

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: P249449

Luminaire Tested: **LD8B175D010 ER8B175850 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249449
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 ER8B175850 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16664.0 lumens
Efficiency: N/A
Efficacy: 94.0 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

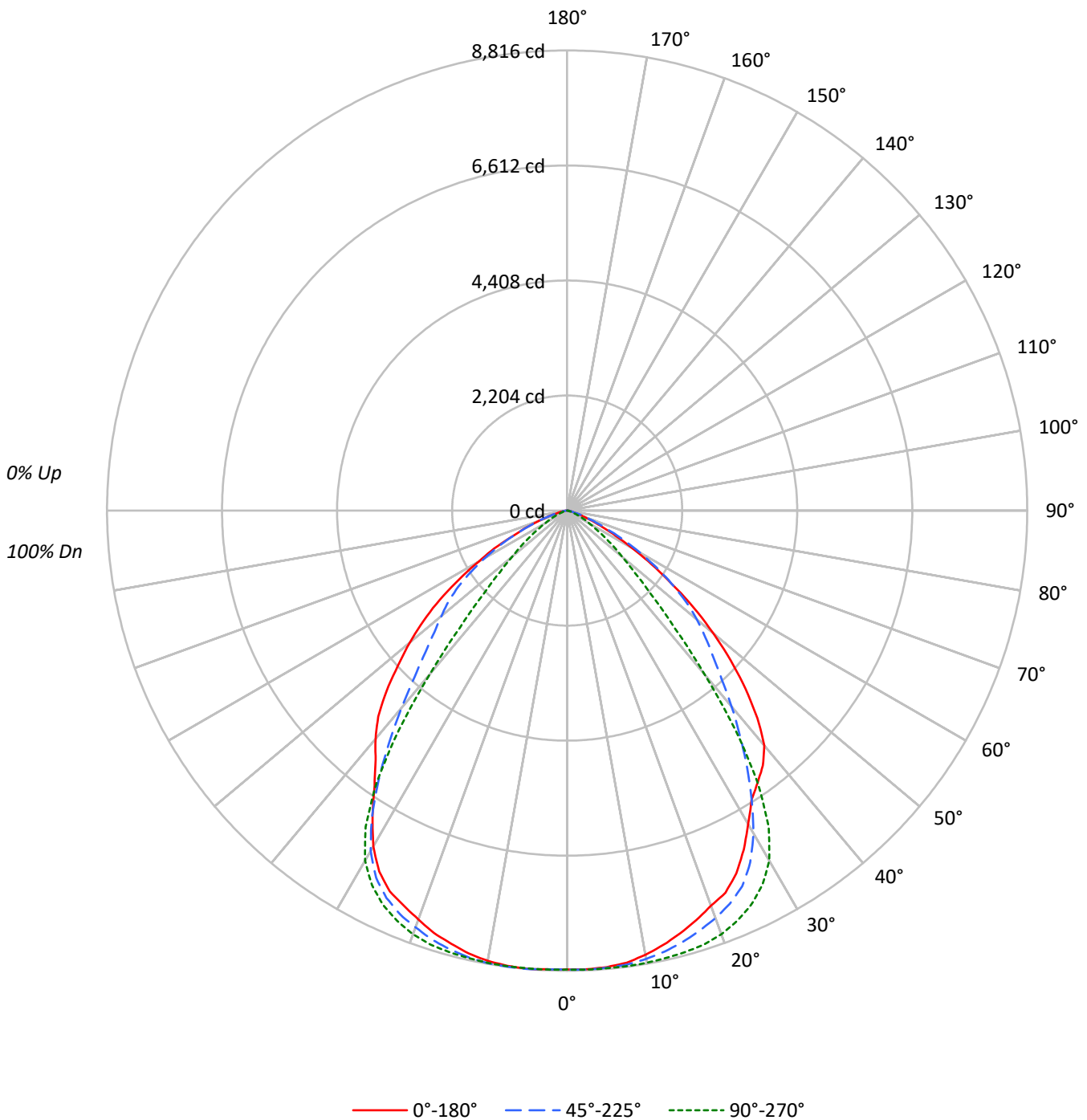
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	271122	271122	271122
5°	271718	272449	272743
10°	270573	275452	274268
15°	267575	279480	274209
20°	264364	283410	273499
25°	260931	283734	273778
30°	246858	275756	264501
35°	239485	239658	242150
40°	236520	164896	229870
45°	210750	98993	213628
50°	175240	65886	188821
55°	131425	45418	160096
60°	89061	30269	120792
65°	53724	19635	82983
70°	29789	10639	51057
75°	13499	4504	26426
80°	11738	5025	18433
85°	13374	6652	18398



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	839.1	5.0
10°-20°	2436.9	14.6
20°-30°	3698.7	22.2
30°-40°	3884.7	23.3
40°-50°	2912.5	17.5
50°-60°	1868.7	11.2
60°-70°	799.4	4.8
70°-80°	188.9	1.1
80°-90°	35.1	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°	6974.6	41.9
0°-40°	10859.4	65.2
0°-60°	15640.6	93.9
0°-90°	16664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16664.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8792	8792	8792	8792	8792	
5°	8778	8792	8802	8816	8811	834
15°	8382	8556	8754	8698	8589	2364
25°	7669	7938	8339	8188	8047	3504
35°	6362	6008	6366	6291	6433	3993
45°	4833	3950	2270	3837	4899	3701
55°	2445	2445	845	2548	2978	2217
65°	736	868	269	1118	1137	786
75°	113	132	38	227	222	165
85°	38	24	19	38	52	40
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°	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3
2.5°	8797.0	8806.5	8801.7	8801.7	8797.0	8801.7	8801.7	8811.2	8811.2	8801.7	8797.0
5°	8778.1	8787.5	8787.5	8778.1	8778.1	8801.7	8787.5	8797.0	8797.0	8792.3	8792.3
7.5°	8735.7	8735.7	8754.5	8740.4	8740.4	8754.5	8749.8	8759.2	8768.7	8773.4	8773.4
10°	8641.2	8650.7	8655.4	8655.4	8660.1	8674.2	8683.7	8702.6	8712.0	8721.5	8726.2
12.5°	8523.3	8537.4	8542.1	8537.4	8551.6	8570.4	8594.1	8617.7	8631.9	8650.7	8664.9
15°	8381.6	8381.6	8391.1	8405.3	8414.8	8443.1	8466.6	8494.9	8532.7	8556.3	8579.9
17.5°	8226.0	8235.4	8249.5	8249.5	8268.5	8315.6	8329.8	8372.3	8414.8	8438.3	8485.5
20°	8056.1	8065.4	8079.6	8089.1	8112.7	8150.4	8178.7	8216.5	8263.7	8306.2	8353.3
22.5°	7923.9	7905.0	7914.4	7923.9	7947.5	7980.6	8013.6	8060.7	8107.9	8150.4	8197.7
25°	7669.0	7673.8	7688.0	7697.3	7725.7	7754.0	7791.8	7848.4	7890.8	7938.1	7989.9
27.5°	7324.5	7329.3	7352.8	7352.8	7376.4	7423.6	7447.2	7494.4	7551.1	7598.2	7659.7
30°	6932.9	6942.2	6942.2	6961.1	6975.2	6998.9	7022.5	7069.7	7098.0	7140.5	7225.5
32.5°	6574.2	6583.5	6578.8	6574.2	6560.0	6555.2	6550.5	6560.0	6569.4	6583.5	6616.6
35°	6361.8	6338.2	6319.3	6286.3	6248.5	6201.3	6158.8	6102.2	6050.3	6007.8	5960.7
37.5°	6158.8	6154.1	6125.8	6078.6	6003.0	5918.2	5819.1	5696.3	5573.6	5441.5	5314.1
40°	5875.7	5861.5	5837.9	5771.9	5686.9	5583.1	5450.9	5299.9	5101.6	4898.7	4691.1
42.5°	5394.2	5399.0	5370.7	5318.7	5238.6	5139.4	5002.6	4837.4	4625.1	4384.3	4115.3
45°	4832.7	4832.7	4823.2	4780.7	4724.1	4643.9	4540.1	4403.2	4195.6	3950.1	3662.2
47.5°	4247.5	4252.2	4238.0	4228.6	4205.0	4153.1	4077.6	3973.8	3827.5	3591.4	3303.5
50°	3652.9	3652.9	3676.4	3671.7	3671.7	3652.9	3619.8	3558.4	3431.0	3242.2	2973.3
52.5°	3058.2	3067.6	3081.8	3100.7	3124.2	3162.0	3124.2	3095.9	3015.7	2869.4	2638.2
55°	2444.6	2454.1	2477.7	2510.7	2539.1	2576.9	2586.2	2586.2	2543.7	2444.6	2270.0
57.5°	1920.8	1906.6	1925.6	1953.9	1991.6	2029.4	2057.7	2090.7	2086.0	2019.9	1878.3
60°	1444.1	1448.9	1463.0	1491.4	1519.7	1552.7	1590.5	1618.7	1632.9	1599.9	1510.2
62.5°	1052.5	1052.5	1071.3	1099.6	1113.8	1161.0	1184.6	1198.8	1212.9	1208.1	1151.5
65°	736.3	745.6	755.1	769.3	783.4	811.7	825.9	854.2	863.6	868.4	825.9
67.5°	519.2	505.0	514.4	523.8	538.0	556.9	585.2	585.2	599.3	599.3	571.0
70°	330.4	330.4	335.1	349.2	358.7	363.4	372.9	382.2	396.4	391.7	391.7
72.5°	221.8	217.1	221.8	226.6	231.3	245.4	245.4	250.1	259.6	264.3	245.4
75°	113.3	118.0	127.4	122.7	136.8	127.4	132.1	146.3	141.6	132.1	132.1
77.5°	94.3	94.3	94.3	89.7	99.1	99.1	94.3	103.8	99.1	99.1	94.3
80°	66.1	70.8	66.1	61.3	66.1	61.3	61.3	61.3	61.3	61.3	56.6
82.5°	52.0	42.5	47.2	42.5	47.2	47.2	42.5	37.8	37.8	42.5	37.8
85°	37.8	28.3	33.0	33.0	28.3	28.3	28.3	28.3	28.3	23.6	23.6
87.5°	23.6	14.2	14.2	14.2	18.8	18.8	18.8	14.2	18.8	18.8	9.5
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3
2.5°	8806.5	8801.7	8811.2	8806.5	8806.5	8801.7	8806.5	8801.7	8811.2	8792.3	8797.0
5°	8806.5	8797.0	8801.7	8806.5	8811.2	8801.7	8801.7	8801.7	8811.2	8801.7	8806.5
7.5°	8787.5	8782.8	8797.0	8806.5	8801.7	8797.0	8806.5	8801.7	8811.2	8806.5	8815.8
10°	8749.8	8754.5	8764.0	8778.1	8782.8	8787.5	8797.0	8797.0	8811.2	8792.3	8801.7
12.5°	8693.2	8712.0	8735.7	8745.0	8764.0	8764.0	8773.4	8778.1	8787.5	8782.8	8797.0
15°	8622.4	8645.9	8674.2	8697.9	8721.5	8735.7	8749.8	8754.5	8768.7	8754.5	8759.2
17.5°	8537.4	8565.7	8608.2	8636.5	8674.2	8688.4	8707.3	8716.7	8730.9	8721.5	8726.2
20°	8419.4	8452.5	8499.6	8542.1	8565.7	8598.7	8622.4	8636.5	8645.9	8636.5	8641.2
22.5°	8254.2	8301.5	8362.8	8395.8	8443.1	8471.3	8476.1	8509.1	8532.7	8509.1	8518.6
25°	8060.7	8107.9	8155.2	8226.0	8268.5	8301.5	8334.5	8339.2	8362.8	8358.1	8353.3
27.5°	7739.8	7801.2	7881.4	7938.1	7994.7	8046.6	8084.4	8093.7	8117.4	8107.9	8112.7
30°	7300.9	7367.0	7442.6	7532.2	7612.4	7664.3	7711.5	7744.5	7768.1	7754.0	7749.3
32.5°	6678.0	6744.0	6824.3	6913.9	7008.4	7083.8	7140.5	7183.0	7211.3	7201.8	7178.2
35°	5965.4	5984.2	6036.2	6107.0	6187.1	6267.4	6319.3	6366.4	6399.5	6408.9	6408.9
37.5°	5233.8	5172.5	5134.8	5134.8	5181.9	5214.9	5262.1	5290.4	5342.4	5361.2	5375.4
40°	4525.9	4384.3	4252.2	4153.1	4087.1	4082.3	4082.3	4096.4	4143.6	4205.0	4261.7
42.5°	3893.5	3667.0	3464.1	3280.0	3147.9	3072.4	3039.3	3044.1	3081.8	3138.4	3232.8
45°	3388.5	3105.4	2850.5	2628.7	2449.4	2331.4	2274.8	2270.0	2298.3	2364.4	2468.3
47.5°	2996.8	2694.8	2406.9	2152.0	1958.6	1831.1	1765.1	1746.2	1765.1	1826.4	1949.1
50°	2671.2	2359.8	2062.4	1798.1	1590.5	1458.3	1396.9	1373.4	1396.9	1448.9	1571.5
52.5°	2369.1	2048.2	1769.8	1514.9	1293.1	1179.8	1113.8	1099.6	1113.8	1175.1	1274.3
55°	2019.9	1746.2	1472.4	1217.6	1024.2	910.9	858.9	844.8	858.9	915.6	1019.4
57.5°	1675.4	1439.4	1198.8	967.5	802.3	703.1	656.0	637.1	670.1	707.9	830.6
60°	1354.4	1165.7	962.7	759.8	623.0	533.3	495.5	490.8	500.2	547.5	632.4
62.5°	1061.9	906.1	745.6	580.5	467.2	429.5	382.2	377.6	387.0	415.3	481.4
65°	764.6	665.5	542.7	424.7	335.1	283.1	264.3	269.1	278.4	297.4	358.7
67.5°	533.3	462.5	377.6	297.4	231.3	207.6	188.8	184.1	188.8	221.8	254.9
70°	358.7	316.2	254.9	226.6	160.5	127.4	132.1	118.0	136.8	136.8	165.1
72.5°	235.9	207.6	169.9	132.1	113.3	89.7	89.7	85.0	94.3	99.1	122.7
75°	122.7	94.3	94.3	66.1	47.2	23.6	42.5	37.8	33.0	37.8	47.2
77.5°	85.0	70.8	66.1	52.0	47.2	37.8	37.8	37.8	37.8	42.5	47.2
80°	52.0	52.0	37.8	33.0	28.3	23.6	28.3	28.3	28.3	28.3	33.0
82.5°	33.0	28.3	28.3	23.6	23.6	18.8	18.8	18.8	18.8	18.8	28.3
85°	28.3	18.8	18.8	14.2	18.8	33.0	14.2	18.8	18.8	18.8	14.2
87.5°	9.5	14.2	14.2	14.2	9.5	4.7	9.5	14.2	14.2	23.6	18.8
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3	8792.3
2.5°	8806.5	8811.2	8811.2	8806.5	8806.5	8797.0	8815.8	8801.7	8806.5	8825.3	8811.2
5°	8815.8	8820.5	8820.5	8815.8	8815.8	8815.8	8820.5	8820.5	8815.8	8811.2	8820.5
7.5°	8834.7	8830.0	8830.0	8820.5	8820.5	8811.2	8820.5	8806.5	8815.8	8806.5	8820.5
10°	8811.2	8815.8	8811.2	8806.5	8806.5	8801.7	8801.7	8787.5	8792.3	8778.1	8787.5
12.5°	8797.0	8792.3	8792.3	8782.8	8773.4	8764.0	8759.2	8745.0	8745.0	8712.0	8726.2
15°	8759.2	8764.0	8749.8	8730.9	8721.5	8697.9	8688.4	8669.5	8650.7	8627.1	8631.9
17.5°	8726.2	8712.0	8693.2	8674.2	8636.5	8617.7	8598.7	8570.4	8561.0	8532.7	8523.3
20°	8627.1	8617.7	8594.1	8561.0	8537.4	8494.9	8476.1	8447.8	8424.1	8395.8	8381.6
22.5°	8499.6	8490.2	8461.9	8428.9	8391.1	8372.3	8353.3	8301.5	8277.8	8249.5	8244.8
25°	8339.2	8325.0	8296.7	8259.0	8240.0	8188.2	8169.3	8131.5	8122.1	8093.7	8089.1
27.5°	8093.7	8074.9	8041.9	7994.7	7961.6	7928.6	7909.8	7881.4	7872.0	7843.6	7839.0
30°	7725.7	7702.0	7636.0	7617.2	7560.5	7527.4	7527.4	7489.7	7494.4	7475.6	7475.6
32.5°	7145.2	7107.5	7055.5	7017.7	6980.0	6961.1	6961.1	6946.9	6956.4	6956.4	6965.9
35°	6375.9	6324.1	6295.7	6272.1	6272.1	6290.9	6347.6	6361.8	6390.1	6413.7	6432.6
37.5°	5389.5	5384.9	5417.9	5446.2	5517.0	5597.3	5696.3	5781.3	5861.5	5918.2	5974.7
40°	4323.0	4441.0	4535.3	4667.6	4776.0	4931.8	5111.1	5257.4	5394.2	5493.4	5597.3
42.5°	3374.3	3525.4	3723.6	3917.1	4110.6	4323.0	4559.0	4761.9	4941.2	5078.1	5186.6
45°	2628.7	2836.3	3077.1	3322.5	3572.6	3836.9	4082.3	4289.9	4478.7	4620.3	4728.9
47.5°	2119.0	2345.6	2619.2	2888.3	3171.4	3449.9	3723.6	3903.0	4058.6	4171.9	4271.1
50°	1750.9	1991.6	2279.5	2586.2	2869.4	3147.9	3383.8	3558.4	3685.9	3785.0	3846.3
52.5°	1463.0	1717.8	2024.6	2331.4	2614.5	2869.4	3081.8	3213.9	3317.8	3388.5	3445.1
55°	1208.1	1453.6	1741.5	2029.4	2307.8	2548.4	2723.1	2822.2	2902.4	2944.9	2977.9
57.5°	986.4	1212.9	1477.2	1741.5	1982.2	2180.4	2317.3	2416.3	2454.1	2487.1	2482.4
60°	774.0	986.4	1227.1	1453.6	1661.2	1821.6	1920.8	1977.4	2005.7	2019.9	2010.4
62.5°	608.8	802.3	986.4	1184.6	1335.6	1472.4	1566.9	1566.9	1581.0	1585.7	1599.9
65°	453.0	599.3	759.8	906.1	1028.8	1118.5	1170.5	1184.6	1203.5	1198.8	1189.3
67.5°	335.1	443.7	561.6	670.1	755.1	811.7	849.4	882.6	877.8	868.4	863.6
70°	231.3	302.1	405.9	472.0	533.3	590.0	599.3	604.1	608.8	613.5	604.1
72.5°	160.5	212.4	269.1	325.6	363.4	387.0	410.6	415.3	415.3	415.3	410.6
75°	80.3	108.5	160.5	184.1	217.1	226.6	245.4	245.4	259.6	240.7	235.9
77.5°	70.8	85.0	113.3	132.1	146.3	160.5	165.1	179.3	174.6	165.1	169.9
80°	42.5	52.0	70.8	80.3	99.1	103.8	108.5	113.3	108.5	113.3	113.3
82.5°	33.0	37.8	47.2	47.2	61.3	61.3	66.1	66.1	70.8	70.8	70.8
85°	18.8	33.0	28.3	56.6	37.8	37.8	47.2	56.6	47.2	47.2	56.6
87.5°	18.8	18.8	14.2	18.8	18.8	18.8	23.6	28.3	28.3	33.0	28.3
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: P249449

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8792.3	8792.3	8792.3	8792.3
2.5°	8806.5	8815.8	8801.7	8797.0
5°	8820.5	8820.5	8811.2	8811.2
7.5°	8820.5	8820.5	8806.5	8797.0
10°	8782.8	8782.8	8768.7	8759.2
12.5°	8712.0	8712.0	8707.3	8693.2
15°	8622.4	8622.4	8603.5	8589.4
17.5°	8499.6	8509.1	8485.5	8485.5
20°	8367.5	8362.8	8344.0	8334.5
22.5°	8230.7	8221.2	8216.5	8188.2
25°	8084.4	8074.9	8060.7	8046.6
27.5°	7834.3	7829.5	7815.3	7796.5
30°	7451.9	7447.2	7428.4	7428.4
32.5°	6956.4	6951.7	6932.9	6937.6
35°	6442.0	6460.9	6451.4	6432.6
37.5°	6012.5	6026.7	6036.2	6026.7
40°	5653.8	5696.3	5701.1	5710.5
42.5°	5271.6	5328.2	5347.1	5356.5
45°	4813.7	4865.7	4908.2	4898.7
47.5°	4346.5	4384.3	4422.1	4393.8
50°	3898.2	3921.8	3936.0	3936.0
52.5°	3473.5	3473.5	3468.8	3473.5
55°	2987.4	2987.4	2968.5	2977.9
57.5°	2477.7	2487.1	2472.9	2449.4
60°	2005.7	1982.2	1972.7	1958.6
62.5°	1562.2	1562.2	1529.1	1571.5
65°	1170.5	1156.3	1142.1	1137.3
67.5°	849.4	844.8	830.6	825.9
70°	599.3	580.5	575.8	566.3
72.5°	401.2	401.2	391.7	391.7
75°	245.4	221.8	217.1	221.8
77.5°	169.9	165.1	165.1	160.5
80°	113.3	108.5	118.0	103.8
82.5°	70.8	75.5	70.8	75.5
85°	47.2	56.6	52.0	52.0
87.5°	28.3	28.3	28.3	28.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)