

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: P249759

Luminaire Tested: **LSR8B120D010 EC8B120940 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249759
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: LSR8B120D010 EC8B120940 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11609.0 lumens
Efficiency: N/A
Efficacy: 98.1 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

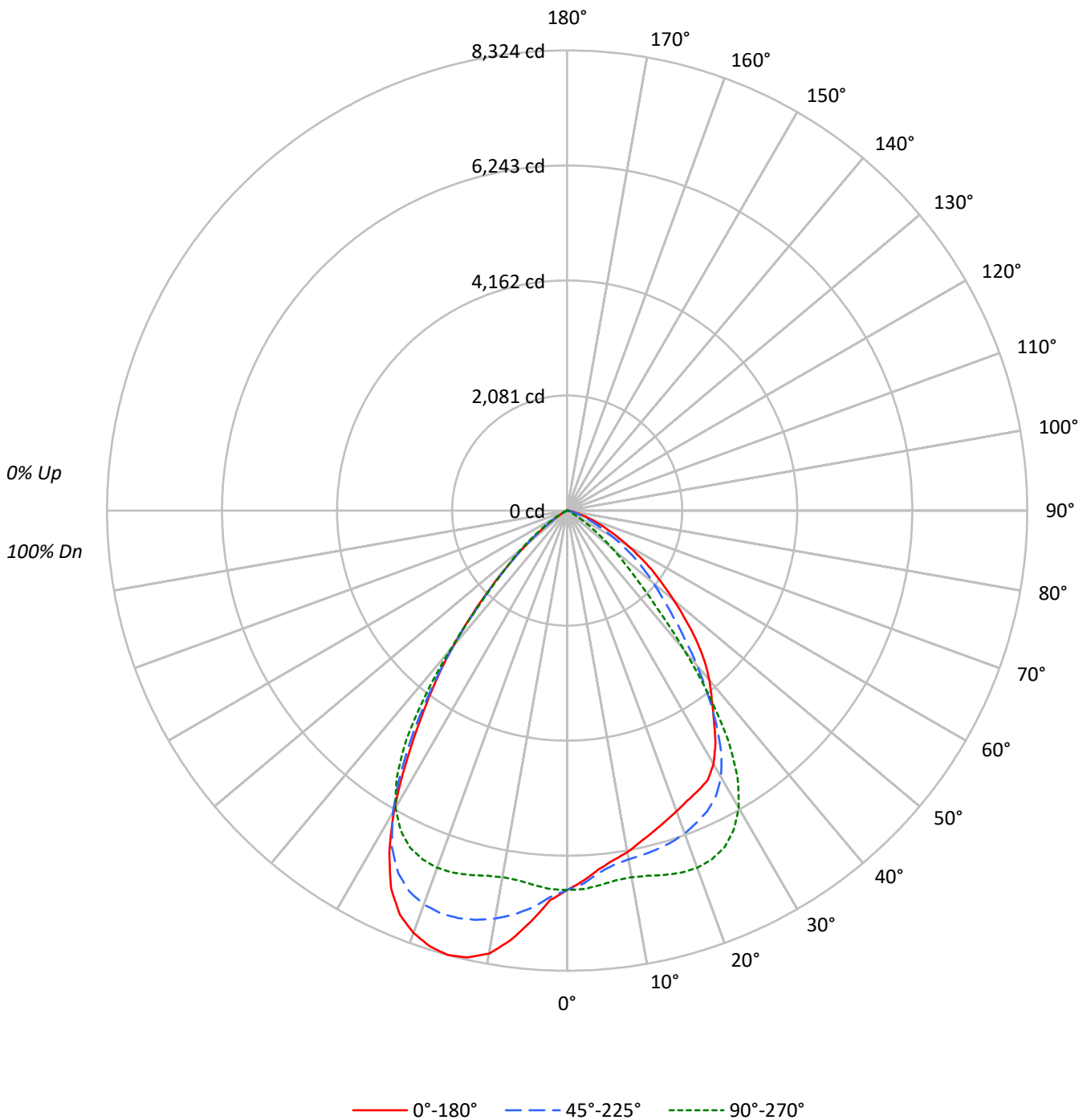
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	211673	211673	211673
5°	201660	210497	230754
10°	196458	210821	254714
15°	192004	217809	265733
20°	189892	225678	266729
25°	190338	228867	256368
30°	188570	221007	222948
35°	174244	191270	174485
40°	161016	132609	129384
45°	143378	80014	82670
50°	120642	51552	46783
55°	100367	28279	21386
60°	78343	12261	6728
65°	57810	6085	3276
70°	40202	3760	1443
75°	24460	774	0
80°	17651	1154	0
85°	11357	1132	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	659.9	5.7
10°-20°	1975.0	17.0
20°-30°	3024.5	26.1
30°-40°	2965.1	25.5
40°-50°	1785.6	15.4
50°-60°	821.8	7.1
60°-70°	288.7	2.5
70°-80°	75.5	0.7
80°-90°	12.9	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°	5659.5	48.8
0°-40°	8624.5	74.3
0°-60°	11231.9	96.8
0°-90°	11609.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11609.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6864	6864	6864	6864	6864	
5°	6515	6576	6800	7208	7455	615
15°	6014	6338	6823	7631	8324	1699
25°	5594	5998	6727	7233	7535	2577
35°	4629	4693	5081	4789	4635	2899
45°	3288	2707	1835	1848	1896	2521
55°	1867	1479	526	414	398	1666
65°	792	548	83	42	45	807
75°	205	119	6	0	0	249
85°	32	16	3	0	0	44
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°	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4
2.5°	6704.0	6710.5	6710.5	6710.5	6723.3	6726.6	6723.3	6726.6	6732.9	6755.4	6765.0
5°	6514.8	6505.2	6511.6	6508.3	6524.4	6534.1	6527.6	6537.3	6559.7	6575.8	6591.8
7.5°	6380.1	6380.1	6380.1	6386.5	6396.1	6415.4	6412.2	6418.6	6441.0	6463.4	6485.9
10°	6274.2	6271.1	6271.1	6287.1	6299.9	6322.3	6328.8	6348.1	6376.8	6405.8	6431.4
12.5°	6136.3	6139.6	6155.6	6171.7	6200.4	6235.7	6255.0	6280.7	6325.6	6373.7	6402.6
15°	6014.4	6017.6	6030.5	6062.5	6097.9	6139.6	6181.2	6222.9	6277.4	6338.4	6389.8
17.5°	5895.7	5898.9	5908.5	5943.9	5988.8	6043.3	6091.4	6145.9	6216.5	6287.1	6351.2
20°	5786.7	5783.5	5799.5	5831.5	5889.4	5940.6	5988.8	6053.0	6129.9	6216.5	6290.2
22.5°	5680.8	5680.8	5696.9	5729.0	5780.3	5831.5	5882.9	5950.2	6027.2	6110.7	6197.3
25°	5594.2	5591.0	5613.4	5629.5	5668.0	5719.3	5773.8	5828.4	5905.4	5998.4	6081.7
27.5°	5501.2	5498.0	5501.2	5520.5	5555.7	5594.2	5635.9	5684.1	5748.2	5825.2	5905.4
30°	5295.9	5299.1	5299.1	5315.2	5334.5	5376.0	5398.5	5446.7	5504.4	5568.5	5639.2
32.5°	4991.2	4994.3	4994.3	5000.8	5016.8	5036.1	5055.3	5090.6	5135.5	5190.0	5254.2
35°	4628.7	4628.7	4625.4	4628.7	4638.4	4638.4	4654.4	4638.4	4660.8	4692.9	4741.0
37.5°	4295.1	4288.6	4282.3	4275.8	4266.2	4250.2	4227.8	4189.2	4179.6	4166.8	4169.9
40°	4000.0	3996.8	3977.6	3961.5	3929.4	3891.0	3836.4	3769.1	3714.6	3650.4	3595.9
42.5°	3672.8	3669.5	3653.6	3624.6	3589.4	3531.7	3445.1	3355.3	3246.2	3150.0	3050.6
45°	3287.8	3297.5	3275.0	3242.9	3201.2	3146.7	3050.6	2941.4	2832.3	2707.3	2582.1
47.5°	2886.9	2883.7	2867.7	2848.4	2813.2	2758.7	2694.5	2575.8	2460.3	2344.9	2216.5
50°	2514.8	2502.0	2495.5	2476.4	2453.9	2409.0	2341.6	2245.3	2142.7	2033.7	1915.0
52.5°	2162.0	2162.0	2145.9	2133.1	2113.8	2078.6	2020.9	1943.9	1857.3	1754.6	1629.5
55°	1866.9	1860.4	1844.5	1828.4	1809.1	1786.6	1735.4	1671.2	1578.2	1478.7	1369.7
57.5°	1552.6	1549.3	1542.9	1523.6	1514.0	1491.6	1433.9	1369.7	1289.5	1202.9	1113.0
60°	1270.3	1257.5	1244.5	1231.7	1215.7	1193.3	1154.7	1100.2	1032.9	955.9	866.1
62.5°	1016.9	1036.0	997.6	997.6	965.5	946.3	911.0	878.9	808.3	737.8	660.8
65°	792.3	792.3	776.2	763.4	744.1	721.7	686.4	654.3	603.0	548.5	493.9
67.5°	606.3	603.0	587.0	574.2	558.1	545.3	519.7	481.1	442.7	397.8	352.8
70°	445.9	442.7	439.4	417.0	404.1	388.2	368.9	343.3	314.4	282.3	240.6
72.5°	320.7	320.7	311.2	301.6	288.8	275.8	256.7	240.6	214.9	192.5	163.6
75°	205.3	202.1	202.1	186.0	186.0	166.8	153.9	144.3	131.5	118.7	93.1
77.5°	147.6	144.3	141.1	134.7	128.3	121.9	112.2	99.4	89.8	77.0	67.3
80°	99.4	93.1	89.8	89.8	80.1	77.0	80.1	61.0	57.7	48.1	41.7
82.5°	61.0	61.0	57.7	57.7	54.5	51.4	41.7	41.7	38.6	35.3	28.9
85°	32.1	41.7	28.9	32.1	28.9	32.1	28.9	22.4	19.3	16.0	16.0
87.5°	19.3	12.8	12.8	19.3	16.0	12.8	12.8	12.8	9.6	6.5	6.5
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°	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4
2.5°	6758.7	6781.1	6777.8	6806.7	6816.4	6838.8	6838.8	6854.8	6864.4	6886.9	6906.1
5°	6598.3	6633.5	6643.1	6678.4	6707.3	6742.6	6765.0	6800.3	6832.3	6880.5	6925.4
7.5°	6498.8	6527.6	6546.9	6588.6	6620.7	6659.1	6697.7	6745.7	6790.6	6848.5	6912.6
10°	6450.6	6489.2	6518.0	6559.7	6598.3	6640.0	6678.4	6732.9	6784.3	6858.1	6928.6
12.5°	6437.8	6482.7	6518.0	6575.8	6614.2	6659.1	6704.0	6765.0	6819.5	6896.5	6976.8
15°	6437.8	6498.8	6546.9	6611.1	6655.9	6713.6	6761.8	6822.7	6883.7	6963.8	7040.8
17.5°	6425.0	6498.8	6559.7	6633.5	6691.2	6749.0	6809.9	6867.7	6931.8	7008.9	7095.3
20°	6373.7	6466.7	6540.4	6627.0	6688.0	6752.2	6813.2	6877.2	6944.7	7024.8	7098.6
22.5°	6283.9	6392.9	6476.4	6569.3	6640.0	6704.0	6765.0	6829.2	6903.0	6980.0	7056.9
25°	6165.2	6267.8	6357.7	6453.8	6524.4	6595.0	6652.8	6726.6	6793.9	6867.7	6928.6
27.5°	5985.5	6094.6	6181.2	6280.7	6344.8	6412.2	6460.3	6521.3	6585.4	6646.3	6694.5
30°	5716.2	5815.6	5905.4	5995.1	6059.3	6107.5	6158.7	6206.9	6248.6	6290.2	6331.9
32.5°	5321.5	5411.4	5498.0	5581.3	5632.7	5674.4	5712.9	5741.8	5764.2	5786.7	5789.8
35°	4779.5	4853.2	4907.7	4981.5	5029.7	5068.1	5068.1	5081.0	5077.8	5068.1	5058.5
37.5°	4173.2	4202.0	4224.5	4253.4	4256.5	4256.5	4237.4	4221.3	4195.7	4189.2	4169.9
40°	3541.3	3502.8	3473.9	3435.4	3413.0	3364.8	3323.2	3294.3	3252.6	3246.2	3239.8
42.5°	2941.4	2851.6	2771.5	2704.1	2627.2	2559.7	2498.8	2453.9	2421.8	2418.5	2421.8
45°	2453.9	2351.2	2232.5	2139.6	2053.0	1969.5	1889.4	1834.8	1805.9	1799.5	1805.9
47.5°	2085.0	1966.3	1850.8	1744.9	1652.0	1558.9	1478.7	1404.9	1369.7	1360.1	1356.9
50°	1793.1	1671.2	1549.3	1440.2	1337.6	1244.5	1145.1	1074.6	1029.7	1013.6	1000.8
52.5°	1507.7	1398.6	1273.4	1161.2	1058.5	949.4	846.8	766.6	721.7	702.5	689.6
55°	1257.5	1148.4	1032.9	923.8	814.8	705.7	603.0	526.0	478.0	455.5	439.4
57.5°	1004.0	901.4	802.0	692.9	603.0	497.2	394.5	327.2	285.5	259.8	247.0
60°	776.2	696.1	609.5	519.7	433.1	346.4	263.0	198.8	166.8	147.6	131.5
62.5°	587.0	519.7	461.8	384.9	317.5	243.7	179.7	128.3	99.4	83.4	77.0
65°	423.4	372.1	320.7	272.6	224.6	170.1	121.9	83.4	57.7	48.1	44.9
67.5°	301.6	259.8	221.3	189.2	153.9	121.9	86.6	57.7	44.9	38.6	35.3
70°	211.6	179.7	153.9	125.2	102.6	80.1	67.3	41.7	25.6	28.9	22.4
72.5°	141.1	118.7	105.9	86.6	70.5	57.7	41.7	28.9	28.9	22.4	19.3
75°	77.0	70.5	54.5	41.7	35.3	32.1	12.8	6.5	3.2	9.6	3.2
77.5°	54.5	48.1	41.7	35.3	28.9	22.4	12.8	12.8	9.6	12.8	6.5
80°	35.3	28.9	25.6	25.6	16.0	9.6	6.5	6.5	9.6	3.2	3.2
82.5°	22.4	19.3	16.0	16.0	16.0	9.6	9.6	9.6	9.6	6.5	6.5
85°	12.8	9.6	6.5	6.5	3.2	6.5	0.0	3.2	3.2	0.0	0.0
87.5°	6.5	3.2	3.2	3.2	3.2	0.0	0.0	3.2	0.0	3.2	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4	6864.4
2.5°	6919.0	6931.8	6947.9	6960.7	6989.6	6995.9	7008.9	7021.7	7031.3	7040.8	7044.1
5°	6963.8	7012.0	7056.9	7105.0	7166.0	7207.7	7255.8	7297.5	7339.2	7374.5	7400.1
7.5°	6976.8	7050.5	7117.9	7201.2	7291.0	7368.1	7448.3	7528.4	7611.9	7676.0	7730.5
10°	7002.4	7092.2	7178.8	7278.2	7393.7	7496.3	7595.7	7701.6	7807.5	7897.3	7977.6
12.5°	7047.3	7146.7	7239.8	7348.8	7467.5	7582.9	7692.0	7810.7	7923.1	8022.5	8112.3
15°	7121.1	7214.0	7304.0	7406.5	7525.2	7631.1	7740.2	7855.6	7967.9	8070.5	8154.0
17.5°	7169.2	7255.8	7345.5	7438.6	7538.0	7634.3	7736.9	7839.6	7942.2	8035.3	8112.3
20°	7169.2	7252.6	7319.9	7403.4	7496.3	7579.8	7663.2	7753.0	7842.8	7919.8	7993.6
22.5°	7111.5	7191.6	7243.0	7307.1	7387.3	7457.9	7502.8	7602.2	7669.6	7736.9	7791.4
25°	6976.8	7034.5	7076.2	7121.1	7185.3	7233.3	7271.9	7329.6	7396.9	7422.7	7461.1
27.5°	6732.9	6774.6	6797.1	6806.7	6838.8	6864.4	6870.9	6896.5	6925.4	6931.8	6947.9
30°	6348.1	6351.2	6341.6	6338.4	6322.3	6303.2	6299.9	6296.7	6283.9	6271.1	6274.2
32.5°	5767.4	5751.4	5712.9	5671.3	5629.5	5584.6	5558.9	5526.8	5507.5	5488.4	5466.0
35°	5016.8	4978.4	4923.8	4872.5	4824.4	4789.0	4731.3	4712.1	4692.9	4667.2	4660.8
37.5°	4134.7	4112.2	4060.9	4022.5	3996.8	3980.7	3951.8	3932.7	3932.7	3923.0	3916.6
40°	3223.7	3217.3	3198.1	3207.7	3194.9	3201.2	3198.1	3191.6	3207.7	3207.7	3214.2
42.5°	2418.5	2421.8	2431.5	2437.8	2457.1	2460.3	2476.4	2476.4	2486.0	2495.5	2502.0
45°	1799.5	1812.4	1812.4	1825.2	1844.5	1847.6	1854.0	1857.3	1863.6	1879.7	1886.1
47.5°	1350.4	1353.6	1353.6	1356.9	1363.2	1369.7	1366.5	1369.7	1379.3	1372.9	1379.3
50°	997.6	1000.8	991.2	981.5	991.2	991.2	988.0	978.4	988.0	975.2	981.5
52.5°	680.1	676.8	667.2	670.5	664.0	660.8	660.8	654.3	654.3	654.3	641.5
55°	429.9	429.9	423.4	423.4	420.3	413.8	410.6	407.3	404.1	401.0	401.0
57.5°	240.6	243.7	234.2	230.9	234.2	230.9	224.6	224.6	224.6	214.9	221.3
60°	131.5	128.3	125.2	121.9	118.7	121.9	121.9	115.5	115.5	115.5	118.7
62.5°	70.5	70.5	67.3	67.3	64.2	64.2	70.5	61.0	64.2	61.0	64.2
65°	38.6	48.1	35.3	35.3	44.9	41.7	38.6	38.6	41.7	35.3	38.6
67.5°	41.7	28.9	25.6	28.9	25.6	25.6	25.6	32.1	28.9	22.4	28.9
70°	19.3	22.4	22.4	16.0	25.6	12.8	22.4	12.8	19.3	16.0	19.3
72.5°	19.3	19.3	19.3	12.8	19.3	12.8	16.0	16.0	12.8	12.8	19.3
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°	6.5	6.5	3.2	3.2	3.2	3.2	6.5	6.5	6.5	0.0	3.2
80°	6.5	6.5	0.0	3.2	0.0	0.0	3.2	0.0	3.2	0.0	6.5
82.5°	3.2	6.5	3.2	3.2	6.5	6.5	6.5	3.2	3.2	3.2	3.2
85°	0.0	3.2	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0	3.2
87.5°	0.0	3.2	0.0	0.0	0.0	0.0	3.2	3.2	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: P249759

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6864.4	6864.4	6864.4	6864.4
2.5°	7047.3	7050.5	7056.9	7053.8
5°	7419.4	7445.1	7457.9	7454.7
7.5°	7769.0	7814.0	7839.6	7839.6
10°	8038.4	8089.8	8128.2	8134.7
12.5°	8182.8	8240.6	8291.9	8279.0
15°	8224.5	8282.3	8333.5	8323.9
17.5°	8176.4	8234.1	8272.7	8266.2
20°	8044.9	8093.0	8131.5	8128.2
22.5°	7839.6	7881.3	7913.4	7910.1
25°	7493.2	7522.1	7547.7	7534.9
27.5°	6960.7	6970.3	6986.3	6967.1
30°	6251.8	6258.1	6264.6	6261.4
32.5°	5456.3	5453.0	5446.7	5440.2
35°	4651.2	4651.2	4654.4	4635.1
37.5°	3919.7	3916.6	3926.2	3916.6
40°	3220.5	3217.3	3230.1	3214.2
42.5°	2511.6	2521.3	2524.4	2524.4
45°	1889.4	1892.5	1895.7	1895.7
47.5°	1379.3	1382.5	1398.6	1379.3
50°	975.2	978.4	981.5	975.2
52.5°	644.7	648.0	644.7	635.1
55°	394.5	397.8	397.8	397.8
57.5°	211.6	214.9	214.9	211.6
60°	115.5	112.2	115.5	109.1
62.5°	61.0	67.3	64.2	57.7
65°	38.6	38.6	38.6	44.9
67.5°	32.1	25.6	28.9	22.4
70°	19.3	22.4	22.4	16.0
72.5°	16.0	16.0	16.0	19.3
75°	0.0	0.0	0.0	0.0
77.5°	6.5	6.5	6.5	3.2
80°	3.2	0.0	3.2	0.0
82.5°	3.2	3.2	6.5	3.2
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)