

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: P249774

Luminaire Tested: **LSR8B150D010 EC8B1509727 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249774
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: LSR8B150D010 EC8B1509727 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11961.0 lumens
Efficiency: N/A
Efficacy: 75.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

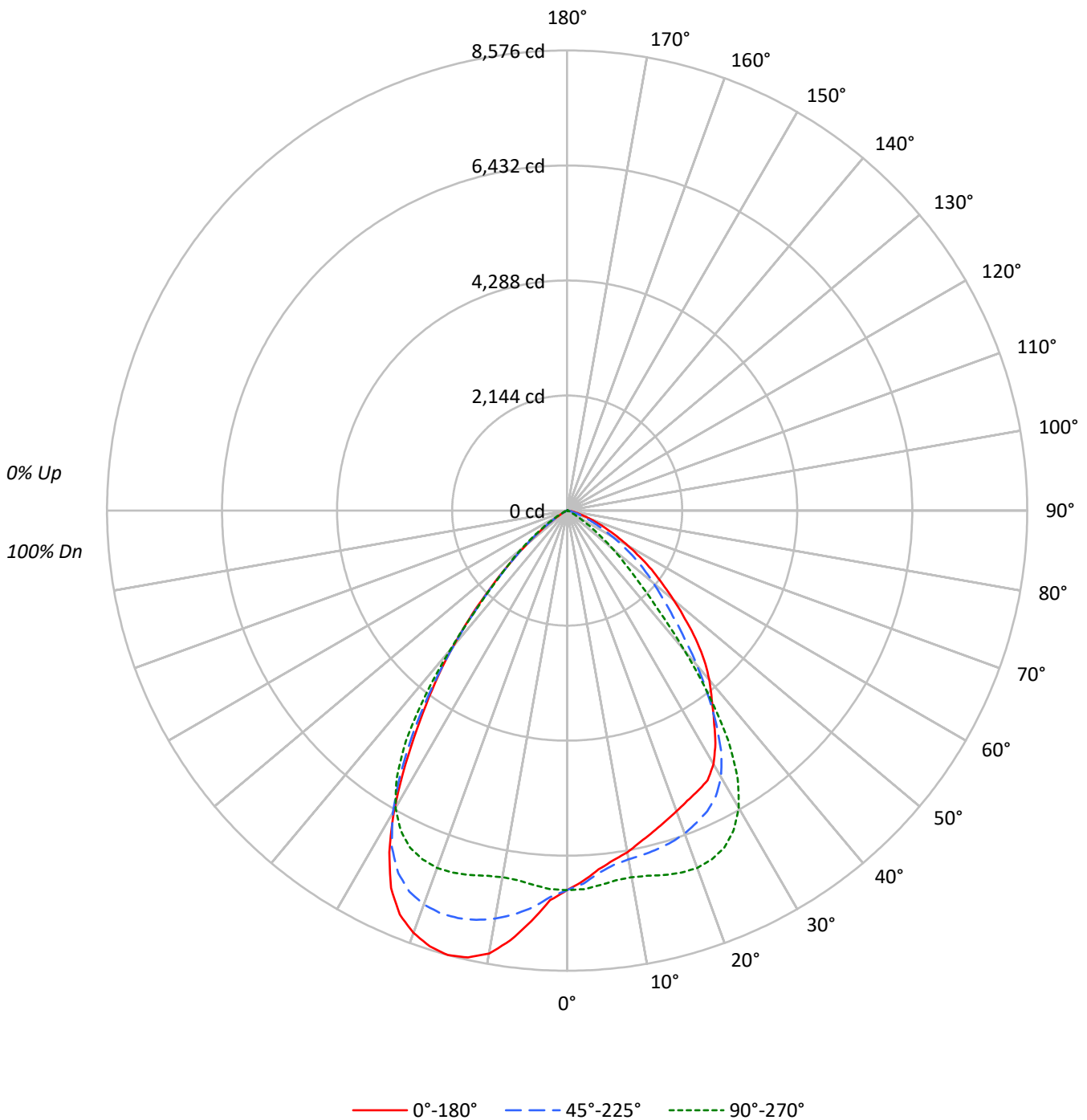
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0			
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91	91	91	91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82	82	82	82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73	73	73	73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66	66	66	66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60	60	60	60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54	54	54	54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49	49	49	49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45	45	45	45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42	42	42	42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38	38	38	38			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	679.9	5.7
10°-20°	2034.9	17.0
20°-30°	3116.2	26.1
30°-40°	3055.0	25.5
40°-50°	1839.7	15.4
50°-60°	846.8	7.1
60°-70°	297.5	2.5
70°-80°	77.8	0.7
80°-90°	13.3	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°	5831.1	48.8
0°-40°	8886.0	74.3
0°-60°	11572.5	96.8
0°-90°	11961.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11961.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7073	7073	7073	7073	7073	
5°	6712	6775	7006	7426	7681	634
15°	6197	6531	7030	7862	8576	1751
25°	5764	6180	6930	7453	7763	2655
35°	4769	4835	5235	4934	4776	2987
45°	3388	2789	1890	1904	1953	2598
55°	1924	1524	542	426	410	1716
65°	816	565	86	43	46	832
75°	212	122	7	0	0	256
85°	33	16	3	0	0	45
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°	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6
2.5°	6907.3	6913.9	6913.9	6913.9	6927.1	6930.5	6927.1	6930.5	6937.1	6960.2	6970.1
5°	6712.3	6702.4	6709.1	6705.7	6722.3	6732.2	6725.5	6735.5	6758.6	6775.2	6791.7
7.5°	6573.6	6573.6	6573.6	6580.1	6590.1	6609.9	6606.6	6613.2	6636.3	6659.4	6682.6
10°	6464.5	6461.2	6461.2	6477.7	6490.9	6514.0	6520.7	6540.5	6570.2	6600.0	6626.4
12.5°	6322.3	6325.7	6342.2	6358.8	6388.4	6424.8	6444.6	6471.2	6517.4	6566.9	6596.7
15°	6196.8	6200.0	6213.4	6246.3	6282.7	6325.7	6368.6	6411.6	6467.8	6530.6	6583.5
17.5°	6074.5	6077.7	6087.7	6124.1	6170.4	6226.6	6276.1	6332.3	6405.0	6477.7	6543.8
20°	5962.1	5958.9	5975.3	6008.4	6068.0	6120.7	6170.4	6236.5	6315.8	6405.0	6481.0
22.5°	5853.0	5853.0	5869.6	5902.7	5955.6	6008.4	6061.3	6130.7	6210.0	6295.9	6385.2
25°	5763.8	5760.5	5783.6	5800.2	5839.8	5892.7	5948.9	6005.1	6084.4	6180.3	6266.2
27.5°	5668.0	5664.7	5668.0	5687.9	5724.2	5763.8	5806.8	5856.4	5922.5	6001.8	6084.4
30°	5456.5	5459.7	5459.7	5476.3	5496.2	5539.0	5562.2	5611.8	5671.3	5737.4	5810.2
32.5°	5142.5	5145.8	5145.8	5152.4	5168.9	5188.8	5208.6	5244.9	5291.2	5347.4	5413.5
35°	4769.1	4769.1	4765.7	4769.1	4779.0	4779.0	4795.5	4779.0	4802.2	4835.2	4884.7
37.5°	4425.3	4418.7	4412.1	4405.5	4395.5	4379.1	4356.0	4316.2	4306.3	4293.1	4296.4
40°	4121.3	4118.0	4098.2	4081.6	4048.5	4008.9	3952.8	3883.4	3827.2	3761.1	3704.9
42.5°	3784.2	3780.8	3764.3	3734.6	3698.2	3638.8	3549.5	3457.0	3344.7	3245.5	3143.1
45°	3387.5	3397.5	3374.3	3341.3	3298.3	3242.1	3143.1	3030.6	2918.2	2789.4	2660.4
47.5°	2974.4	2971.1	2954.7	2934.8	2898.5	2842.3	2776.2	2653.9	2534.9	2416.0	2283.7
50°	2591.0	2577.9	2571.2	2551.5	2528.3	2482.1	2412.6	2313.4	2207.7	2095.3	1973.0
52.5°	2227.6	2227.6	2211.0	2197.8	2177.9	2141.6	2082.1	2002.8	1913.6	1807.8	1678.9
55°	1923.5	1916.9	1900.4	1883.8	1863.9	1840.8	1788.0	1721.9	1626.0	1523.6	1411.2
57.5°	1599.6	1596.2	1589.7	1569.8	1559.9	1536.8	1477.3	1411.2	1328.6	1239.4	1146.8
60°	1308.8	1295.6	1282.3	1269.1	1252.6	1229.5	1189.8	1133.6	1064.2	984.9	892.4
62.5°	1047.7	1067.5	1027.9	1027.9	994.8	975.0	938.6	905.6	832.8	760.2	680.9
65°	816.3	816.3	799.7	786.6	766.7	743.6	707.2	674.2	621.3	565.1	508.9
67.5°	624.7	621.3	604.8	591.6	575.0	561.8	535.4	495.7	456.1	409.9	363.5
70°	459.4	456.1	452.7	429.6	416.4	399.9	380.1	353.7	323.9	290.8	247.9
72.5°	330.4	330.4	320.6	310.7	297.5	284.2	264.5	247.9	221.5	198.3	168.5
75°	211.5	208.3	208.3	191.7	191.7	171.8	158.6	148.7	135.5	122.3	95.9
77.5°	152.1	148.7	145.4	138.8	132.2	125.6	115.6	102.4	92.5	79.3	69.4
80°	102.4	95.9	92.5	92.5	82.6	79.3	82.6	62.8	59.4	49.5	43.0
82.5°	62.8	62.8	59.4	59.4	56.2	52.9	43.0	43.0	39.7	36.3	29.8
85°	33.1	43.0	29.8	33.1	29.8	33.1	29.8	23.1	19.9	16.5	16.5
87.5°	19.9	13.2	13.2	19.9	16.5	13.2	13.2	13.2	9.9	6.7	6.7
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°	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6
2.5°	6963.6	6986.7	6983.3	7013.1	7023.0	7046.2	7046.2	7062.6	7072.6	7095.7	7115.6
5°	6798.3	6834.6	6844.6	6880.9	6910.7	6947.0	6970.1	7006.5	7039.5	7089.2	7135.4
7.5°	6695.9	6725.5	6745.4	6788.4	6821.4	6861.0	6900.8	6950.3	6996.5	7056.1	7122.2
10°	6646.2	6686.0	6715.6	6758.6	6798.3	6841.3	6880.9	6937.1	6990.0	7066.0	7138.7
12.5°	6633.0	6679.3	6715.6	6775.2	6814.8	6861.0	6907.3	6970.1	7026.3	7105.6	7188.3
15°	6633.0	6695.9	6745.4	6811.5	6857.8	6917.2	6966.9	7029.6	7092.4	7175.0	7254.3
17.5°	6619.8	6695.9	6758.6	6834.6	6894.1	6953.7	7016.4	7076.0	7141.9	7221.4	7310.5
20°	6566.9	6662.8	6738.7	6828.0	6890.8	6956.9	7019.8	7085.8	7155.3	7237.8	7313.9
22.5°	6474.4	6586.8	6672.8	6768.5	6841.3	6907.3	6970.1	7036.2	7112.3	7191.6	7270.9
25°	6352.1	6457.8	6550.5	6649.5	6722.3	6794.9	6854.5	6930.5	6999.9	7076.0	7138.7
27.5°	6167.0	6279.3	6368.6	6471.2	6537.1	6606.6	6656.2	6719.0	6785.1	6847.8	6897.5
30°	5889.5	5991.9	6084.4	6176.9	6243.0	6292.7	6345.5	6395.1	6438.1	6481.0	6523.9
32.5°	5482.9	5575.5	5664.7	5750.6	5803.5	5846.5	5886.1	5915.9	5939.0	5962.1	5965.4
35°	4924.4	5000.4	5056.5	5132.6	5182.2	5221.8	5221.8	5235.0	5231.7	5221.8	5211.9
37.5°	4299.8	4329.4	4352.6	4382.3	4385.6	4385.6	4365.9	4349.3	4322.9	4316.2	4296.4
40°	3648.7	3609.0	3579.2	3539.6	3516.5	3466.8	3424.0	3394.2	3351.2	3344.7	3338.0
42.5°	3030.6	2938.1	2855.5	2786.1	2706.8	2637.3	2574.6	2528.3	2495.3	2491.9	2495.3
45°	2528.3	2422.5	2300.2	2204.4	2115.2	2029.2	1946.7	1890.5	1860.7	1854.0	1860.7
47.5°	2148.3	2026.0	1906.9	1797.8	1702.1	1606.2	1523.6	1447.5	1411.2	1401.3	1398.0
50°	1847.5	1721.9	1596.2	1483.9	1378.2	1282.3	1179.8	1107.2	1060.9	1044.3	1031.1
52.5°	1553.4	1441.0	1312.1	1196.4	1090.6	978.2	872.5	789.8	743.6	723.8	710.5
55°	1295.6	1183.2	1064.2	951.8	839.5	727.1	621.3	542.0	492.4	469.3	452.7
57.5°	1034.4	928.7	826.3	713.9	621.3	512.3	406.5	337.1	294.1	267.7	254.5
60°	799.7	717.2	627.9	535.4	446.2	357.0	271.0	204.9	171.8	152.1	135.5
62.5°	604.8	535.4	475.8	396.5	327.2	251.1	185.1	132.2	102.4	86.0	79.3
65°	436.3	383.3	330.4	280.9	231.4	175.2	125.6	86.0	59.4	49.5	46.3
67.5°	310.7	267.7	228.0	194.9	158.6	125.6	89.2	59.4	46.3	39.7	36.3
70°	218.1	185.1	158.6	129.0	105.7	82.6	69.4	43.0	26.4	29.8	23.1
72.5°	145.4	122.3	109.1	89.2	72.6	59.4	43.0	29.8	29.8	23.1	19.9
75°	79.3	72.6	56.2	43.0	36.3	33.1	13.2	6.7	3.3	9.9	3.3
77.5°	56.2	49.5	43.0	36.3	29.8	23.1	13.2	13.2	9.9	13.2	6.7
80°	36.3	29.8	26.4	26.4	16.5	9.9	6.7	6.7	9.9	3.3	3.3
82.5°	23.1	19.9	16.5	16.5	16.5	9.9	9.9	9.9	9.9	6.7	6.7
85°	13.2	9.9	6.7	6.7	3.3	6.7	0.0	3.3	3.3	0.0	0.0
87.5°	6.7	3.3	3.3	3.3	3.3	0.0	0.0	3.3	0.0	3.3	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°	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6	7072.6
2.5°	7128.7	7141.9	7158.5	7171.7	7201.5	7208.1	7221.4	7234.6	7244.5	7254.3	7257.7
5°	7175.0	7224.7	7270.9	7320.4	7383.3	7426.3	7475.8	7518.8	7561.7	7598.1	7624.5
7.5°	7188.3	7264.2	7333.8	7419.6	7512.1	7591.5	7674.1	7756.7	7842.7	7908.8	7965.0
10°	7214.7	7307.2	7396.5	7498.9	7617.9	7723.6	7826.1	7935.2	8044.3	8136.8	8219.5
12.5°	7261.0	7363.4	7459.3	7571.7	7694.0	7812.9	7925.2	8047.5	8163.3	8265.7	8358.2
15°	7337.0	7432.8	7525.4	7631.1	7753.4	7862.5	7974.9	8093.8	8209.5	8315.2	8401.2
17.5°	7386.5	7475.8	7568.3	7664.2	7766.6	7865.8	7971.5	8077.3	8183.0	8278.9	8358.2
20°	7386.5	7472.5	7541.9	7627.9	7723.6	7809.6	7895.6	7988.1	8080.6	8159.9	8235.9
22.5°	7327.1	7409.7	7462.6	7528.7	7611.3	7684.0	7730.3	7832.7	7902.1	7971.5	8027.7
25°	7188.3	7247.8	7290.8	7337.0	7403.1	7452.6	7492.4	7551.8	7621.2	7647.7	7687.3
27.5°	6937.1	6980.1	7003.2	7013.1	7046.2	7072.6	7079.2	7105.6	7135.4	7141.9	7158.5
30°	6540.5	6543.8	6533.9	6530.6	6514.0	6494.3	6490.9	6487.6	6474.4	6461.2	6464.5
32.5°	5942.3	5925.8	5886.1	5843.2	5800.2	5754.0	5727.5	5694.4	5674.5	5654.8	5631.7
35°	5168.9	5129.3	5073.1	5020.2	4970.7	4934.2	4874.8	4854.9	4835.2	4808.7	4802.2
37.5°	4260.1	4236.9	4184.0	4144.4	4118.0	4101.4	4071.6	4051.9	4051.9	4042.0	4035.3
40°	3321.4	3314.9	3295.0	3305.0	3291.8	3298.3	3295.0	3288.4	3305.0	3305.0	3311.6
42.5°	2491.9	2495.3	2505.2	2511.7	2531.6	2534.9	2551.5	2551.5	2561.4	2571.2	2577.9
45°	1854.0	1867.3	1867.3	1880.5	1900.4	1903.7	1910.2	1913.6	1920.1	1936.7	1943.3
47.5°	1391.4	1394.6	1394.6	1398.0	1404.6	1411.2	1408.0	1411.2	1421.2	1414.5	1421.2
50°	1027.9	1031.1	1021.2	1011.3	1021.2	1021.2	1017.9	1008.0	1017.9	1004.8	1011.3
52.5°	700.7	697.3	687.4	690.8	684.1	680.9	680.9	674.2	674.2	674.2	661.0
55°	442.9	442.9	436.3	436.3	433.0	426.3	423.1	419.7	416.4	413.1	413.1
57.5°	247.9	251.1	241.3	237.9	241.3	237.9	231.4	231.4	231.4	221.5	228.0
60°	135.5	132.2	129.0	125.6	122.3	125.6	125.6	119.0	119.0	119.0	122.3
62.5°	72.6	72.6	69.4	69.4	66.1	66.1	72.6	62.8	66.1	62.8	66.1
65°	39.7	49.5	36.3	36.3	46.3	43.0	39.7	39.7	43.0	36.3	39.7
67.5°	43.0	29.8	26.4	29.8	26.4	26.4	26.4	33.1	29.8	23.1	29.8
70°	19.9	23.1	23.1	16.5	26.4	13.2	23.1	13.2	19.9	16.5	19.9
72.5°	19.9	19.9	19.9	13.2	19.9	13.2	16.5	16.5	13.2	13.2	19.9
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°	6.7	6.7	3.3	3.3	3.3	3.3	6.7	6.7	6.7	0.0	3.3
80°	6.7	6.7	0.0	3.3	0.0	0.0	3.3	0.0	3.3	0.0	6.7
82.5°	3.3	6.7	3.3	3.3	6.7	6.7	6.7	3.3	3.3	3.3	3.3
85°	0.0	3.3	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	3.3
87.5°	0.0	3.3	0.0	0.0	0.0	0.0	3.3	3.3	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: P249774

CATALOG NUMBER: LSR8B150D010 EC8B1509727 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7072.6	7072.6	7072.6	7072.6
2.5°	7261.0	7264.2	7270.9	7267.6
5°	7644.3	7670.8	7684.0	7680.8
7.5°	8004.5	8050.9	8077.3	8077.3
10°	8282.2	8335.1	8374.7	8381.4
12.5°	8430.9	8490.5	8543.4	8530.0
15°	8473.9	8533.4	8586.2	8576.3
17.5°	8424.3	8483.8	8523.5	8516.8
20°	8288.8	8338.4	8378.1	8374.7
22.5°	8077.3	8120.3	8153.4	8150.0
25°	7720.4	7750.2	7776.5	7763.3
27.5°	7171.7	7181.7	7198.1	7178.4
30°	6441.4	6447.9	6454.6	6451.3
32.5°	5621.8	5618.4	5611.8	5605.2
35°	4792.2	4792.2	4795.5	4775.6
37.5°	4038.6	4035.3	4045.3	4035.3
40°	3318.2	3314.9	3328.1	3311.6
42.5°	2587.8	2597.7	2601.0	2601.0
45°	1946.7	1949.9	1953.2	1953.2
47.5°	1421.2	1424.4	1441.0	1421.2
50°	1004.8	1008.0	1011.3	1004.8
52.5°	664.3	667.7	664.3	654.3
55°	406.5	409.9	409.9	409.9
57.5°	218.1	221.5	221.5	218.1
60°	119.0	115.6	119.0	112.4
62.5°	62.8	69.4	66.1	59.4
65°	39.7	39.7	39.7	46.3
67.5°	33.1	26.4	29.8	23.1
70°	19.9	23.1	23.1	16.5
72.5°	16.5	16.5	16.5	19.9
75°	0.0	0.0	0.0	0.0
77.5°	6.7	6.7	6.7	3.3
80°	3.3	0.0	3.3	0.0
82.5°	3.3	3.3	6.7	3.3
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)