

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: P249098

Luminaire Tested: **LD8B175D010 ER8B175830 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249098
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 ER8B175830 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17877.0 lumens
Efficiency: N/A
Efficacy: 100.9 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

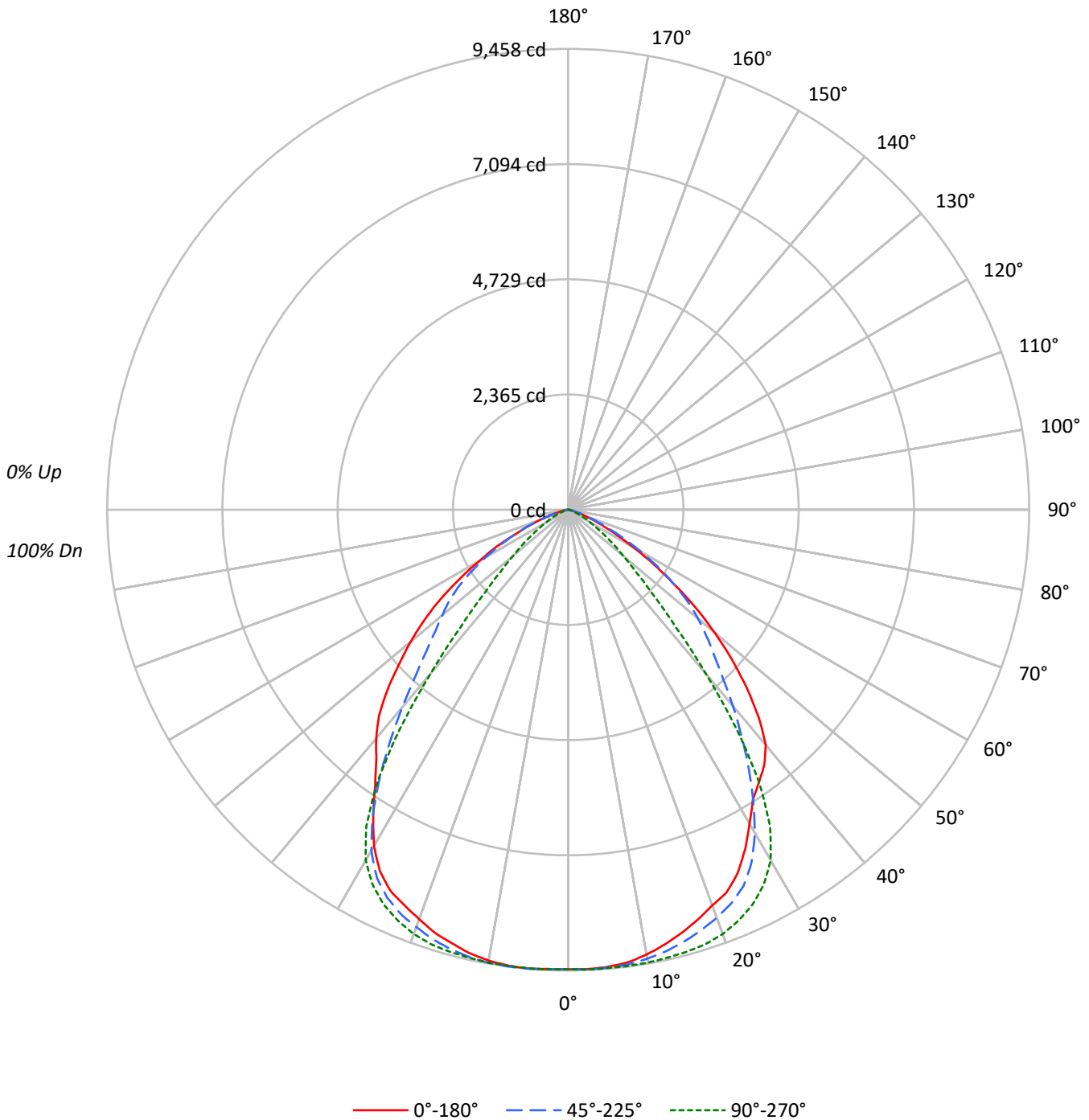
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	290857	290857	290857
5°	291495	292281	292597
10°	290269	295501	294233
15°	287052	299822	294168
20°	283606	304037	293408
25°	279927	304390	293706
30°	264825	295831	283753
35°	256918	257106	259775
40°	253737	176900	246604
45°	226092	106201	229179
50°	187996	70678	202565
55°	140995	48724	171752
60°	95549	32471	129587
65°	57635	21058	89025
70°	31952	11414	54772
75°	14476	4825	28356
80°	12590	5398	19782
85°	14329	7147	19707



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	900.2	5.0
10°-20°	2614.2	14.6
20°-30°	3967.9	22.2
30°-40°	4167.5	23.3
40°-50°	3124.5	17.5
50°-60°	2004.8	11.2
60°-70°	857.6	4.8
70°-80°	202.6	1.1
80°-90°	37.7	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°	7482.3	41.9
0°-40°	11649.8	65.2
0°-60°	16779.1	93.9
0°-90°	17877.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17877.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9432	9432	9432	9432	9432	
5°	9417	9432	9442	9458	9453	895
15°	8992	9179	9392	9331	9215	2536
25°	8227	8516	8946	8784	8632	3759
35°	6825	6445	6830	6749	6901	4283
45°	5184	4238	2435	4116	5255	3970
55°	2623	2623	906	2734	3195	2379
65°	790	932	289	1200	1220	843
75°	122	142	40	243	238	177
85°	40	25	20	40	56	43
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°	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3
2.5°	9437.3	9447.5	9442.4	9442.4	9437.3	9442.4	9442.4	9452.6	9452.6	9442.4	9437.3
5°	9417.0	9427.2	9427.2	9417.0	9417.0	9442.4	9427.2	9437.3	9437.3	9432.3	9432.3
7.5°	9371.6	9371.6	9391.7	9376.6	9376.6	9391.7	9386.7	9396.8	9407.0	9412.1	9412.1
10°	9270.2	9280.4	9285.5	9285.5	9290.5	9305.7	9315.8	9336.1	9346.2	9356.3	9361.4
12.5°	9143.7	9158.8	9163.9	9158.8	9174.1	9194.3	9219.7	9244.9	9260.2	9280.4	9295.6
15°	8991.7	8991.7	9001.9	9017.1	9027.3	9057.6	9082.9	9113.3	9153.8	9179.2	9204.4
17.5°	8824.7	8834.9	8850.0	8850.0	8870.3	8920.9	8936.1	8981.7	9027.3	9052.6	9103.2
20°	8642.5	8652.5	8667.8	8677.9	8703.2	8743.7	8774.1	8814.6	8865.2	8910.8	8961.4
22.5°	8500.7	8480.5	8490.5	8500.7	8526.1	8561.5	8596.9	8647.5	8698.1	8743.7	8794.4
25°	8227.3	8232.3	8247.6	8257.6	8288.1	8318.4	8358.9	8419.6	8465.2	8515.9	8571.5
27.5°	7857.7	7862.8	7888.1	7888.1	7913.3	7964.0	7989.3	8039.9	8100.8	8151.3	8217.2
30°	7437.5	7447.5	7447.5	7467.9	7483.0	7508.4	7533.6	7584.3	7614.7	7660.2	7751.4
32.5°	7052.7	7062.8	7057.7	7052.7	7037.5	7032.4	7027.3	7037.5	7047.6	7062.8	7098.2
35°	6824.9	6799.5	6779.3	6743.9	6703.4	6652.7	6607.1	6546.4	6490.7	6445.1	6394.5
37.5°	6607.1	6602.0	6571.7	6521.0	6440.0	6349.0	6242.7	6111.0	5979.3	5837.6	5700.9
40°	6303.4	6288.1	6262.9	6192.0	6100.8	5989.5	5847.7	5685.7	5473.0	5255.3	5032.6
42.5°	5786.9	5792.0	5761.6	5705.9	5619.9	5513.5	5366.7	5189.5	4961.7	4703.4	4414.9
45°	5184.5	5184.5	5174.3	5128.7	5068.0	4981.9	4870.5	4723.7	4501.0	4237.6	3928.8
47.5°	4556.6	4561.7	4546.5	4536.4	4511.0	4455.4	4374.4	4263.0	4106.1	3852.9	3544.0
50°	3918.8	3918.8	3944.0	3939.0	3939.0	3918.8	3883.3	3817.4	3680.8	3478.2	3189.7
52.5°	3280.8	3290.9	3306.2	3326.4	3351.6	3392.1	3351.6	3321.3	3235.2	3078.2	2830.2
55°	2622.6	2632.7	2658.0	2693.4	2723.9	2764.4	2774.5	2774.5	2728.9	2622.6	2435.3
57.5°	2060.7	2045.4	2065.7	2096.1	2136.6	2177.1	2207.5	2242.9	2237.8	2166.9	2015.1
60°	1549.3	1554.3	1569.5	1599.9	1630.3	1665.7	1706.2	1736.6	1751.8	1716.4	1620.1
62.5°	1129.1	1129.1	1149.3	1179.6	1194.8	1245.5	1270.8	1286.0	1301.1	1296.1	1235.4
65°	789.9	799.9	810.1	825.3	840.4	870.8	886.0	916.4	926.5	931.6	886.0
67.5°	557.0	541.7	551.9	561.9	577.2	597.5	627.8	627.8	643.0	643.0	612.6
70°	354.4	354.4	359.5	374.6	384.8	389.9	400.0	410.1	425.3	420.2	420.2
72.5°	238.0	232.9	238.0	243.1	248.1	263.3	263.3	268.3	278.5	283.6	263.3
75°	121.5	126.6	136.6	131.7	146.8	136.6	141.7	157.0	151.9	141.7	141.7
77.5°	101.2	101.2	101.2	96.3	106.3	106.3	101.2	111.4	106.3	106.3	101.2
80°	70.9	75.9	70.9	65.8	70.9	65.8	65.8	65.8	65.8	65.8	60.7
82.5°	55.7	45.6	50.7	45.6	50.7	50.7	45.6	40.5	40.5	45.6	40.5
85°	40.5	30.4	35.4	35.4	30.4	30.4	30.4	30.4	30.4	25.3	25.3
87.5°	25.3	15.2	15.2	15.2	20.2	20.2	20.2	15.2	20.2	20.2	10.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3
2.5°	9447.5	9442.4	9452.6	9447.5	9447.5	9442.4	9447.5	9442.4	9452.6	9432.3	9437.3
5°	9447.5	9437.3	9442.4	9447.5	9452.6	9442.4	9442.4	9442.4	9452.6	9442.4	9447.5
7.5°	9427.2	9422.1	9437.3	9447.5	9442.4	9437.3	9447.5	9442.4	9452.6	9447.5	9457.5
10°	9386.7	9391.7	9401.9	9417.0	9422.1	9427.2	9437.3	9437.3	9452.6	9432.3	9442.4
12.5°	9326.0	9346.2	9371.6	9381.6	9401.9	9401.9	9412.1	9417.0	9427.2	9422.1	9437.3
15°	9250.0	9275.3	9305.7	9331.0	9356.3	9371.6	9386.7	9391.7	9407.0	9391.7	9396.8
17.5°	9158.8	9189.2	9234.8	9265.1	9305.7	9320.9	9341.1	9351.2	9366.5	9356.3	9361.4
20°	9032.2	9067.8	9118.3	9163.9	9189.2	9224.6	9250.0	9265.1	9275.3	9265.1	9270.2
22.5°	8855.1	8905.8	8971.5	9007.0	9057.6	9088.0	9093.1	9128.5	9153.8	9128.5	9138.7
25°	8647.5	8698.1	8748.8	8824.7	8870.3	8905.8	8941.2	8946.3	8971.5	8966.5	8961.4
27.5°	8303.2	8369.1	8455.1	8515.9	8576.6	8632.3	8672.9	8682.9	8708.3	8698.1	8703.2
30°	7832.3	7903.3	7984.3	8080.5	8166.6	8222.2	8272.8	8308.3	8333.5	8318.4	8313.4
32.5°	7164.1	7235.0	7321.1	7417.2	7518.5	7599.4	7660.2	7705.8	7736.2	7726.0	7700.8
35°	6399.6	6419.8	6475.6	6551.5	6637.5	6723.6	6779.3	6829.9	6865.3	6875.5	6875.5
37.5°	5614.8	5549.0	5508.5	5508.5	5559.1	5594.5	5645.2	5675.5	5731.3	5751.5	5766.7
40°	4855.3	4703.4	4561.7	4455.4	4384.6	4379.5	4379.5	4394.6	4445.3	4511.0	4571.9
42.5°	4176.9	3933.9	3716.2	3518.7	3377.0	3296.0	3260.6	3265.7	3306.2	3366.9	3468.1
45°	3635.2	3331.4	3058.0	2820.1	2627.7	2501.1	2440.4	2435.3	2465.6	2536.5	2648.0
47.5°	3215.0	2890.9	2582.1	2308.7	2101.2	1964.4	1893.5	1873.3	1893.5	1959.3	2091.0
50°	2865.6	2531.5	2212.5	1929.0	1706.2	1564.5	1498.6	1473.3	1498.6	1554.3	1685.9
52.5°	2541.6	2197.3	1898.6	1625.2	1387.2	1265.7	1194.8	1179.6	1194.8	1260.6	1367.0
55°	2166.9	1873.3	1579.6	1306.2	1098.7	977.2	921.4	906.3	921.4	982.3	1093.6
57.5°	1797.4	1544.2	1286.0	1037.9	860.7	754.3	703.8	683.5	718.9	759.4	891.1
60°	1453.0	1250.6	1032.8	815.1	668.3	572.1	531.6	526.5	536.7	587.3	678.4
62.5°	1139.2	972.1	799.9	622.8	501.2	460.7	410.1	405.1	415.1	445.5	516.5
65°	820.2	713.9	582.2	455.6	359.5	303.8	283.6	288.6	298.7	319.0	384.8
67.5°	572.1	496.1	405.1	319.0	248.1	222.7	202.5	197.5	202.5	238.0	273.4
70°	384.8	339.2	273.4	243.1	172.2	136.6	141.7	126.6	146.8	146.8	177.2
72.5°	253.1	222.7	182.2	141.7	121.5	96.3	96.3	91.2	101.2	106.3	131.7
75°	131.7	101.2	101.2	70.9	50.7	25.3	45.6	40.5	35.4	40.5	50.7
77.5°	91.2	75.9	70.9	55.7	50.7	40.5	40.5	40.5	40.5	45.6	50.7
80°	55.7	55.7	40.5	35.4	30.4	25.3	30.4	30.4	30.4	30.4	35.4
82.5°	35.4	30.4	30.4	25.3	25.3	20.2	20.2	20.2	20.2	20.2	30.4
85°	30.4	20.2	20.2	15.2	20.2	35.4	15.2	20.2	20.2	20.2	15.2
87.5°	10.2	15.2	15.2	15.2	10.2	5.1	10.2	15.2	15.2	25.3	20.2
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3	9432.3
2.5°	9447.5	9452.6	9452.6	9447.5	9447.5	9437.3	9457.5	9442.4	9447.5	9467.7	9452.6
5°	9457.5	9462.6	9462.6	9457.5	9457.5	9457.5	9462.6	9462.6	9457.5	9452.6	9462.6
7.5°	9477.8	9472.8	9472.8	9462.6	9462.6	9452.6	9462.6	9447.5	9457.5	9447.5	9462.6
10°	9452.6	9457.5	9452.6	9447.5	9447.5	9442.4	9442.4	9427.2	9432.3	9417.0	9427.2
12.5°	9437.3	9432.3	9432.3	9422.1	9412.1	9401.9	9396.8	9381.6	9381.6	9346.2	9361.4
15°	9396.8	9401.9	9386.7	9366.5	9356.3	9331.0	9320.9	9300.6	9280.4	9255.1	9260.2
17.5°	9361.4	9346.2	9326.0	9305.7	9265.1	9244.9	9224.6	9194.3	9184.1	9153.8	9143.7
20°	9255.1	9244.9	9219.7	9184.1	9158.8	9113.3	9093.1	9062.7	9037.3	9007.0	8991.7
22.5°	9118.3	9108.2	9077.8	9042.4	9001.9	8981.7	8961.4	8905.8	8880.4	8850.0	8844.9
25°	8946.3	8931.0	8900.7	8860.2	8839.9	8784.2	8763.9	8723.4	8713.4	8682.9	8677.9
27.5°	8682.9	8662.7	8627.3	8576.6	8541.2	8505.7	8485.5	8455.1	8445.0	8414.6	8409.6
30°	8288.1	8262.7	8191.8	8171.6	8110.8	8075.4	8075.4	8034.9	8039.9	8019.8	8019.8
32.5°	7665.3	7624.8	7569.1	7528.6	7488.1	7467.9	7467.9	7452.6	7462.8	7462.8	7472.9
35°	6840.0	6784.4	6753.9	6728.7	6728.7	6748.8	6809.7	6824.9	6855.3	6880.5	6900.8
37.5°	5781.8	5776.9	5812.3	5842.6	5918.6	6004.7	6111.0	6202.2	6288.1	6349.0	6409.7
40°	4637.6	4764.3	4865.5	5007.3	5123.6	5290.8	5483.1	5640.1	5786.9	5893.3	6004.7
42.5°	3620.0	3782.0	3994.7	4202.2	4409.8	4637.6	4890.9	5108.5	5300.9	5447.7	5564.2
45°	2820.1	3042.8	3301.1	3564.3	3832.7	4116.2	4379.5	4602.2	4804.8	4956.6	5073.1
47.5°	2273.2	2516.3	2809.9	3098.5	3402.3	3701.0	3994.7	4187.1	4354.1	4475.6	4582.0
50°	1878.3	2136.6	2445.4	2774.5	3078.2	3377.0	3630.1	3817.4	3954.2	4060.5	4126.3
52.5°	1569.5	1842.9	2172.0	2501.1	2804.8	3078.2	3306.2	3447.9	3559.3	3635.2	3695.9
55°	1296.1	1559.4	1868.3	2177.1	2475.8	2734.0	2921.3	3027.7	3113.7	3159.2	3194.7
57.5°	1058.2	1301.1	1584.7	1868.3	2126.4	2339.1	2485.9	2592.2	2632.7	2668.2	2663.1
60°	830.4	1058.2	1316.4	1559.4	1782.2	1954.2	2060.7	2121.4	2151.7	2166.9	2156.8
62.5°	653.1	860.7	1058.2	1270.8	1432.8	1579.6	1681.0	1681.0	1696.1	1701.1	1716.4
65°	486.0	643.0	815.1	972.1	1103.7	1199.9	1255.7	1270.8	1291.1	1286.0	1275.9
67.5°	359.5	476.0	602.4	718.9	810.1	870.8	911.3	946.8	941.7	931.6	926.5
70°	248.1	324.1	435.4	506.3	572.1	632.9	643.0	648.0	653.1	658.2	648.0
72.5°	172.2	227.8	288.6	349.3	389.9	415.1	440.5	445.5	445.5	445.5	440.5
75°	86.1	116.4	172.2	197.5	232.9	243.1	263.3	263.3	278.5	258.2	253.1
77.5°	75.9	91.2	121.5	141.7	157.0	172.2	177.2	192.4	187.3	177.2	182.2
80°	45.6	55.7	75.9	86.1	106.3	111.4	116.4	121.5	116.4	121.5	121.5
82.5°	35.4	40.5	50.7	50.7	65.8	65.8	70.9	70.9	75.9	75.9	75.9
85°	20.2	35.4	30.4	60.7	40.5	40.5	50.7	60.7	50.7	50.7	60.7
87.5°	20.2	20.2	15.2	20.2	20.2	20.2	25.3	30.4	30.4	35.4	30.4
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: P249098

CATALOG NUMBER: LD8B175D010 ER8B175830 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9432.3	9432.3	9432.3	9432.3
2.5°	9447.5	9457.5	9442.4	9437.3
5°	9462.6	9462.6	9452.6	9452.6
7.5°	9462.6	9462.6	9447.5	9437.3
10°	9422.1	9422.1	9407.0	9396.8
12.5°	9346.2	9346.2	9341.1	9326.0
15°	9250.0	9250.0	9229.7	9214.6
17.5°	9118.3	9128.5	9103.2	9103.2
20°	8976.6	8971.5	8951.3	8941.2
22.5°	8829.8	8819.7	8814.6	8784.2
25°	8672.9	8662.7	8647.5	8632.3
27.5°	8404.5	8399.5	8384.2	8364.0
30°	7994.4	7989.3	7969.1	7969.1
32.5°	7462.8	7457.7	7437.5	7442.6
35°	6910.9	6931.2	6921.0	6900.8
37.5°	6450.2	6465.4	6475.6	6465.4
40°	6065.4	6111.0	6116.1	6126.2
42.5°	5655.3	5716.0	5736.4	5746.4
45°	5164.2	5219.9	5265.5	5255.3
47.5°	4662.9	4703.4	4743.9	4713.6
50°	4182.0	4207.3	4222.5	4222.5
52.5°	3726.4	3726.4	3721.3	3726.4
55°	3204.8	3204.8	3184.6	3194.7
57.5°	2658.0	2668.2	2652.9	2627.7
60°	2151.7	2126.4	2116.3	2101.2
62.5°	1675.9	1675.9	1640.4	1685.9
65°	1255.7	1240.4	1225.2	1220.1
67.5°	911.3	906.3	891.1	886.0
70°	643.0	622.8	617.7	607.5
72.5°	430.4	430.4	420.2	420.2
75°	263.3	238.0	232.9	238.0
77.5°	182.2	177.2	177.2	172.2
80°	121.5	116.4	126.6	111.4
82.5°	75.9	81.0	75.9	81.0
85°	50.7	60.7	55.7	55.7
87.5°	30.4	30.4	30.4	30.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)