

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: P249441

Luminaire Tested: **LD8B200D010 ER8B200840 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249441
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: LD8B200D010 ER8B200840 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19265.0 lumens
Efficiency: N/A
Efficacy: 86.3 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

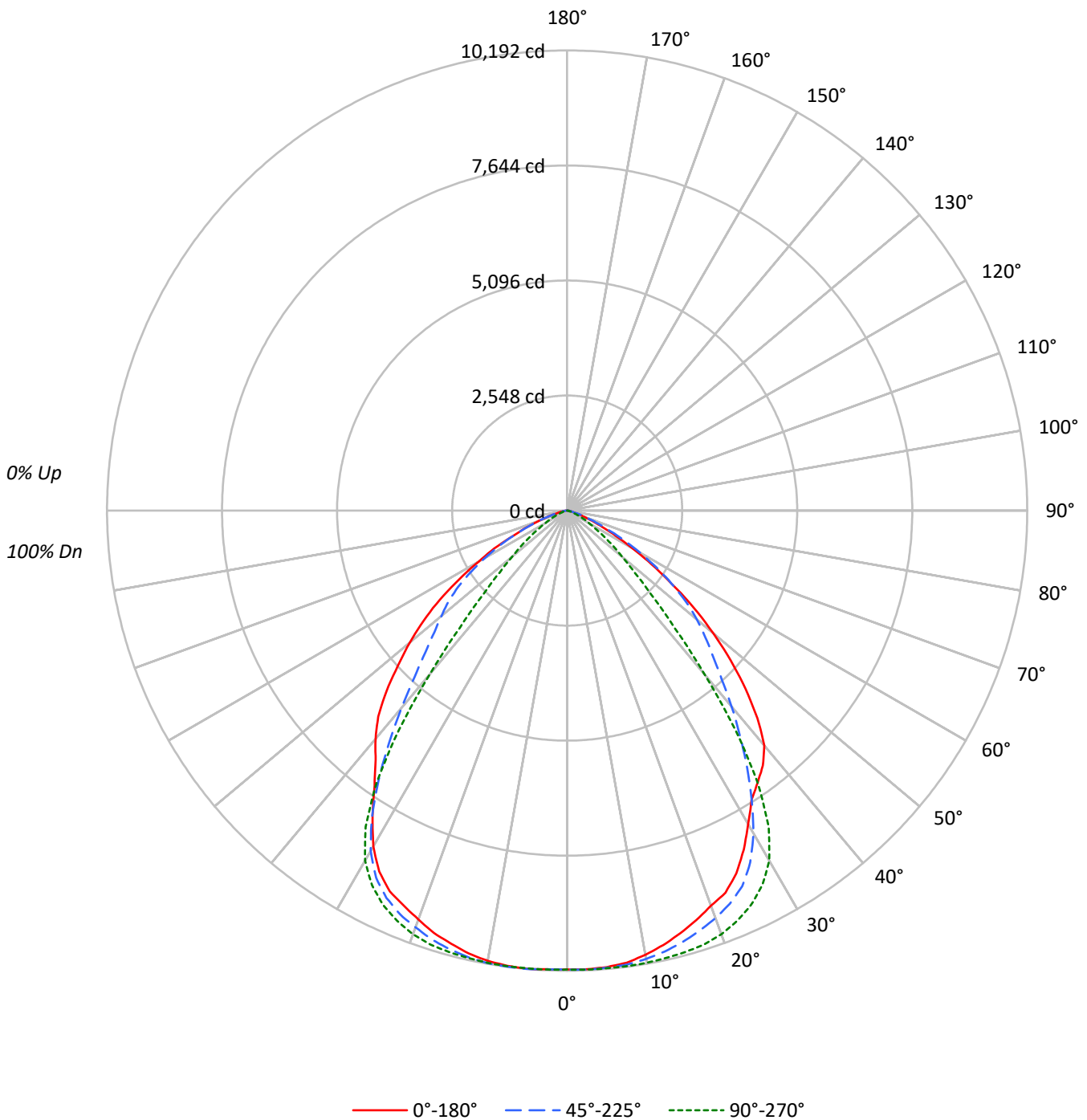
Input Watts (W): 223.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	313439	313439	313439
5°	314128	314973	315314
10°	312807	318446	317078
15°	309341	323101	317006
20°	305625	327645	316189
25°	301658	328023	316513
30°	285388	318798	305783
35°	276865	277069	279945
40°	273437	190635	265753
45°	243644	114448	246976
50°	202589	76166	218295
55°	151941	52509	185085
60°	102969	34993	139645
65°	62108	22699	95934
70°	34432	12298	59027
75°	15608	5207	30560
80°	13567	5807	21310
85°	15461	7713	21264



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	970.1	5.0
10°-20°	2817.2	14.6
20°-30°	4276.0	22.2
30°-40°	4491.1	23.3
40°-50°	3367.1	17.5
50°-60°	2160.4	11.2
60°-70°	924.2	4.8
70°-80°	218.3	1.1
80°-90°	40.6	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°	8063.3	41.9
0°-40°	12554.3	65.2
0°-60°	18081.9	93.9
0°-90°	19265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19265.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10165	10165	10165	10165	10165	
5°	10148	10165	10176	10192	10186	964
15°	9690	9892	10121	10056	9930	2733
25°	8866	9177	9641	9466	9303	4050
35°	7355	6946	7360	7273	7437	4616
45°	5587	4567	2624	4436	5663	4279
55°	2826	2826	977	2946	3443	2564
65°	851	1004	311	1293	1315	909
75°	131	153	44	262	256	191
85°	44	27	22	44	60	46
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°	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6
2.5°	10170.1	10181.0	10175.5	10175.5	10170.1	10175.5	10175.5	10186.5	10186.5	10175.5	10170.1
5°	10148.2	10159.1	10159.1	10148.2	10148.2	10175.5	10159.1	10170.1	10170.1	10164.6	10164.6
7.5°	10099.2	10099.2	10120.9	10104.6	10104.6	10120.9	10115.5	10126.4	10137.4	10142.8	10142.8
10°	9990.0	10000.9	10006.4	10006.4	10011.9	10028.2	10039.1	10061.0	10071.8	10082.8	10088.2
12.5°	9853.7	9870.0	9875.4	9870.0	9886.4	9908.1	9935.5	9962.7	9979.2	10000.9	10017.3
15°	9689.9	9689.9	9700.8	9717.2	9728.2	9760.9	9788.1	9820.8	9864.5	9891.8	9919.1
17.5°	9509.9	9520.9	9537.1	9537.1	9559.0	9613.5	9629.9	9679.0	9728.2	9755.4	9810.0
20°	9313.5	9324.3	9340.8	9351.7	9378.9	9422.6	9455.3	9499.0	9553.6	9602.7	9657.2
22.5°	9160.7	9138.9	9149.7	9160.7	9188.0	9226.2	9264.4	9318.9	9373.5	9422.6	9477.2
25°	8866.0	8871.5	8887.9	8898.7	8931.6	8964.3	9007.9	9073.4	9122.5	9177.1	9237.0
27.5°	8467.8	8473.3	8500.5	8500.5	8527.7	8582.3	8609.6	8664.2	8729.7	8784.2	8855.2
30°	8015.0	8025.8	8025.8	8047.7	8064.0	8091.3	8118.6	8173.2	8205.9	8255.0	8353.3
32.5°	7600.3	7611.1	7605.7	7600.3	7583.9	7578.4	7572.9	7583.9	7594.8	7611.1	7649.3
35°	7354.8	7327.4	7305.7	7267.5	7223.8	7169.2	7120.1	7054.7	6994.6	6945.5	6891.0
37.5°	7120.1	7114.6	7081.9	7027.3	6940.0	6841.9	6727.4	6585.4	6443.5	6290.8	6143.6
40°	6792.8	6776.4	6749.1	6672.8	6574.5	6454.5	6301.8	6127.1	5897.9	5663.4	5423.3
42.5°	6236.2	6241.7	6209.0	6148.9	6056.2	5941.6	5783.4	5592.5	5347.0	5068.6	4757.7
45°	5587.0	5587.0	5576.0	5526.9	5461.5	5368.7	5248.7	5090.5	4850.5	4566.7	4233.8
47.5°	4910.4	4915.9	4899.5	4888.7	4861.3	4801.3	4714.0	4594.0	4424.9	4152.0	3819.2
50°	4223.0	4223.0	4250.3	4244.8	4244.8	4223.0	4184.8	4113.8	3966.6	3748.3	3437.4
52.5°	3535.5	3546.4	3562.9	3584.6	3611.9	3655.5	3611.9	3579.1	3486.4	3317.2	3050.0
55°	2826.2	2837.2	2864.4	2902.6	2935.4	2979.1	2989.9	2989.9	2940.8	2826.2	2624.4
57.5°	2220.6	2204.2	2226.1	2258.8	2302.5	2346.1	2378.8	2417.0	2411.6	2335.2	2171.5
60°	1669.6	1675.0	1691.3	1724.2	1756.9	1795.0	1838.7	1871.4	1887.8	1849.6	1745.9
62.5°	1216.7	1216.7	1238.5	1271.2	1287.6	1342.2	1369.4	1385.9	1402.2	1396.7	1331.3
65°	851.2	862.0	873.0	889.4	905.7	938.4	954.8	987.5	998.5	1003.9	954.8
67.5°	600.2	583.8	594.7	605.6	622.0	643.9	676.6	676.6	692.9	692.9	660.2
70°	381.9	381.9	387.4	403.7	414.7	420.1	431.1	441.9	458.3	452.8	452.8
72.5°	256.5	251.0	256.5	261.9	267.4	283.7	283.7	289.2	300.1	305.6	283.7
75°	131.0	136.4	147.3	141.9	158.2	147.3	152.7	169.1	163.7	152.7	152.7
77.5°	109.1	109.1	109.1	103.7	114.5	114.5	109.1	120.0	114.5	114.5	109.1
80°	76.4	81.8	76.4	70.9	76.4	70.9	70.9	70.9	70.9	70.9	65.4
82.5°	60.1	49.1	54.6	49.1	54.6	54.6	49.1	43.7	43.7	49.1	43.7
85°	43.7	32.7	38.2	38.2	32.7	32.7	32.7	32.7	32.7	27.2	27.2
87.5°	27.2	16.4	16.4	16.4	21.8	21.8	21.8	16.4	21.8	21.8	10.9
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°	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6
2.5°	10181.0	10175.5	10186.5	10181.0	10181.0	10175.5	10181.0	10175.5	10186.5	10164.6	10170.1
5°	10181.0	10170.1	10175.5	10181.0	10186.5	10175.5	10175.5	10175.5	10186.5	10175.5	10181.0
7.5°	10159.1	10153.6	10170.1	10181.0	10175.5	10170.1	10181.0	10175.5	10186.5	10181.0	10191.8
10°	10115.5	10120.9	10131.9	10148.2	10153.6	10159.1	10170.1	10170.1	10186.5	10164.6	10175.5
12.5°	10050.0	10071.8	10099.2	10110.0	10131.9	10131.9	10142.8	10148.2	10159.1	10153.6	10170.1
15°	9968.2	9995.4	10028.2	10055.5	10082.8	10099.2	10115.5	10120.9	10137.4	10120.9	10126.4
17.5°	9870.0	9902.7	9951.8	9984.5	10028.2	10044.6	10066.3	10077.3	10093.7	10082.8	10088.2
20°	9733.5	9771.8	9826.3	9875.4	9902.7	9940.8	9968.2	9984.5	9995.4	9984.5	9990.0
22.5°	9542.6	9597.2	9668.1	9706.3	9760.9	9793.6	9799.1	9837.2	9864.5	9837.2	9848.2
25°	9318.9	9373.5	9428.1	9509.9	9559.0	9597.2	9635.4	9640.9	9668.1	9662.6	9657.2
27.5°	8947.9	9018.9	9111.5	9177.1	9242.5	9302.6	9346.2	9357.1	9384.4	9373.5	9378.9
30°	8440.4	8516.9	8604.2	8707.8	8800.6	8860.6	8915.2	8953.3	8980.6	8964.3	8958.8
32.5°	7720.3	7796.7	7889.5	7993.1	8102.3	8189.5	8255.0	8304.1	8336.8	8325.9	8298.7
35°	6896.5	6918.3	6978.3	7060.2	7152.8	7245.6	7305.7	7360.2	7398.3	7409.3	7409.3
37.5°	6050.8	5979.9	5936.2	5936.2	5990.7	6028.9	6083.5	6116.2	6176.3	6198.0	6214.4
40°	5232.3	5068.6	4915.9	4801.3	4725.0	4719.5	4719.5	4735.8	4790.4	4861.3	4926.8
42.5°	4501.2	4239.3	4004.7	3791.9	3639.2	3551.9	3513.7	3519.2	3562.9	3628.3	3737.3
45°	3917.4	3590.1	3295.5	3039.0	2831.7	2695.2	2629.8	2624.4	2657.1	2733.4	2853.6
47.5°	3464.6	3115.4	2782.6	2487.9	2264.3	2116.9	2040.6	2018.8	2040.6	2111.4	2253.4
50°	3088.1	2728.1	2384.3	2078.7	1838.7	1686.0	1615.0	1587.7	1615.0	1675.0	1816.8
52.5°	2738.9	2367.9	2046.0	1751.4	1494.9	1364.0	1287.6	1271.2	1287.6	1358.5	1473.2
55°	2335.2	2018.8	1702.3	1407.6	1184.0	1053.1	993.0	976.7	993.0	1058.5	1178.5
57.5°	1937.0	1664.1	1385.9	1118.5	927.6	812.9	758.4	736.5	774.7	818.4	960.3
60°	1565.8	1347.7	1113.0	878.4	720.2	616.5	572.9	567.4	578.3	632.9	731.1
62.5°	1227.7	1047.6	862.0	671.1	540.1	496.5	441.9	436.5	447.4	480.1	556.6
65°	883.9	769.4	627.5	491.0	387.4	327.3	305.6	311.1	321.9	343.8	414.7
67.5°	616.5	534.7	436.5	343.8	267.4	240.0	218.3	212.8	218.3	256.5	294.6
70°	414.7	365.5	294.6	261.9	185.6	147.3	152.7	136.4	158.2	158.2	190.9
72.5°	272.7	240.0	196.4	152.7	131.0	103.7	103.7	98.3	109.1	114.5	141.9
75°	141.9	109.1	109.1	76.4	54.6	27.2	49.1	43.7	38.2	43.7	54.6
77.5°	98.3	81.8	76.4	60.1	54.6	43.7	43.7	43.7	43.7	49.1	54.6
80°	60.1	60.1	43.7	38.2	32.7	27.2	32.7	32.7	32.7	32.7	38.2
82.5°	38.2	32.7	32.7	27.2	27.2	21.8	21.8	21.8	21.8	21.8	32.7
85°	32.7	21.8	21.8	16.4	21.8	38.2	16.4	21.8	21.8	21.8	16.4
87.5°	10.9	16.4	16.4	16.4	10.9	5.5	10.9	16.4	16.4	27.2	21.8
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°	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6	10164.6
2.5°	10181.0	10186.5	10186.5	10181.0	10181.0	10170.1	10191.8	10175.5	10181.0	10202.8	10186.5
5°	10191.8	10197.3	10197.3	10191.8	10191.8	10191.8	10197.3	10197.3	10191.8	10186.5	10197.3
7.5°	10213.7	10208.2	10208.2	10197.3	10197.3	10186.5	10197.3	10181.0	10191.8	10181.0	10197.3
10°	10186.5	10191.8	10186.5	10181.0	10181.0	10175.5	10175.5	10159.1	10164.6	10148.2	10159.1
12.5°	10170.1	10164.6	10164.6	10153.6	10142.8	10131.9	10126.4	10110.0	10110.0	10071.8	10088.2
15°	10126.4	10131.9	10115.5	10093.7	10082.8	10055.5	10044.6	10022.7	10000.9	9973.7	9979.2
17.5°	10088.2	10071.8	10050.0	10028.2	9984.5	9962.7	9940.8	9908.1	9897.2	9864.5	9853.7
20°	9973.7	9962.7	9935.5	9897.2	9870.0	9820.8	9799.1	9766.4	9739.0	9706.3	9689.9
22.5°	9826.3	9815.4	9782.6	9744.5	9700.8	9679.0	9657.2	9597.2	9569.9	9537.1	9531.7
25°	9640.9	9624.4	9591.7	9548.1	9526.2	9466.3	9444.4	9400.7	9389.9	9357.1	9351.7
27.5°	9357.1	9335.3	9297.1	9242.5	9204.3	9166.1	9144.4	9111.5	9100.7	9067.9	9062.5
30°	8931.6	8904.2	8827.9	8806.1	8740.5	8702.4	8702.4	8658.7	8664.2	8642.4	8642.4
32.5°	8260.5	8216.8	8156.7	8113.1	8069.4	8047.7	8047.7	8031.3	8042.2	8042.2	8053.1
35°	7371.1	7311.2	7278.3	7251.1	7251.1	7272.8	7338.4	7354.8	7387.5	7414.8	7436.6
37.5°	6230.7	6225.4	6263.6	6296.3	6378.1	6470.9	6585.4	6683.7	6776.4	6841.9	6907.3
40°	4997.7	5134.2	5243.2	5396.1	5521.4	5701.5	5908.9	6078.0	6236.2	6350.9	6470.9
42.5°	3901.0	4075.6	4304.9	4528.5	4752.2	4997.7	5270.6	5505.2	5712.5	5870.7	5996.2
45°	3039.0	3279.0	3557.4	3841.1	4130.2	4435.8	4719.5	4959.5	5177.8	5341.5	5467.0
47.5°	2449.7	2711.7	3028.1	3339.1	3666.5	3988.3	4304.9	4512.2	4692.1	4823.1	4937.8
50°	2024.1	2302.5	2635.3	2989.9	3317.2	3639.2	3912.0	4113.8	4261.2	4375.7	4446.6
52.5°	1691.3	1986.0	2340.7	2695.2	3022.6	3317.2	3562.9	3715.6	3835.6	3917.4	3982.9
55°	1396.7	1680.5	2013.3	2346.1	2668.0	2946.2	3148.1	3262.7	3355.4	3404.5	3442.7
57.5°	1140.4	1402.2	1707.7	2013.3	2291.5	2520.8	2679.0	2793.5	2837.2	2875.3	2869.9
60°	894.9	1140.4	1418.6	1680.5	1920.5	2106.0	2220.6	2286.1	2318.8	2335.2	2324.2
62.5°	703.8	927.6	1140.4	1369.4	1544.1	1702.3	1811.5	1811.5	1827.8	1833.2	1849.6
65°	523.7	692.9	878.4	1047.6	1189.4	1293.1	1353.2	1369.4	1391.3	1385.9	1374.9
67.5°	387.4	512.9	649.2	774.7	873.0	938.4	982.0	1020.3	1014.9	1003.9	998.5
70°	267.4	349.2	469.3	545.6	616.5	682.1	692.9	698.3	703.8	709.3	698.3
72.5°	185.6	245.5	311.1	376.5	420.1	447.4	474.7	480.1	480.1	480.1	474.7
75°	92.8	125.5	185.6	212.8	251.0	261.9	283.7	283.7	300.1	278.2	272.7
77.5°	81.8	98.3	131.0	152.7	169.1	185.6	190.9	207.3	201.9	190.9	196.4
80°	49.1	60.1	81.8	92.8	114.5	120.0	125.5	131.0	125.5	131.0	131.0
82.5°	38.2	43.7	54.6	54.6	70.9	70.9	76.4	76.4	81.8	81.8	81.8
85°	21.8	38.2	32.7	65.4	43.7	43.7	54.6	65.4	54.6	54.6	65.4
87.5°	21.8	21.8	16.4	21.8	21.8	21.8	27.2	32.7	32.7	38.2	32.7
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: P249441

CATALOG NUMBER: LD8B200D010 ER8B200840 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	10164.6	10164.6	10164.6	10164.6
2.5°	10181.0	10191.8	10175.5	10170.1
5°	10197.3	10197.3	10186.5	10186.5
7.5°	10197.3	10197.3	10181.0	10170.1
10°	10153.6	10153.6	10137.4	10126.4
12.5°	10071.8	10071.8	10066.3	10050.0
15°	9968.2	9968.2	9946.3	9930.0
17.5°	9826.3	9837.2	9810.0	9810.0
20°	9673.6	9668.1	9646.3	9635.4
22.5°	9515.4	9504.4	9499.0	9466.3
25°	9346.2	9335.3	9318.9	9302.6
27.5°	9057.1	9051.6	9035.2	9013.4
30°	8615.1	8609.6	8587.8	8587.8
32.5°	8042.2	8036.7	8015.0	8020.4
35°	7447.5	7469.4	7458.4	7436.6
37.5°	6951.0	6967.4	6978.3	6967.4
40°	6536.3	6585.4	6590.9	6601.9
42.5°	6094.4	6159.8	6181.7	6192.6
45°	5565.1	5625.2	5674.3	5663.4
47.5°	5025.0	5068.6	5112.3	5079.6
50°	4506.7	4533.9	4550.4	4550.4
52.5°	4015.7	4015.7	4010.2	4015.7
55°	3453.7	3453.7	3431.9	3442.7
57.5°	2864.4	2875.3	2858.9	2831.7
60°	2318.8	2291.5	2280.6	2264.3
62.5°	1806.0	1806.0	1767.8	1816.8
65°	1353.2	1336.7	1320.3	1314.8
67.5°	982.0	976.7	960.3	954.8
70°	692.9	671.1	665.6	654.7
72.5°	463.8	463.8	452.8	452.8
75°	283.7	256.5	251.0	256.5
77.5°	196.4	190.9	190.9	185.6
80°	131.0	125.5	136.4	120.0
82.5°	81.8	87.3	81.8	87.3
85°	54.6	65.4	60.1	60.1
87.5°	32.7	32.7	32.7	32.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)