

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: P249703

Luminaire Tested: **LSR8B120D010 EC8B120827 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249703
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 EC8B120827 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12228.0 lumens
Efficiency: N/A
Efficacy: 103.4 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

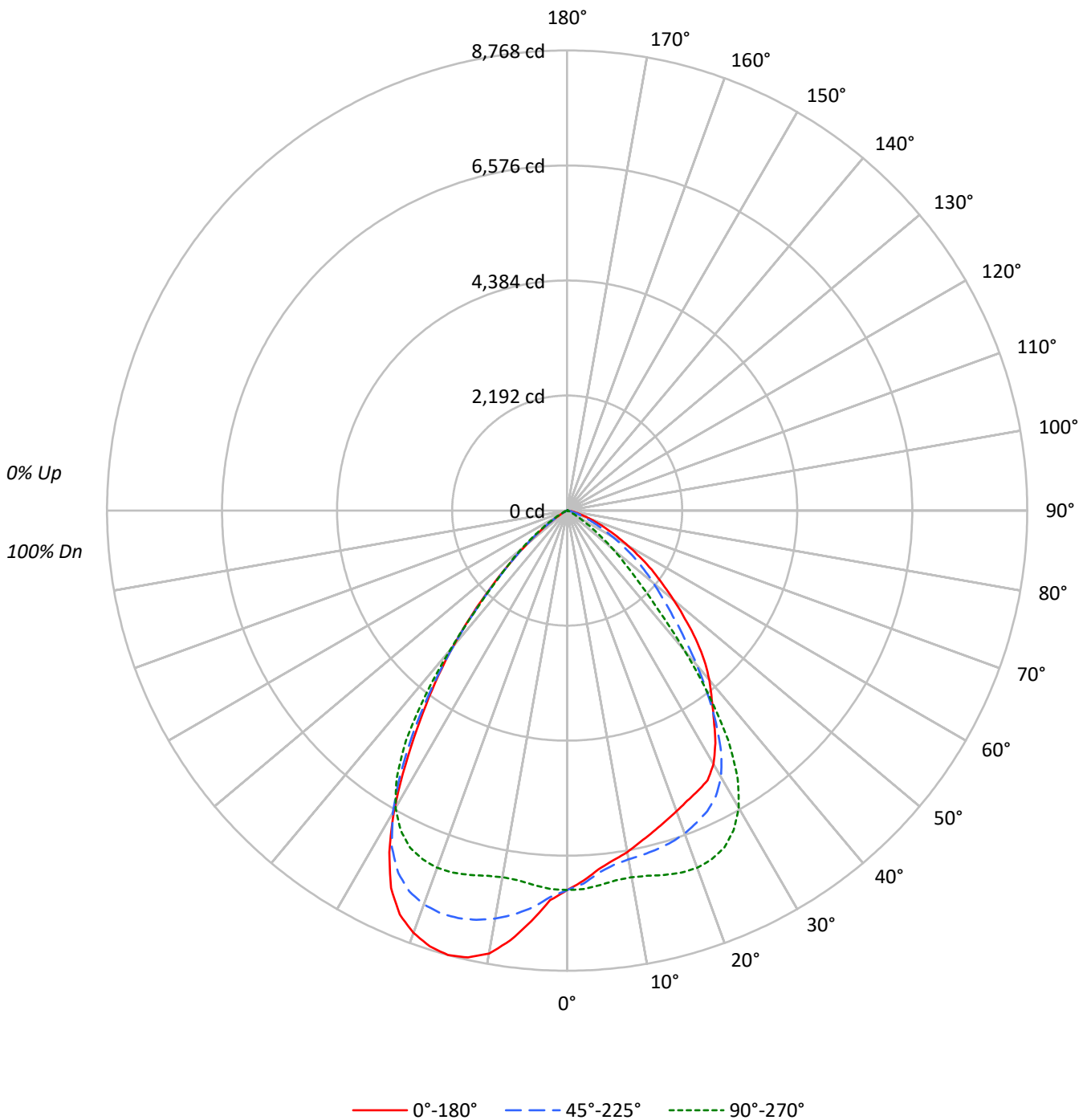
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	222959	222959	222959
5°	212413	221721	243058
10°	206935	222062	268294
15°	202242	229423	279901
20°	200016	237711	280952
25°	200484	241071	270036
30°	198625	232793	234837
35°	183538	201468	183786
40°	169602	139681	136280
45°	151023	84283	87079
50°	127075	54300	49278
55°	105722	29789	22526
60°	82518	12914	7086
65°	60897	6414	3451
70°	42339	3958	1515
75°	25770	810	0
80°	18593	1208	0
85°	11959	1168	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	695.1	5.7
10°-20°	2080.3	17.0
20°-30°	3185.8	26.1
30°-40°	3123.2	25.5
40°-50°	1880.8	15.4
50°-60°	865.7	7.1
60°-70°	304.1	2.5
70°-80°	79.5	0.7
80°-90°	13.5	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°	5961.2	48.8
0°-40°	9084.4	74.3
0°-60°	11830.8	96.8
0°-90°	12228.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12228.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7230	7230	7230	7230	7230	
5°	6862	6926	7163	7592	7852	648
15°	6335	6676	7186	8038	8768	1790
25°	5892	6318	7085	7619	7937	2714
35°	4876	4943	5352	5044	4882	3054
45°	3463	2852	1933	1946	1997	2656
55°	1966	1558	554	436	419	1755
65°	835	578	88	44	47	850
75°	216	125	7	0	0	262
85°	34	17	3	0	0	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°	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4
2.5°	7061.5	7068.3	7068.3	7068.3	7081.8	7085.3	7081.8	7085.3	7091.9	7115.6	7125.7
5°	6862.2	6852.0	6858.8	6855.4	6872.3	6882.5	6875.7	6885.8	6909.5	6926.4	6943.3
7.5°	6720.3	6720.3	6720.3	6727.0	6737.2	6757.5	6754.1	6760.8	6784.4	6808.1	6831.7
10°	6608.8	6605.5	6605.5	6622.3	6635.8	6659.4	6666.2	6686.5	6716.9	6747.3	6774.3
12.5°	6463.5	6466.9	6483.8	6500.7	6531.1	6568.2	6588.5	6615.6	6662.9	6713.5	6744.0
15°	6335.1	6338.4	6352.1	6385.7	6423.0	6466.9	6510.7	6554.7	6612.1	6676.4	6730.5
17.5°	6210.1	6213.4	6223.6	6260.8	6308.1	6365.6	6416.2	6473.6	6548.0	6622.3	6689.9
20°	6095.2	6091.9	6108.7	6142.5	6203.4	6257.4	6308.1	6375.7	6456.8	6548.0	6625.6
22.5°	5983.7	5983.7	6000.6	6034.4	6088.5	6142.5	6196.6	6267.5	6348.6	6436.5	6527.7
25°	5892.4	5889.1	5912.7	5929.7	5970.2	6024.3	6081.7	6139.2	6220.2	6318.3	6406.0
27.5°	5794.5	5791.2	5794.5	5814.8	5852.0	5892.4	5936.4	5987.1	6054.7	6135.8	6220.2
30°	5578.3	5581.6	5581.6	5598.6	5618.9	5662.7	5686.3	5737.1	5797.9	5865.5	5939.9
32.5°	5257.3	5260.6	5260.6	5267.5	5284.3	5304.6	5324.9	5362.0	5409.3	5466.7	5534.3
35°	4875.6	4875.6	4872.1	4875.6	4885.7	4885.7	4902.5	4885.7	4909.3	4943.1	4993.8
37.5°	4524.1	4517.3	4510.6	4503.8	4493.7	4476.8	4453.2	4412.6	4402.4	4388.9	4392.3
40°	4213.3	4210.0	4189.7	4172.7	4138.9	4098.4	4041.0	3970.1	3912.6	3845.0	3787.6
42.5°	3868.7	3865.2	3848.4	3817.9	3780.8	3720.0	3628.8	3534.2	3419.3	3318.0	3213.2
45°	3463.1	3473.3	3449.7	3415.9	3371.9	3314.5	3213.2	3098.2	2983.4	2851.7	2719.8
47.5°	3040.8	3037.5	3020.6	3000.3	2963.2	2905.8	2838.2	2713.1	2591.4	2469.9	2334.7
50°	2648.9	2635.4	2628.6	2608.4	2584.8	2537.5	2466.4	2365.0	2257.0	2142.1	2017.1
52.5°	2277.3	2277.3	2260.3	2246.8	2226.5	2189.4	2128.6	2047.5	1956.3	1848.1	1716.4
55°	1966.5	1959.6	1942.8	1925.9	1905.6	1881.9	1827.9	1760.4	1662.3	1557.6	1442.7
57.5°	1635.3	1631.9	1625.2	1604.9	1594.7	1571.1	1510.3	1442.7	1358.3	1267.1	1172.4
60°	1338.0	1324.5	1310.9	1297.4	1280.6	1256.9	1216.3	1158.9	1088.0	1006.9	912.3
62.5°	1071.1	1091.3	1050.8	1050.8	1017.0	996.7	959.6	925.8	851.4	777.1	696.1
65°	834.6	834.6	817.6	804.1	783.8	760.2	723.0	689.2	635.1	577.7	520.3
67.5°	638.6	635.1	618.3	604.8	587.9	574.4	547.4	506.8	466.3	419.0	371.6
70°	469.6	466.3	462.8	439.2	425.7	408.9	388.6	361.6	331.1	297.3	253.4
72.5°	337.8	337.8	327.8	317.6	304.1	290.5	270.4	253.4	226.4	202.8	172.3
75°	216.3	212.9	212.9	196.0	196.0	175.6	162.2	152.0	138.5	125.0	98.0
77.5°	155.5	152.0	148.7	141.9	135.2	128.4	118.2	104.7	94.6	81.1	70.9
80°	104.7	98.0	94.6	94.6	84.4	81.1	84.4	64.3	60.8	50.6	43.9
82.5°	64.3	64.3	60.8	60.8	57.4	54.1	43.9	43.9	40.6	37.1	30.5
85°	33.8	43.9	30.5	33.8	30.5	33.8	30.5	23.6	20.3	16.8	16.8
87.5°	20.3	13.5	13.5	20.3	16.8	13.5	13.5	13.5	10.2	6.8	6.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4
2.5°	7119.0	7142.7	7139.2	7169.7	7179.8	7203.5	7203.5	7220.3	7230.4	7254.1	7274.4
5°	6950.1	6987.2	6997.4	7034.5	7064.9	7102.1	7125.7	7162.9	7196.6	7247.4	7294.7
7.5°	6845.4	6875.7	6896.0	6939.9	6973.7	7014.2	7054.8	7105.4	7152.7	7213.6	7281.2
10°	6794.6	6835.2	6865.5	6909.5	6950.1	6994.0	7034.5	7091.9	7146.0	7223.8	7298.0
12.5°	6781.1	6828.4	6865.5	6926.4	6966.9	7014.2	7061.5	7125.7	7183.2	7264.2	7348.8
15°	6781.1	6845.4	6896.0	6963.6	7010.8	7071.6	7122.4	7186.5	7250.7	7335.2	7416.2
17.5°	6767.6	6845.4	6909.5	6987.2	7048.0	7108.9	7173.0	7233.9	7301.4	7382.6	7473.7
20°	6713.5	6811.6	6889.2	6980.4	7044.6	7112.2	7176.5	7243.9	7315.0	7399.4	7477.2
22.5°	6618.9	6733.8	6821.7	6919.6	6994.0	7061.5	7125.7	7193.3	7271.1	7352.1	7433.2
25°	6493.9	6602.0	6696.7	6797.9	6872.3	6946.6	7007.5	7085.3	7156.2	7233.9	7298.0
27.5°	6304.6	6419.5	6510.7	6615.6	6683.1	6754.1	6804.7	6869.0	6936.6	7000.7	7051.5
30°	6020.9	6125.7	6220.2	6314.8	6382.4	6433.1	6487.1	6537.9	6581.8	6625.6	6669.6
32.5°	5605.3	5700.0	5791.2	5878.9	5933.0	5977.0	6017.5	6047.9	6071.6	6095.2	6098.5
35°	5034.4	5112.0	5169.4	5247.2	5297.9	5338.4	5338.4	5351.9	5348.5	5338.4	5328.2
37.5°	4395.8	4426.1	4449.7	4480.2	4483.5	4483.5	4463.3	4446.4	4419.4	4412.6	4392.3
40°	3730.2	3689.6	3659.1	3618.6	3595.0	3544.2	3500.4	3470.0	3426.0	3419.3	3412.5
42.5°	3098.2	3003.7	2919.2	2848.3	2767.2	2696.2	2632.1	2584.8	2551.0	2547.5	2551.0
45°	2584.8	2476.6	2351.6	2253.6	2162.4	2074.5	1990.1	1932.7	1902.2	1895.4	1902.2
47.5°	2196.2	2071.2	1949.5	1838.0	1740.1	1642.0	1557.6	1479.9	1442.7	1432.6	1429.2
50°	1888.7	1760.4	1631.9	1517.0	1408.9	1310.9	1206.2	1131.9	1084.6	1067.6	1054.2
52.5°	1588.1	1473.2	1341.3	1223.1	1114.9	1000.1	892.0	807.4	760.2	740.0	726.4
55°	1324.5	1209.6	1088.0	973.1	858.2	743.3	635.1	554.1	503.4	479.8	462.8
57.5°	1057.5	949.4	844.7	729.8	635.1	523.7	415.5	344.6	300.7	273.7	260.2
60°	817.6	733.2	642.0	547.4	456.2	364.9	277.0	209.4	175.6	155.5	138.5
62.5°	618.3	547.4	486.5	405.4	334.5	256.7	189.3	135.2	104.7	87.9	81.1
65°	446.0	391.9	337.8	287.2	236.6	179.1	128.4	87.9	60.8	50.6	47.3
67.5°	317.6	273.7	233.1	199.3	162.2	128.4	91.2	60.8	47.3	40.6	37.1
70°	222.9	189.3	162.2	131.8	108.1	84.4	70.9	43.9	27.0	30.5	23.6
72.5°	148.7	125.0	111.5	91.2	74.3	60.8	43.9	30.5	30.5	23.6	20.3
75°	81.1	74.3	57.4	43.9	37.1	33.8	13.5	6.8	3.3	10.2	3.3
77.5°	57.4	50.6	43.9	37.1	30.5	23.6	13.5	13.5	10.2	13.5	6.8
80°	37.1	30.5	27.0	27.0	16.8	10.2	6.8	6.8	10.2	3.3	3.3
82.5°	23.6	20.3	16.8	16.8	16.8	10.2	10.2	10.2	10.2	6.8	6.8
85°	13.5	10.2	6.8	6.8	3.3	6.8	0.0	3.3	3.3	0.0	0.0
87.5°	6.8	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°	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4	7230.4
2.5°	7287.9	7301.4	7318.3	7331.8	7362.3	7369.0	7382.6	7396.1	7406.2	7416.2	7419.7
5°	7335.2	7385.9	7433.2	7483.8	7548.1	7592.0	7642.6	7686.6	7730.5	7767.7	7794.7
7.5°	7348.8	7426.4	7497.5	7585.2	7679.8	7761.0	7845.4	7929.8	8017.7	8085.3	8142.7
10°	7375.8	7470.3	7561.6	7666.3	7788.0	7896.0	8000.8	8112.3	8223.8	8318.4	8403.0
12.5°	7423.1	7527.8	7625.8	7740.7	7865.7	7987.3	8102.1	8227.2	8345.5	8450.2	8544.8
15°	7500.8	7598.7	7693.4	7801.5	7926.5	8038.0	8152.9	8274.4	8392.8	8500.9	8588.7
17.5°	7551.4	7642.6	7737.2	7835.3	7940.0	8041.4	8149.4	8257.6	8365.7	8463.7	8544.8
20°	7551.4	7639.3	7710.2	7798.1	7896.0	7983.9	8071.8	8166.4	8261.0	8342.0	8419.8
22.5°	7490.6	7575.1	7629.2	7696.7	7781.2	7855.6	7902.9	8007.6	8078.5	8149.4	8206.9
25°	7348.8	7409.6	7453.5	7500.8	7568.4	7619.0	7659.6	7720.4	7791.3	7818.4	7858.9
27.5°	7091.9	7135.9	7159.5	7169.7	7203.5	7230.4	7237.3	7264.2	7294.7	7301.4	7318.3
30°	6686.5	6689.9	6679.7	6676.4	6659.4	6639.3	6635.8	6632.4	6618.9	6605.5	6608.8
32.5°	6074.9	6058.1	6017.5	5973.7	5929.7	5882.4	5855.3	5821.5	5801.2	5781.0	5757.4
35°	5284.3	5243.8	5186.4	5132.3	5081.7	5044.4	4983.6	4963.3	4943.1	4916.0	4909.3
37.5°	4355.1	4331.5	4277.4	4236.9	4210.0	4193.0	4162.5	4142.4	4142.4	4132.2	4125.4
40°	3395.6	3388.9	3368.6	3378.7	3365.2	3371.9	3368.6	3361.8	3378.7	3378.7	3385.5
42.5°	2547.5	2551.0	2561.1	2567.8	2588.1	2591.4	2608.4	2608.4	2618.6	2628.6	2635.4
45°	1895.4	1909.0	1909.0	1922.5	1942.8	1946.2	1952.8	1956.3	1963.0	1980.0	1986.6
47.5°	1422.4	1425.8	1425.8	1429.2	1435.9	1442.7	1439.4	1442.7	1452.9	1446.1	1452.9
50°	1050.8	1054.2	1044.0	1033.9	1044.0	1044.0	1040.7	1030.5	1040.7	1027.2	1033.9
52.5°	716.4	712.9	702.7	706.2	699.4	696.1	696.1	689.2	689.2	689.2	675.7
55°	452.8	452.8	446.0	446.0	442.7	435.8	432.5	429.0	425.7	422.4	422.4
57.5°	253.4	256.7	246.7	243.2	246.7	243.2	236.6	236.6	236.6	226.4	233.1
60°	138.5	135.2	131.8	128.4	125.0	128.4	128.4	121.7	121.7	121.7	125.0
62.5°	74.3	74.3	70.9	70.9	67.6	67.6	74.3	64.3	67.6	64.3	67.6
65°	40.6	50.6	37.1	37.1	47.3	43.9	40.6	40.6	43.9	37.1	40.6
67.5°	43.9	30.5	27.0	30.5	27.0	27.0	27.0	33.8	30.5	23.6	30.5
70°	20.3	23.6	23.6	16.8	27.0	13.5	23.6	13.5	20.3	16.8	20.3
72.5°	20.3	20.3	20.3	13.5	20.3	13.5	16.8	16.8	13.5	13.5	20.3
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°	6.8	6.8	3.3	3.3	3.3	3.3	6.8	6.8	6.8	0.0	3.3
80°	6.8	6.8	0.0	3.3	0.0	0.0	3.3	0.0	3.3	0.0	6.8
82.5°	3.3	6.8	3.3	3.3	6.8	6.8	6.8	3.3	3.3	3.3	3.3
85°	0.0	3.3	0.0	0.0	0.0	0.0	6.8	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: P249703

CATALOG NUMBER: LSR8B120D010 EC8B120827 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7230.4	7230.4	7230.4	7230.4
2.5°	7423.1	7426.4	7433.2	7429.9
5°	7815.0	7842.1	7855.6	7852.2
7.5°	8183.2	8230.6	8257.6	8257.6
10°	8467.1	8521.2	8561.6	8568.4
12.5°	8619.1	8680.0	8734.1	8720.4
15°	8663.0	8723.9	8777.9	8767.7
17.5°	8612.4	8673.2	8713.8	8707.0
20°	8473.9	8524.5	8565.1	8561.6
22.5°	8257.6	8301.6	8335.4	8331.9
25°	7892.7	7923.2	7950.1	7936.6
27.5°	7331.8	7342.0	7358.8	7338.6
30°	6585.2	6591.8	6598.6	6595.3
32.5°	5747.2	5743.8	5737.1	5730.3
35°	4899.2	4899.2	4902.5	4882.2
37.5°	4128.7	4125.4	4135.6	4125.4
40°	3392.2	3388.9	3402.4	3385.5
42.5°	2645.5	2655.7	2659.0	2659.0
45°	1990.1	1993.4	1996.8	1996.8
47.5°	1452.9	1456.2	1473.2	1452.9
50°	1027.2	1030.5	1033.9	1027.2
52.5°	679.1	682.6	679.1	668.9
55°	415.5	419.0	419.0	419.0
57.5°	222.9	226.4	226.4	222.9
60°	121.7	118.2	121.7	114.9
62.5°	64.3	70.9	67.6	60.8
65°	40.6	40.6	40.6	47.3
67.5°	33.8	27.0	30.5	23.6
70°	20.3	23.6	23.6	16.8
72.5°	16.8	16.8	16.8	20.3
75°	0.0	0.0	0.0	0.0
77.5°	6.8	6.8	6.8	3.3
80°	3.3	0.0	3.3	0.0
82.5°	3.3	3.3	6.8	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)