

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: P249717

Luminaire Tested: **LSR8B120D010 EC8B120835 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249717  
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 EC8B120835 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: 13034.0 lumens  
Efficiency: N/A  
Efficacy: 110.2 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

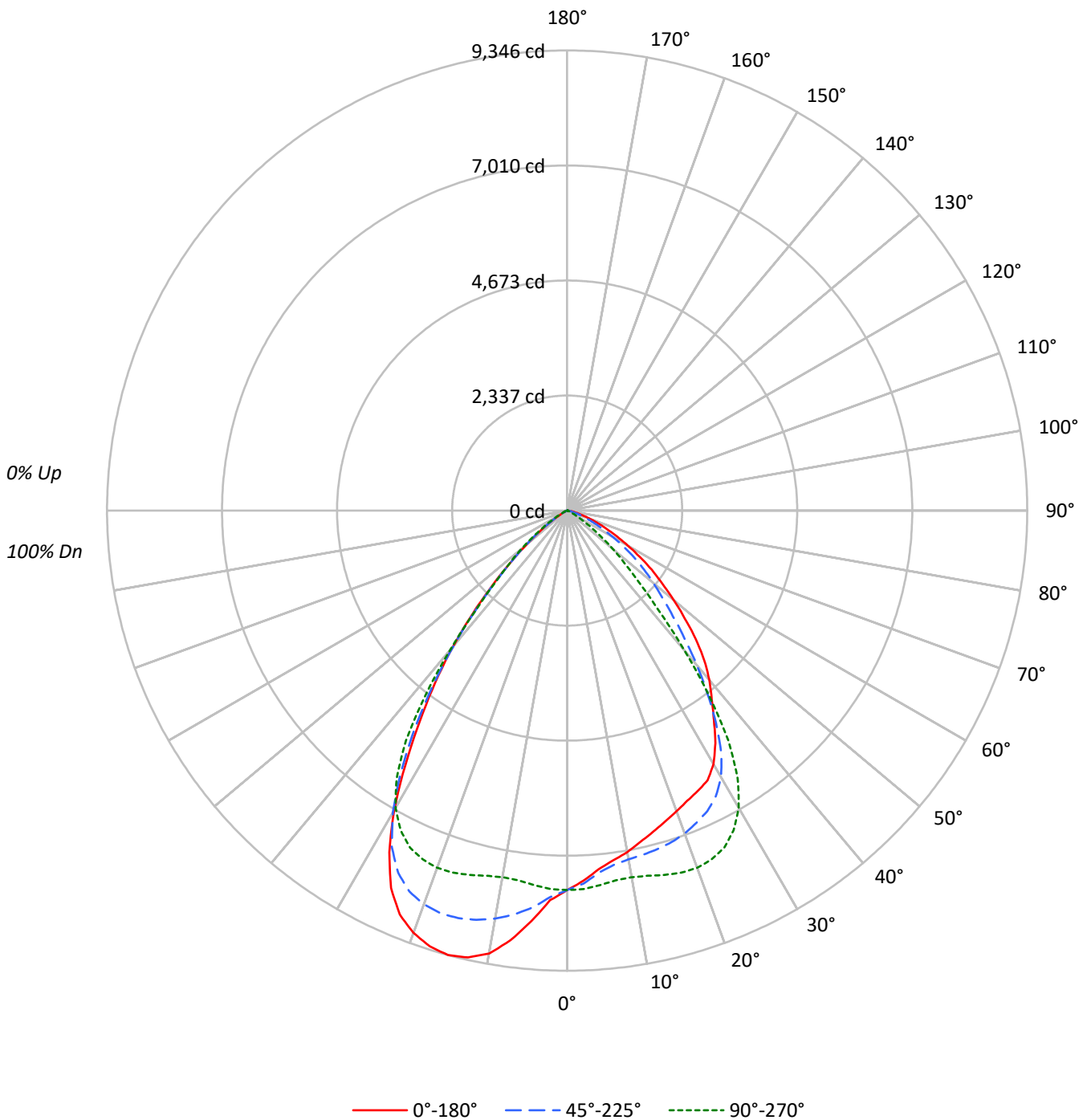
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	237655	237655	237655
5°	226414	236335	259080
10°	220574	236700	285979
15°	215574	244545	298353
20°	213201	253380	299473
25°	213699	256960	287837
30°	211717	248136	250315
35°	195633	214745	195900
40°	180780	148887	145264
45°	160979	89839	92818
50°	135451	57879	52525
55°	112689	31752	24010
60°	87958	13765	7549
65°	64910	6837	3677
70°	45134	4219	1614
75°	27462	870	0
80°	19818	1296	0
85°	12737	1274	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	740.9	5.7
10°-20°	2217.5	17.0
20°-30°	3395.8	26.1
30°-40°	3329.0	25.5
40°-50°	2004.7	15.4
50°-60°	922.7	7.1
60°-70°	324.1	2.5
70°-80°	84.8	0.7
80°-90°	14.4	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°	6354.2	48.8
0°-40°	9683.2	74.3
0°-60°	12610.6	96.8
0°-90°	13034.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13034.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7707	7707	7707	7707	7707	
5°	7314	7383	7635	8092	8370	691
15°	6753	7116	7660	8568	9346	1908
25°	6281	6735	7552	8121	8460	2893
35°	5197	5269	5705	5377	5204	3255
45°	3691	3040	2060	2074	2128	2831
55°	2096	1660	591	465	447	1870
65°	890	616	94	47	50	906
75°	230	133	7	0	0	279
85°	36	18	4	0	0	49
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°	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0
2.5°	7526.9	7534.2	7534.2	7534.2	7548.6	7552.3	7548.6	7552.3	7559.4	7584.6	7595.4
5°	7314.5	7303.7	7310.9	7307.2	7325.3	7336.1	7328.9	7339.7	7364.9	7383.0	7400.9
7.5°	7163.3	7163.3	7163.3	7170.4	7181.2	7202.9	7199.3	7206.4	7231.6	7256.8	7282.0
10°	7044.4	7040.9	7040.9	7058.8	7073.2	7098.4	7105.6	7127.3	7159.6	7192.1	7220.8
12.5°	6889.5	6893.2	6911.1	6929.2	6961.5	7001.1	7022.8	7051.7	7102.1	7156.0	7188.5
15°	6752.7	6756.2	6770.8	6806.6	6846.4	6893.2	6939.9	6986.7	7048.0	7116.5	7174.1
17.5°	6619.4	6623.0	6633.8	6673.5	6723.9	6785.1	6839.1	6900.3	6979.6	7058.8	7130.8
20°	6497.0	6493.4	6511.3	6547.4	6612.3	6669.8	6723.9	6796.0	6882.4	6979.6	7062.3
22.5°	6378.1	6378.1	6396.2	6432.2	6489.9	6547.4	6605.0	6680.6	6767.1	6860.7	6958.0
25°	6280.8	6277.3	6302.5	6320.6	6363.7	6421.4	6482.6	6543.8	6630.2	6734.7	6828.3
27.5°	6176.5	6172.9	6176.5	6198.1	6237.7	6280.8	6327.7	6381.8	6453.8	6540.3	6630.2
30°	5946.0	5949.5	5949.5	5967.6	5989.3	6035.9	6061.1	6115.3	6180.0	6252.1	6331.4
32.5°	5603.8	5607.4	5607.4	5614.7	5632.6	5654.2	5675.9	5715.5	5765.9	5827.1	5899.1
35°	5196.9	5196.9	5193.2	5196.9	5207.7	5207.7	5225.7	5207.7	5232.9	5269.0	5322.9
37.5°	4822.3	4815.1	4807.9	4800.7	4789.9	4771.9	4746.7	4703.4	4692.6	4678.2	4681.8
40°	4491.0	4487.5	4465.8	4447.7	4411.7	4368.6	4307.3	4231.7	4170.5	4098.5	4037.3
42.5°	4123.7	4120.0	4102.0	4069.6	4030.0	3965.2	3868.0	3767.2	3644.7	3536.7	3425.0
45°	3691.4	3702.2	3677.0	3641.0	3594.2	3533.0	3425.0	3302.4	3180.0	3039.6	2899.1
47.5°	3241.2	3237.7	3219.7	3198.1	3158.5	3097.3	3025.2	2892.0	2762.3	2632.7	2488.6
50°	2823.5	2809.1	2801.8	2780.3	2755.1	2704.7	2629.0	2520.9	2405.8	2283.3	2150.0
52.5°	2427.4	2427.4	2409.3	2394.9	2373.3	2333.7	2268.9	2182.5	2085.3	1969.9	1829.6
55°	2096.1	2088.8	2070.9	2052.8	2031.2	2006.0	1948.4	1876.4	1771.9	1660.3	1537.8
57.5°	1743.1	1739.4	1732.3	1710.7	1699.8	1674.6	1609.9	1537.8	1447.8	1350.6	1249.6
60°	1426.2	1411.8	1397.3	1382.9	1365.0	1339.8	1296.5	1235.3	1159.7	1073.2	972.4
62.5°	1141.7	1163.2	1120.1	1120.1	1084.1	1062.4	1022.8	986.8	907.5	828.4	741.9
65°	889.6	889.6	871.5	857.1	835.5	810.3	770.7	734.7	677.0	615.8	554.6
67.5°	680.7	677.0	659.1	644.7	626.6	612.2	583.5	540.2	497.0	446.6	396.1
70°	500.6	497.0	493.3	468.1	453.8	435.8	414.2	385.4	353.0	316.9	270.1
72.5°	360.1	360.1	349.4	338.6	324.2	309.7	288.2	270.1	241.3	216.1	183.7
75°	230.5	227.0	227.0	208.9	208.9	187.2	172.8	162.0	147.6	133.3	104.5
77.5°	165.7	162.0	158.5	151.2	144.1	136.8	126.0	111.6	100.8	86.4	75.6
80°	111.6	104.5	100.8	100.8	90.0	86.4	90.0	68.5	64.8	54.0	46.8
82.5°	68.5	68.5	64.8	64.8	61.2	57.7	46.8	46.8	43.3	39.6	32.5
85°	36.0	46.8	32.5	36.0	32.5	36.0	32.5	25.2	21.6	17.9	17.9
87.5°	21.6	14.4	14.4	21.6	17.9	14.4	14.4	14.4	10.8	7.3	7.3
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°	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0
2.5°	7588.3	7613.5	7609.8	7642.3	7653.1	7678.3	7678.3	7696.2	7707.0	7732.2	7753.9
5°	7408.2	7447.8	7458.6	7498.2	7530.6	7570.2	7595.4	7635.0	7671.0	7725.1	7775.5
7.5°	7296.6	7328.9	7350.5	7397.4	7433.4	7476.5	7519.8	7573.8	7624.2	7689.1	7761.1
10°	7242.5	7285.7	7318.1	7364.9	7408.2	7455.0	7498.2	7559.4	7617.1	7699.9	7779.1
12.5°	7228.1	7278.5	7318.1	7383.0	7426.1	7476.5	7526.9	7595.4	7656.6	7743.1	7833.2
15°	7228.1	7296.6	7350.5	7422.6	7473.0	7537.7	7591.9	7660.2	7728.7	7818.7	7905.1
17.5°	7213.7	7296.6	7364.9	7447.8	7512.5	7577.5	7645.8	7710.7	7782.6	7869.2	7966.3
20°	7156.0	7260.5	7343.3	7440.5	7509.0	7581.0	7649.5	7721.4	7797.2	7887.1	7970.0
22.5°	7055.2	7177.7	7271.4	7375.7	7455.0	7526.9	7595.4	7667.5	7750.3	7836.7	7923.2
25°	6922.0	7037.1	7138.1	7246.0	7325.3	7404.5	7469.4	7552.3	7627.9	7710.7	7779.1
27.5°	6720.2	6842.7	6939.9	7051.7	7123.6	7199.3	7253.3	7321.8	7393.8	7462.1	7516.2
30°	6417.8	6529.4	6630.2	6731.0	6803.1	6857.2	6914.7	6968.8	7015.7	7062.3	7109.2
32.5°	5974.7	6075.7	6172.9	6266.5	6324.1	6371.0	6414.1	6446.6	6471.8	6497.0	6500.5
35°	5366.2	5448.9	5510.1	5593.0	5647.1	5690.3	5690.3	5704.6	5701.1	5690.3	5679.4
37.5°	4685.5	4717.8	4743.0	4775.5	4779.0	4779.0	4757.5	4739.5	4710.7	4703.4	4681.8
40°	3976.0	3932.7	3900.3	3857.1	3831.9	3777.8	3731.1	3698.7	3651.8	3644.7	3637.5
42.5°	3302.4	3201.6	3111.7	3036.1	2949.6	2873.9	2805.5	2755.1	2719.1	2715.4	2719.1
45°	2755.1	2639.8	2506.6	2402.2	2304.9	2211.3	2121.3	2060.1	2027.6	2020.3	2027.6
47.5°	2341.0	2207.7	2078.0	1959.1	1854.8	1750.2	1660.3	1577.4	1537.8	1527.0	1523.4
50°	2013.2	1876.4	1739.4	1617.0	1501.8	1397.3	1285.7	1206.5	1156.1	1138.0	1123.6
52.5°	1692.7	1570.3	1429.8	1303.8	1188.4	1066.0	950.8	860.7	810.3	788.8	774.2
55°	1411.8	1289.4	1159.7	1037.2	914.8	792.3	677.0	590.6	536.6	511.4	493.3
57.5°	1127.2	1012.0	900.4	778.0	677.0	558.3	442.9	367.3	320.5	291.7	277.4
60°	871.5	781.5	684.3	583.5	486.2	389.0	295.3	223.2	187.2	165.7	147.6
62.5°	659.1	583.5	518.5	432.1	356.5	273.6	201.8	144.1	111.6	93.7	86.4
65°	475.4	417.7	360.1	306.1	252.2	190.9	136.8	93.7	64.8	54.0	50.4
67.5°	338.6	291.7	248.4	212.4	172.8	136.8	97.2	64.8	50.4	43.3	39.6
70°	237.6	201.8	172.8	140.5	115.2	90.0	75.6	46.8	28.8	32.5	25.2
72.5°	158.5	133.3	118.9	97.2	79.2	64.8	46.8	32.5	32.5	25.2	21.6
75°	86.4	79.2	61.2	46.8	39.6	36.0	14.4	7.3	3.6	10.8	3.6
77.5°	61.2	54.0	46.8	39.6	32.5	25.2	14.4	14.4	10.8	14.4	7.3
80°	39.6	32.5	28.8	28.8	17.9	10.8	7.3	7.3	10.8	3.6	3.6
82.5°	25.2	21.6	17.9	17.9	17.9	10.8	10.8	10.8	10.8	7.3	7.3
85°	14.4	10.8	7.3	7.3	3.6	7.3	0.0	3.6	3.6	0.0	0.0
87.5°	7.3	3.6	3.6	3.6	3.6	0.0	0.0	3.6	0.0	3.6	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°	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0	7707.0
2.5°	7768.3	7782.6	7800.7	7815.1	7847.6	7854.7	7869.2	7883.6	7894.4	7905.1	7908.8
5°	7818.7	7872.8	7923.2	7977.1	8045.6	8092.5	8146.4	8193.3	8240.1	8279.7	8308.4
7.5°	7833.2	7915.9	7991.6	8085.2	8186.0	8272.6	8362.5	8452.5	8546.2	8618.2	8679.5
10°	7861.9	7962.7	8060.0	8171.6	8301.3	8416.5	8528.1	8647.0	8765.9	8866.7	8956.8
12.5°	7912.3	8024.0	8128.5	8250.9	8384.2	8513.7	8636.2	8769.5	8895.6	9007.2	9108.0
15°	7995.2	8099.6	8200.5	8315.7	8449.0	8567.8	8690.3	8819.9	8946.0	9061.2	9154.9
17.5°	8049.2	8146.4	8247.2	8351.7	8463.3	8571.4	8686.6	8801.9	8917.1	9021.6	9108.0
20°	8049.2	8142.9	8218.5	8312.1	8416.5	8510.2	8603.9	8704.7	8805.5	8891.9	8974.8
22.5°	7984.4	8074.4	8132.0	8204.1	8294.1	8373.4	8423.8	8535.4	8611.0	8686.6	8747.8
25°	7833.2	7898.0	7944.8	7995.2	8067.2	8121.2	8164.5	8229.3	8304.9	8333.8	8376.9
27.5°	7559.4	7606.2	7631.4	7642.3	7678.3	7707.0	7714.3	7743.1	7775.5	7782.6	7800.7
30°	7127.3	7130.8	7120.0	7116.5	7098.4	7076.9	7073.2	7069.6	7055.2	7040.9	7044.4
32.5°	6475.3	6457.4	6414.1	6367.4	6320.6	6270.2	6241.3	6205.2	6183.6	6162.1	6136.9
35°	5632.6	5589.5	5528.2	5470.6	5416.6	5376.9	5312.1	5290.5	5269.0	5240.1	5232.9
37.5°	4642.2	4617.0	4559.4	4516.2	4487.5	4469.4	4436.9	4415.4	4415.4	4404.6	4397.3
40°	3619.4	3612.3	3590.6	3601.4	3587.1	3594.2	3590.6	3583.4	3601.4	3601.4	3608.7
42.5°	2715.4	2719.1	2729.9	2737.1	2758.7	2762.3	2780.3	2780.3	2791.2	2801.8	2809.1
45°	2020.3	2034.9	2034.9	2049.2	2070.9	2074.4	2081.6	2085.3	2092.4	2110.5	2117.6
47.5°	1516.2	1519.7	1519.7	1523.4	1530.6	1537.8	1534.3	1537.8	1548.6	1541.4	1548.6
50°	1120.1	1123.6	1112.8	1102.0	1112.8	1112.8	1109.3	1098.4	1109.3	1094.9	1102.0
52.5°	763.6	759.9	749.0	752.8	745.5	741.9	741.9	734.7	734.7	734.7	720.3
55°	482.7	482.7	475.4	475.4	471.8	464.6	461.0	457.3	453.8	450.2	450.2
57.5°	270.1	273.6	263.0	259.3	263.0	259.3	252.2	252.2	252.2	241.3	248.4
60°	147.6	144.1	140.5	136.8	133.3	136.8	136.8	129.7	129.7	129.7	133.3
62.5°	79.2	79.2	75.6	75.6	72.0	72.0	79.2	68.5	72.0	68.5	72.0
65°	43.3	54.0	39.6	39.6	50.4	46.8	43.3	43.3	46.8	39.6	43.3
67.5°	46.8	32.5	28.8	32.5	28.8	28.8	28.8	36.0	32.5	25.2	32.5
70°	21.6	25.2	25.2	17.9	28.8	14.4	25.2	14.4	21.6	17.9	21.6
72.5°	21.6	21.6	21.6	14.4	21.6	14.4	17.9	17.9	14.4	14.4	21.6
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°	7.3	7.3	3.6	3.6	3.6	3.6	7.3	7.3	7.3	0.0	3.6
80°	7.3	7.3	0.0	3.6	0.0	0.0	3.6	0.0	3.6	0.0	7.3
82.5°	3.6	7.3	3.6	3.6	7.3	7.3	7.3	3.6	3.6	3.6	3.6
85°	0.0	3.6	0.0	0.0	0.0	0.0	7.3	0.0	0.0	0.0	3.6
87.5°	0.0	3.6	0.0	0.0	0.0	0.0	3.6	3.6	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: P249717

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBSWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7707.0	7707.0	7707.0	7707.0
2.5°	7912.3	7915.9	7923.2	7919.6
5°	8330.1	8359.0	8373.4	8369.8
7.5°	8722.6	8773.2	8801.9	8801.9
10°	9025.2	9082.8	9126.0	9133.2
12.5°	9187.2	9252.1	9309.8	9295.3
15°	9234.0	9299.0	9356.5	9345.7
17.5°	9180.1	9244.9	9288.1	9280.9
20°	9032.4	9086.4	9129.7	9126.0
22.5°	8801.9	8848.8	8884.8	8881.1
25°	8412.9	8445.4	8474.2	8459.8
27.5°	7815.1	7825.9	7843.9	7822.4
30°	7019.2	7026.3	7033.6	7030.0
32.5°	6126.1	6122.4	6115.3	6108.0
35°	5222.1	5222.1	5225.7	5204.0
37.5°	4400.9	4397.3	4408.1	4397.3
40°	3615.8	3612.3	3626.6	3608.7
42.5°	2819.9	2830.7	2834.3	2834.3
45°	2121.3	2124.8	2128.4	2128.4
47.5°	1548.6	1552.2	1570.3	1548.6
50°	1094.9	1098.4	1102.0	1094.9
52.5°	723.8	727.6	723.8	713.0
55°	442.9	446.6	446.6	446.6
57.5°	237.6	241.3	241.3	237.6
60°	129.7	126.0	129.7	122.4
62.5°	68.5	75.6	72.0	64.8
65°	43.3	43.3	43.3	50.4
67.5°	36.0	28.8	32.5	25.2
70°	21.6	25.2	25.2	17.9
72.5°	17.9	17.9	17.9	21.6
75°	0.0	0.0	0.0	0.0
77.5°	7.3	7.3	7.3	3.6
80°	3.6	0.0	3.6	0.0
82.5°	3.6	3.6	7.3	3.6
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)