561.8
30°	6844.2	6853.5	6853.5	6872.2	6886.1	6909.4	6932.7	6979.3	7007.3	7049.2	7133.1
32.5°	6490.2	6499.4	6494.7	6490.2	6476.1	6471.5	6466.8	6476.1	6485.5	6499.4	6532.0
35°	6280.5	6257.1	6238.6	6205.9	6168.7	6122.0	6080.1	6024.2	5972.9	5931.0	5884.5
37.5°	6080.1	6075.4	6047.5	6000.9	5926.3	5842.5	5744.7	5623.5	5502.3	5371.9	5246.2
40°	5800.6	5786.5	5763.3	5698.1	5614.2	5511.7	5381.3	5232.2	5036.4	4836.1	4631.1
42.5°	5325.3	5330.0	5302.0	5250.7	5171.6	5073.7	4938.6	4775.6	4565.9	4328.3	4062.7
45°	4770.9	4770.9	4761.6	4719.6	4663.8	4584.5	4482.0	4346.9	4142.0	3899.6	3615.4
47.5°	4193.2	4197.8	4183.8	4174.6	4151.2	4100.0	4025.5	3923.0	3778.5	3545.5	3261.3
50°	3606.2	3606.2	3629.4	3624.8	3624.8	3606.2	3573.6	3512.9	3387.2	3200.8	2935.3
52.5°	3019.1	3028.4	3042.4	3061.0	3084.3	3121.6	3084.3	3056.3	2977.1	2832.7	2604.5
55°	2413.4	2422.7	2446.0	2478.6	2506.6	2543.9	2553.2	2553.2	2511.2	2413.4	2241.0
57.5°	1896.3	1882.3	1901.0	1928.9	1966.2	2003.4	2031.4	2064.0	2059.3	1994.1	1854.3
60°	1425.7	1430.4	1444.3	1472.3	1500.2	1532.8	1570.1	1598.1	1612.1	1579.5	1490.9
62.5°	1039.0	1039.0	1057.6	1085.5	1099.5	1146.2	1169.4	1183.4	1197.3	1192.7	1136.8
65°	726.9	736.1	745.4	759.5	773.4	801.3	815.3	843.3	852.6	857.3	815.3
67.5°	512.5	498.5	507.9	517.1	531.1	549.8	577.8	577.8	591.7	591.7	563.7
70°	326.2	326.2	330.8	344.7	354.1	358.8	368.1	377.3	391.4	386.7	386.7
72.5°	219.0	214.3	219.0	223.7	228.3	242.3	242.3	246.9	256.3	260.9	242.3
75°	111.8	116.5	125.7	121.2	135.1	125.7	130.4	144.4	139.8	130.4	130.4
77.5°	93.1	93.1	93.1	88.6	97.8	97.8	93.1	102.5	97.8	97.8	93.1
80°	65.2	69.9	65.2	60.5	65.2	60.5	60.5	60.5	60.5	60.5	55.9
82.5°	51.3	42.0	46.6	42.0	46.6	46.6	42.0	37.3	37.3	42.0	37.3
85°	37.3	27.9	32.6	32.6	27.9	27.9	27.9	27.9	27.9	23.3	23.3
87.5°	23.3	14.0	14.0	14.0	18.6	18.6	18.6	14.0	18.6	18.6	9.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9
2.5°	8693.9	8689.2	8698.6	8693.9	8693.9	8689.2	8693.9	8689.2	8698.6	8679.9	8684.5
5°	8693.9	8684.5	8689.2	8693.9	8698.6	8689.2	8689.2	8689.2	8698.6	8689.2	8693.9
7.5°	8675.2	8670.5	8684.5	8693.9	8689.2	8684.5	8693.9	8689.2	8698.6	8693.9	8703.1
10°	8637.9	8642.6	8651.9	8665.9	8670.5	8675.2	8684.5	8684.5	8698.6	8679.9	8689.2
12.5°	8582.1	8600.6	8624.0	8633.2	8651.9	8651.9	8661.3	8665.9	8675.2	8670.5	8684.5
15°	8512.2	8535.4	8563.4	8586.7	8610.0	8624.0	8637.9	8642.6	8656.6	8642.6	8647.3
17.5°	8428.3	8456.2	8498.2	8526.1	8563.4	8577.4	8596.0	8605.3	8619.3	8610.0	8614.7
20°	8311.8	8344.5	8391.0	8432.9	8456.2	8488.8	8512.2	8526.1	8535.4	8526.1	8530.8
22.5°	8148.7	8195.4	8255.9	8288.5	8335.1	8363.1	8367.7	8400.3	8423.6	8400.3	8409.7
25°	7957.7	8004.3	8050.9	8120.8	8162.8	8195.4	8228.0	8232.6	8255.9	8251.2	8246.6
27.5°	7640.9	7701.5	7780.6	7836.6	7892.5	7943.8	7981.0	7990.3	8013.7	8004.3	8009.0
30°	7207.6	7272.9	7347.4	7435.9	7515.1	7566.3	7612.9	7645.5	7668.8	7654.9	7650.2
32.5°	6592.6	6657.8	6737.1	6825.5	6918.8	6993.2	7049.2	7091.2	7119.1	7109.7	7086.5
35°	5889.1	5907.7	5959.0	6028.9	6108.0	6187.3	6238.6	6285.1	6317.7	6327.0	6327.0
37.5°	5166.9	5106.4	5069.1	5069.1	5115.7	5148.3	5194.9	5222.8	5274.1	5292.7	5306.7
40°	4468.0	4328.3	4197.8	4100.0	4034.8	4030.1	4030.1	4044.0	4090.7	4151.2	4207.2
42.5°	3843.7	3620.1	3419.8	3238.1	3107.6	3033.1	3000.5	3005.2	3042.4	3098.3	3191.4
45°	3345.2	3065.7	2814.1	2595.1	2418.1	2301.6	2245.7	2241.0	2268.9	2334.2	2436.8
47.5°	2958.5	2660.3	2376.1	2124.5	1933.6	1807.7	1742.5	1723.9	1742.5	1803.0	1924.2
50°	2637.1	2329.6	2036.0	1775.1	1570.1	1439.7	1379.1	1355.8	1379.1	1430.4	1551.4
52.5°	2338.8	2022.0	1747.2	1495.6	1276.6	1164.7	1099.5	1085.5	1099.5	1160.1	1258.0
55°	1994.1	1723.9	1453.6	1202.0	1011.1	899.2	847.9	834.0	847.9	903.9	1006.4
57.5°	1654.0	1421.0	1183.4	955.1	792.1	694.2	647.6	628.9	661.5	698.8	820.0
60°	1337.1	1150.8	950.4	750.1	615.0	526.5	489.2	484.5	493.9	540.5	624.3
62.5°	1048.3	894.6	736.1	573.1	461.2	424.0	377.3	372.8	382.0	409.9	475.3
65°	754.8	657.0	535.8	419.3	330.8	279.5	260.9	265.6	274.9	293.5	354.1
67.5°	526.5	456.6	372.8	293.5	228.3	205.0	186.4	181.7	186.4	219.0	251.6
70°	354.1	312.1	251.6	223.7	158.5	125.7	130.4	116.5	135.1	135.1	163.0
72.5°	232.9	205.0	167.7	130.4	111.8	88.6	88.6	83.9	93.1	97.8	121.2
75°	121.2	93.1	93.1	65.2	46.6	23.3	42.0	37.3	32.6	37.3	46.6
77.5°	83.9	69.9	65.2	51.3	46.6	37.3	37.3	37.3	37.3	42.0	46.6
80°	51.3	51.3	37.3	32.6	27.9	23.3	27.9	27.9	27.9	27.9	32.6
82.5°	32.6	27.9	27.9	23.3	23.3	18.6	18.6	18.6	18.6	18.6	27.9
85°	27.9	18.6	18.6	14.0	18.6	32.6	14.0	18.6	18.6	18.6	14.0
87.5°	9.3	14.0	14.0	14.0	9.3	4.7	9.3	14.0	14.0	23.3	18.6
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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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9	8679.9
2.5°	8693.9	8698.6	8698.6	8693.9	8693.9	8684.5	8703.1	8689.2	8693.9	8712.5	8698.6
5°	8703.1	8707.8	8707.8	8703.1	8703.1	8703.1	8707.8	8707.8	8703.1	8698.6	8707.8
7.5°	8721.8	8717.1	8717.1	8707.8	8707.8	8698.6	8707.8	8693.9	8703.1	8693.9	8707.8
10°	8698.6	8703.1	8698.6	8693.9	8693.9	8689.2	8689.2	8675.2	8679.9	8665.9	8675.2
12.5°	8684.5	8679.9	8679.9	8670.5	8661.3	8651.9	8647.3	8633.2	8633.2	8600.6	8614.7
15°	8647.3	8651.9	8637.9	8619.3	8610.0	8586.7	8577.4	8558.7	8540.1	8516.8	8521.5
17.5°	8614.7	8600.6	8582.1	8563.4	8526.1	8507.5	8488.8	8460.9	8451.5	8423.6	8414.4
20°	8516.8	8507.5	8484.2	8451.5	8428.3	8386.3	8367.7	8339.8	8316.4	8288.5	8274.5
22.5°	8391.0	8381.6	8353.7	8321.1	8283.8	8265.3	8246.6	8195.4	8172.0	8144.1	8139.4
25°	8232.6	8218.6	8190.7	8153.4	8134.7	8083.5	8064.8	8027.6	8018.3	7990.3	7985.7
27.5°	7990.3	7971.7	7939.1	7892.5	7859.9	7827.3	7808.7	7780.6	7771.4	7743.4	7738.8
30°	7627.0	7603.6	7538.4	7519.8	7463.8	7431.2	7431.2	7393.9	7398.6	7380.0	7380.0
32.5°	7053.9	7016.6	6965.3	6928.0	6890.8	6872.2	6872.2	6858.1	6867.5	6867.5	6876.8
35°	6294.4	6243.2	6215.2	6191.9	6191.9	6210.5	6266.5	6280.5	6308.4	6331.7	6350.4
37.5°	5320.6	5316.1	5348.7	5376.6	5446.5	5525.7	5623.5	5707.4	5786.5	5842.5	5898.4
40°	4267.7	4384.2	4477.4	4607.9	4714.9	4868.7	5045.8	5190.2	5325.3	5423.2	5525.7
42.5°	3331.2	3480.3	3676.1	3867.0	4058.1	4267.7	4500.7	4701.0	4878.1	5013.2	5120.3
45°	2595.1	2800.1	3037.8	3280.0	3526.9	3787.9	4030.1	4235.1	4421.5	4561.3	4668.4
47.5°	2091.9	2315.6	2585.8	2851.4	3130.9	3405.8	3676.1	3853.1	4006.8	4118.6	4216.5
50°	1728.5	1966.2	2250.4	2553.2	2832.7	3107.6	3340.6	3512.9	3638.8	3736.6	3797.1
52.5°	1444.3	1695.9	1998.8	2301.6	2581.1	2832.7	3042.4	3172.9	3275.3	3345.2	3401.1
55°	1192.7	1435.0	1719.2	2003.4	2278.3	2515.9	2688.2	2786.2	2865.3	2907.2	2939.8
57.5°	973.8	1197.3	1458.3	1719.2	1956.8	2152.6	2287.6	2385.5	2422.7	2455.3	2450.7
60°	764.1	973.8	1211.4	1435.0	1640.0	1798.4	1896.3	1952.1	1980.1	1994.1	1984.7
62.5°	601.0	792.1	973.8	1169.4	1318.5	1453.6	1546.9	1546.9	1560.8	1565.5	1579.5
65°	447.2	591.7	750.1	894.6	1015.6	1104.2	1155.5	1169.4	1188.1	1183.4	1174.1
67.5°	330.8	438.0	554.4	661.5	745.4	801.3	838.6	871.3	866.6	857.3	852.6
70°	228.3	298.2	400.7	465.9	526.5	582.4	591.7	596.3	601.0	605.7	596.3
72.5°	158.5	209.6	265.6	321.5	358.8	382.0	405.4	409.9	409.9	409.9	405.4
75°	79.2	107.2	158.5	181.7	214.3	223.7	242.3	242.3	256.3	237.6	232.9
77.5°	69.9	83.9	111.8	130.4	144.4	158.5	163.0	177.0	172.4	163.0	167.7
80°	42.0	51.3	69.9	79.2	97.8	102.5	107.2	111.8	107.2	111.8	111.8
82.5°	32.6	37.3	46.6	46.6	60.5	60.5	65.2	65.2	69.9	69.9	69.9
85°	18.6	32.6	27.9	55.9	37.3	37.3	46.6	55.9	46.6	46.6	55.9
87.5°	18.6	18.6	14.0	18.6	18.6	18.6	23.3	27.9	27.9	32.6	27.9
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: P249431

CATALOG NUMBER: LD8B175D010 ER8B175835 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8679.9	8679.9	8679.9	8679.9
2.5°	8693.9	8703.1	8689.2	8684.5
5°	8707.8	8707.8	8698.6	8698.6
7.5°	8707.8	8707.8	8693.9	8684.5
10°	8670.5	8670.5	8656.6	8647.3
12.5°	8600.6	8600.6	8596.0	8582.1
15°	8512.2	8512.2	8493.5	8479.6
17.5°	8391.0	8400.3	8377.1	8377.1
20°	8260.6	8255.9	8237.3	8228.0
22.5°	8125.5	8116.1	8111.5	8083.5
25°	7981.0	7971.7	7957.7	7943.8
27.5°	7734.1	7729.4	7715.4	7696.8
30°	7356.7	7352.0	7333.4	7333.4
32.5°	6867.5	6862.8	6844.2	6848.9
35°	6359.6	6378.3	6369.0	6350.4
37.5°	5935.7	5949.7	5959.0	5949.7
40°	5581.6	5623.5	5628.2	5637.5
42.5°	5204.2	5260.1	5278.8	5288.0
45°	4752.2	4803.5	4845.5	4836.1
47.5°	4291.0	4328.3	4365.5	4337.6
50°	3848.4	3871.7	3885.7	3885.7
52.5°	3429.1	3429.1	3424.5	3429.1
55°	2949.2	2949.2	2930.6	2939.8
57.5°	2446.0	2455.3	2441.3	2418.1
60°	1980.1	1956.8	1947.5	1933.6
62.5°	1542.2	1542.2	1509.6	1551.4
65°	1155.5	1141.5	1127.5	1122.8
67.5°	838.6	834.0	820.0	815.3
70°	591.7	573.1	568.4	559.1
72.5°	396.0	396.0	386.7	386.7
75°	242.3	219.0	214.3	219.0
77.5°	167.7	163.0	163.0	158.5
80°	111.8	107.2	116.5	102.5
82.5°	69.9	74.6	69.9	74.6
85°	46.6	55.9	51.3	51.3
87.5°	27.9	27.9	27.9	27.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)