

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: P249716

Luminaire Tested: **LSR8B100D010 EC8B100835 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249716
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B100D010 EC8B100835 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11498.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

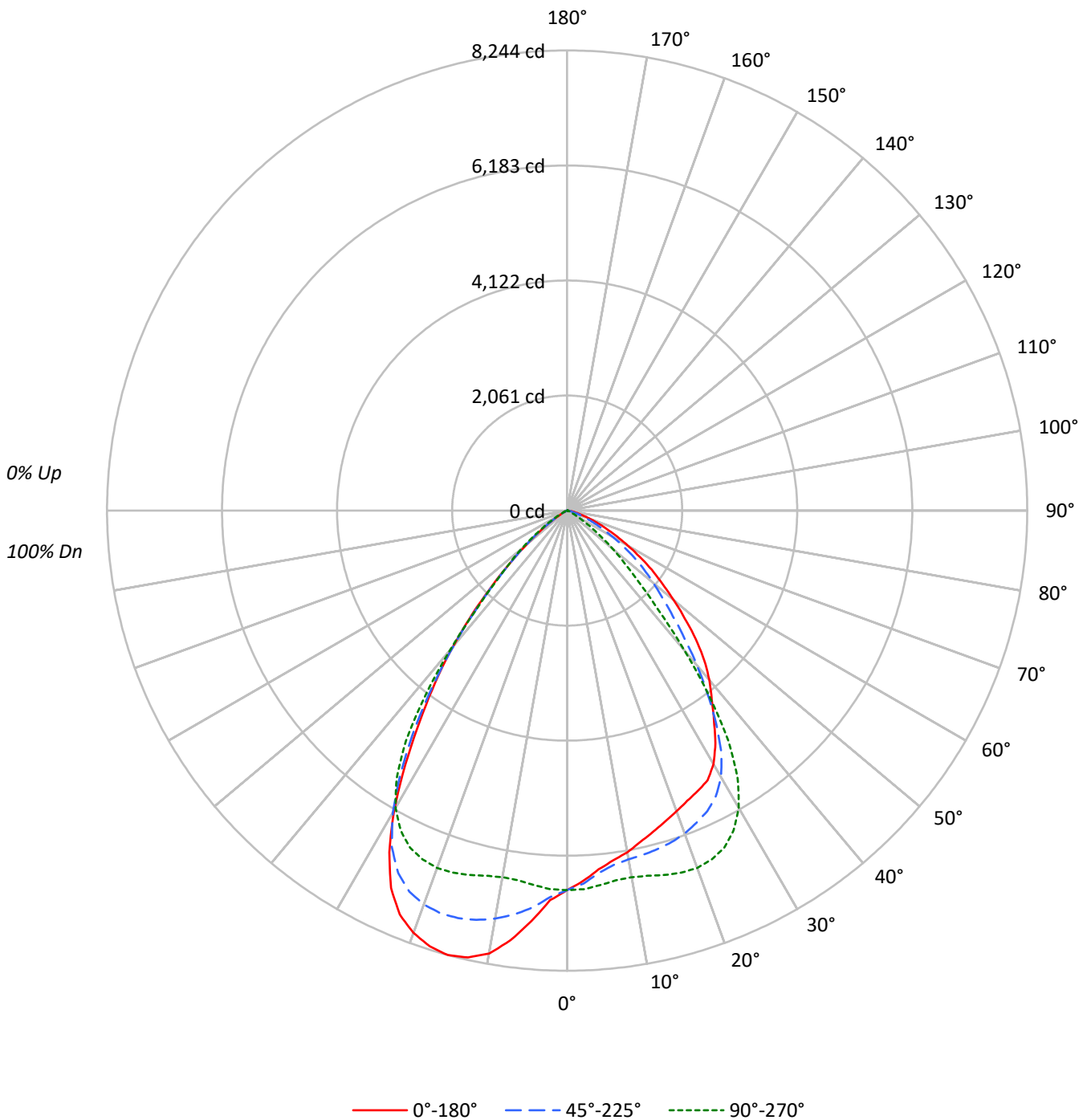
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249716

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBSWOLI

Luminous Intensity Polar Plot





TEST NUMBER: P249716

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBSW0LI

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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	209650	209650	209650
5°	199731	208482	228550
10°	194582	208804	252278
15°	190169	215727	263192
20°	188074	223522	264180
25°	188517	226679	253915
30°	186768	218896	220819
35°	172580	189441	172817
40°	159478	131341	128144
45°	142009	79251	81881
50°	119491	51057	46337
55°	99410	28010	21182
60°	77590	12143	6661
65°	57256	6027	3247
70°	39814	3724	1425
75°	24222	763	0
80°	17492	1137	0
85°	11251	1097	0



TEST NUMBER: P249716

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBSWOLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	653.6	5.7
10°-20°	1956.1	17.0
20°-30°	2995.6	26.1
30°-40°	2936.7	25.5
40°-50°	1768.5	15.4
50°-60°	814.0	7.1
60°-70°	285.9	2.5
70°-80°	74.8	0.7
80°-90°	12.7	0.1
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°	5605.4	48.8
0°-40°	8542.1	74.3
0°-60°	11124.5	96.8
0°-90°	11498.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11498.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6799	6799	6799	6799	6799	
5°	6452	6513	6735	7139	7384	609
15°	5957	6278	6758	7558	8244	1683
25°	5541	5941	6662	7164	7463	2552
35°	4584	4648	5032	4743	4591	2871
45°	3256	2681	1817	1830	1878	2497
55°	1849	1465	521	410	394	1650
65°	785	543	83	41	44	799
75°	203	118	6	0	0	247
85°	32	16	3	0	0	44
90°	0	0	0	0	0	



TEST NUMBER: P249716

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBSWOLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8
2.5°	6639.9	6646.3	6646.3	6646.3	6659.0	6662.3	6659.0	6662.3	6668.5	6690.8	6700.3
5°	6452.5	6443.0	6449.4	6446.1	6462.1	6471.6	6465.2	6474.7	6497.0	6512.9	6528.8
7.5°	6319.1	6319.1	6319.1	6325.4	6335.0	6354.0	6350.9	6357.2	6379.4	6401.6	6423.9
10°	6214.3	6211.1	6211.1	6226.9	6239.6	6261.9	6268.3	6287.4	6315.9	6344.5	6369.9
12.5°	6077.6	6080.9	6096.7	6112.6	6141.2	6176.1	6195.2	6220.7	6265.1	6312.7	6341.4
15°	5956.9	5960.0	5972.9	6004.5	6039.5	6080.9	6122.1	6163.4	6217.4	6277.8	6328.7
17.5°	5839.3	5842.5	5852.0	5887.1	5931.5	5985.5	6033.1	6087.1	6157.1	6226.9	6290.5
20°	5731.3	5728.2	5744.0	5775.8	5833.1	5883.8	5931.5	5995.1	6071.3	6157.1	6230.1
22.5°	5626.5	5626.5	5642.4	5674.2	5725.1	5775.8	5826.7	5893.3	5969.6	6052.2	6138.0
25°	5540.7	5537.5	5559.8	5575.7	5613.8	5664.6	5718.6	5772.7	5848.9	5941.1	6023.6
27.5°	5448.6	5445.5	5448.6	5467.7	5502.6	5540.7	5582.0	5629.7	5693.3	5769.5	5848.9
30°	5245.3	5248.4	5248.4	5264.4	5283.4	5324.6	5346.9	5394.6	5451.7	5515.3	5585.3
32.5°	4943.4	4946.6	4946.6	4953.0	4968.8	4987.9	5007.0	5041.9	5086.4	5140.4	5203.9
35°	4584.5	4584.5	4581.2	4584.5	4594.0	4594.0	4609.9	4594.0	4616.3	4648.0	4695.6
37.5°	4254.0	4247.6	4241.3	4234.9	4225.4	4209.6	4187.3	4149.2	4139.6	4126.9	4130.1
40°	3961.8	3958.6	3939.5	3923.6	3891.8	3853.8	3799.7	3733.1	3679.0	3615.5	3561.5
42.5°	3637.7	3634.5	3618.6	3590.0	3555.1	3497.9	3412.1	3323.2	3215.2	3119.9	3021.4
45°	3256.4	3265.9	3243.7	3211.9	3170.6	3116.6	3021.4	2913.3	2805.2	2681.4	2557.4
47.5°	2859.3	2856.1	2840.3	2821.2	2786.3	2732.3	2668.7	2551.2	2436.7	2322.5	2195.3
50°	2490.8	2478.1	2471.7	2452.7	2430.5	2386.0	2319.2	2223.9	2122.2	2014.2	1896.7
52.5°	2141.3	2141.3	2125.4	2112.7	2093.6	2058.7	2001.5	1925.3	1839.5	1737.8	1613.9
55°	1849.1	1842.7	1826.8	1810.9	1791.8	1769.6	1718.8	1655.3	1563.1	1464.6	1356.6
57.5°	1537.7	1534.4	1528.2	1509.1	1499.5	1477.3	1420.1	1356.6	1277.2	1191.4	1102.4
60°	1258.1	1245.4	1232.6	1219.9	1204.1	1181.9	1143.7	1089.7	1023.0	946.8	857.8
62.5°	1007.2	1026.1	988.1	988.1	956.3	937.2	902.3	870.5	800.6	730.7	654.5
65°	784.7	784.7	768.8	756.1	737.0	714.8	679.9	648.1	597.2	543.2	489.2
67.5°	600.5	597.2	581.4	568.7	552.8	540.1	514.7	476.5	438.5	394.0	349.4
70°	441.6	438.5	435.2	413.0	400.3	384.5	365.4	340.0	311.4	279.6	238.3
72.5°	317.6	317.6	308.2	298.7	286.0	273.2	254.2	238.3	212.9	190.7	162.0
75°	203.3	200.2	200.2	184.3	184.3	165.2	152.5	142.9	130.2	117.6	92.2
77.5°	146.2	142.9	139.8	133.4	127.1	120.7	111.2	98.5	88.9	76.2	66.7
80°	98.5	92.2	88.9	88.9	79.4	76.2	79.4	60.4	57.1	47.6	41.3
82.5°	60.4	60.4	57.1	57.1	54.0	50.9	41.3	41.3	38.2	34.9	28.6
85°	31.8	41.3	28.6	31.8	28.6	31.8	28.6	22.2	19.1	15.8	15.8
87.5°	19.1	12.7	12.7	19.1	15.8	12.7	12.7	12.7	9.5	6.4	6.4
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: P249716

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8
2.5°	6694.0	6716.3	6713.0	6741.6	6751.2	6773.4	6773.4	6789.2	6798.8	6821.0	6840.1
5°	6535.2	6570.1	6579.6	6614.5	6643.2	6678.1	6700.3	6735.2	6767.0	6814.7	6859.2
7.5°	6436.7	6465.2	6484.3	6525.6	6557.4	6595.4	6633.6	6681.2	6725.7	6783.0	6846.5
10°	6389.0	6427.1	6455.7	6497.0	6535.2	6576.5	6614.5	6668.5	6719.4	6792.5	6862.3
12.5°	6376.3	6420.7	6455.7	6512.9	6551.0	6595.4	6639.9	6700.3	6754.3	6830.6	6910.1
15°	6376.3	6436.7	6484.3	6547.8	6592.3	6649.5	6697.2	6757.5	6817.9	6897.3	6973.5
17.5°	6363.6	6436.7	6497.0	6570.1	6627.2	6684.5	6744.8	6802.1	6865.5	6941.9	7027.5
20°	6312.7	6404.9	6477.9	6563.7	6624.1	6687.6	6748.1	6811.5	6878.3	6957.7	7030.8
22.5°	6223.8	6331.8	6414.5	6506.5	6576.5	6639.9	6700.3	6763.9	6837.0	6913.2	6989.5
25°	6106.2	6207.8	6296.9	6392.1	6462.1	6531.9	6589.2	6662.3	6729.0	6802.1	6862.3
27.5°	5928.3	6036.3	6122.1	6220.7	6284.1	6350.9	6398.5	6458.9	6522.5	6582.8	6630.5
30°	5661.5	5760.0	5848.9	5937.8	6001.4	6049.1	6099.8	6147.6	6188.9	6230.1	6271.4
32.5°	5270.6	5359.7	5445.5	5528.0	5578.9	5620.2	5658.2	5686.9	5709.1	5731.3	5734.5
35°	4733.8	4806.8	4860.8	4933.9	4981.6	5019.7	5019.7	5032.4	5029.2	5019.7	5010.1
37.5°	4133.3	4161.8	4184.1	4212.7	4215.8	4215.8	4196.9	4180.9	4155.6	4149.2	4130.1
40°	3507.5	3469.3	3440.7	3402.6	3380.4	3332.6	3291.4	3262.8	3221.5	3215.2	3208.8
42.5°	2913.3	2824.3	2745.0	2678.3	2602.0	2535.2	2474.9	2430.5	2398.7	2395.4	2398.7
45°	2430.5	2328.7	2211.2	2119.1	2033.3	1950.7	1871.3	1817.3	1788.7	1782.2	1788.7
47.5°	2065.1	1947.5	1833.1	1728.2	1636.2	1544.0	1464.6	1391.5	1356.6	1347.0	1343.9
50°	1776.0	1655.3	1534.4	1426.4	1324.8	1232.6	1134.2	1064.3	1019.9	1003.9	991.2
52.5°	1493.2	1385.2	1261.3	1150.1	1048.4	940.4	838.7	759.2	714.8	695.8	683.0
55°	1245.4	1137.4	1023.0	915.0	807.0	699.0	597.2	521.0	473.4	451.2	435.2
57.5°	994.4	892.8	794.3	686.3	597.2	492.5	390.7	324.0	282.7	257.4	244.7
60°	768.8	689.4	603.6	514.7	428.9	343.1	260.5	196.9	165.2	146.2	130.2
62.5°	581.4	514.7	457.4	381.2	314.5	241.4	178.0	127.1	98.5	82.6	76.2
65°	419.4	368.5	317.6	270.0	222.4	168.4	120.7	82.6	57.1	47.6	44.5
67.5°	298.7	257.4	219.2	187.4	152.5	120.7	85.8	57.1	44.5	38.2	34.9
70°	209.6	178.0	152.5	124.0	101.6	79.4	66.7	41.3	25.4	28.6	22.2
72.5°	139.8	117.6	104.9	85.8	69.8	57.1	41.3	28.6	28.6	22.2	19.1
75°	76.2	69.8	54.0	41.3	34.9	31.8	12.7	6.4	3.1	9.5	3.1
77.5°	54.0	47.6	41.3	34.9	28.6	22.2	12.7	12.7	9.5	12.7	6.4
80°	34.9	28.6	25.4	25.4	15.8	9.5	6.4	6.4	9.5	3.1	3.1
82.5°	22.2	19.1	15.8	15.8	15.8	9.5	9.5	9.5	9.5	6.4	6.4
85°	12.7	9.5	6.4	6.4	3.1	6.4	0.0	3.1	3.1	0.0	0.0
87.5°	6.4	3.1	3.1	3.1	3.1	0.0	0.0	3.1	0.0	3.1	0.0
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: P249716

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8	6798.8
2.5°	6852.8	6865.5	6881.4	6894.1	6922.8	6929.0	6941.9	6954.5	6964.1	6973.5	6976.8
5°	6897.3	6945.0	6989.5	7037.1	7097.5	7138.8	7186.4	7227.7	7269.0	7304.0	7329.3
7.5°	6910.1	6983.0	7049.9	7132.4	7221.3	7297.7	7377.1	7456.4	7539.1	7602.6	7656.6
10°	6935.4	7024.4	7110.2	7208.6	7323.0	7424.7	7523.1	7628.0	7732.9	7821.8	7901.3
12.5°	6979.9	7078.4	7170.6	7278.6	7396.1	7510.4	7618.4	7736.0	7847.3	7945.8	8034.7
15°	7053.0	7145.1	7234.1	7335.7	7453.3	7558.2	7666.2	7780.5	7891.8	7993.4	8076.0
17.5°	7100.6	7186.4	7275.3	7367.5	7466.0	7561.3	7662.9	7764.6	7866.3	7958.4	8034.7
20°	7100.6	7183.3	7249.9	7332.6	7424.7	7507.3	7589.9	7678.9	7767.8	7844.0	7917.1
22.5°	7043.5	7122.8	7173.7	7237.3	7316.6	7386.6	7431.1	7529.5	7596.2	7662.9	7716.9
25°	6910.1	6967.2	7008.5	7053.0	7116.6	7164.2	7202.3	7259.5	7326.2	7351.7	7389.7
27.5°	6668.5	6709.9	6732.1	6741.6	6773.4	6798.8	6805.2	6830.6	6859.2	6865.5	6881.4
30°	6287.4	6290.5	6280.9	6277.8	6261.9	6242.9	6239.6	6236.5	6223.8	6211.1	6214.3
32.5°	5712.2	5696.4	5658.2	5617.0	5575.7	5531.3	5505.8	5474.0	5454.9	5435.9	5413.7
35°	4968.8	4930.8	4876.8	4825.9	4778.3	4743.2	4686.1	4667.0	4648.0	4622.5	4616.3
37.5°	4095.2	4072.9	4022.1	3984.0	3958.6	3942.7	3914.0	3895.1	3895.1	3885.5	3879.1
40°	3192.8	3186.6	3167.5	3177.0	3164.3	3170.6	3167.5	3161.1	3177.0	3177.0	3183.4
42.5°	2395.4	2398.7	2408.2	2414.5	2433.6	2436.7	2452.7	2452.7	2462.2	2471.7	2478.1
45°	1782.2	1795.1	1795.1	1807.7	1826.8	1830.0	1836.3	1839.5	1845.8	1861.8	1868.0
47.5°	1337.5	1340.6	1340.6	1343.9	1350.2	1356.6	1353.5	1356.6	1366.1	1359.7	1366.1
50°	988.1	991.2	981.7	972.1	981.7	981.7	978.5	969.0	978.5	965.9	972.1
52.5°	673.6	670.3	660.8	664.0	657.6	654.5	654.5	648.1	648.1	648.1	635.4
55°	425.8	425.8	419.4	419.4	416.2	409.8	406.7	403.4	400.3	397.1	397.1
57.5°	238.3	241.4	232.0	228.7	232.0	228.7	222.4	222.4	222.4	212.9	219.2
60°	130.2	127.1	124.0	120.7	117.6	120.7	120.7	114.4	114.4	114.4	117.6
62.5°	69.8	69.8	66.7	66.7	63.6	63.6	69.8	60.4	63.6	60.4	63.6
65°	38.2	47.6	34.9	34.9	44.5	41.3	38.2	38.2	41.3	34.9	38.2
67.5°	41.3	28.6	25.4	28.6	25.4	25.4	25.4	31.8	28.6	22.2	28.6
70°	19.1	22.2	22.2	15.8	25.4	12.7	22.2	12.7	19.1	15.8	19.1
72.5°	19.1	19.1	19.1	12.7	19.1	12.7	15.8	15.8	12.7	12.7	19.1
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°	6.4	6.4	3.1	3.1	3.1	3.1	6.4	6.4	6.4	0.0	3.1
80°	6.4	6.4	0.0	3.1	0.0	0.0	3.1	0.0	3.1	0.0	6.4
82.5°	3.1	6.4	3.1	3.1	6.4	6.4	6.4	3.1	3.1	3.1	3.1
85°	0.0	3.1	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.0	3.1
87.5°	0.0	3.1	0.0	0.0	0.0	0.0	3.1	3.1	0.0	0.0	0.0
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: P249716

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6798.8	6798.8	6798.8	6798.8
2.5°	6979.9	6983.0	6989.5	6986.3
5°	7348.4	7373.9	7386.6	7383.5
7.5°	7694.7	7739.3	7764.6	7764.6
10°	7961.6	8012.5	8050.5	8056.9
12.5°	8104.5	8161.8	8212.7	8199.8
15°	8145.8	8203.1	8253.9	8244.3
17.5°	8098.2	8155.4	8193.6	8187.2
20°	7968.0	8015.6	8053.8	8050.5
22.5°	7764.6	7806.0	7837.7	7834.5
25°	7421.5	7450.2	7475.5	7462.8
27.5°	6894.1	6903.7	6919.5	6900.5
30°	6192.0	6198.3	6204.7	6201.6
32.5°	5404.1	5400.9	5394.6	5388.2
35°	4606.7	4606.7	4609.9	4590.8
37.5°	3882.3	3879.1	3888.7	3879.1
40°	3189.7	3186.6	3199.3	3183.4
42.5°	2487.6	2497.2	2500.3	2500.3
45°	1871.3	1874.4	1877.6	1877.6
47.5°	1366.1	1369.3	1385.2	1366.1
50°	965.9	969.0	972.1	965.9
52.5°	638.5	641.8	638.5	629.0
55°	390.7	394.0	394.0	394.0
57.5°	209.6	212.9	212.9	209.6
60°	114.4	111.2	114.4	108.0
62.5°	60.4	66.7	63.6	57.1
65°	38.2	38.2	38.2	44.5
67.5°	31.8	25.4	28.6	22.2
70°	19.1	22.2	22.2	15.8
72.5°	15.8	15.8	15.8	19.1
75°	0.0	0.0	0.0	0.0
77.5°	6.4	6.4	6.4	3.1
80°	3.1	0.0	3.1	0.0
82.5°	3.1	3.1	6.4	3.1
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)