

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: P250221

Luminaire Tested: **LSR8B120D010 EC8B120835 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250221
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 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12569.0 lumens
Efficiency: N/A
Efficacy: 106.2 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

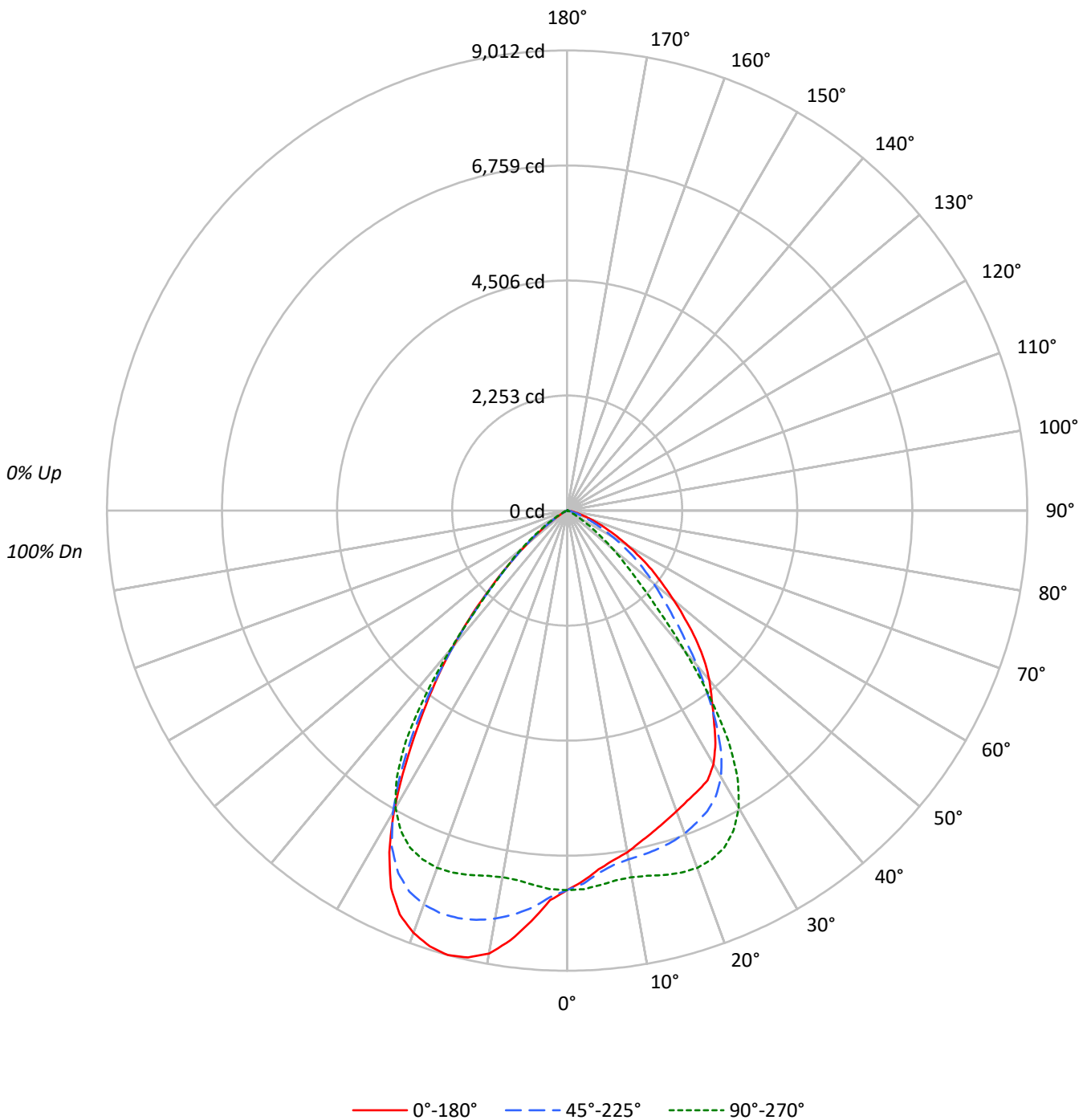
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	229179	229179	229179
5°	218335	227903	249837
10°	212706	228255	275777
15°	207883	235820	287706
20°	205595	244340	288788
25°	206077	247791	277569
30°	204162	239284	241385
35°	188654	207084	188914
40°	174332	143574	140084
45°	155235	86634	89508
50°	130620	55816	50650
55°	108668	30617	23155
60°	84818	13278	7284
65°	62589	6589	3546
70°	43520	4075	1560
75°	26485	834	0
80°	19108	1243	0
85°	12277	1203	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	714.5	5.7
10°-20°	2138.3	17.0
20°-30°	3274.7	26.1
30°-40°	3210.2	25.5
40°-50°	1933.2	15.4
50°-60°	889.8	7.1
60°-70°	312.6	2.5
70°-80°	81.8	0.7
80°-90°	13.9	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°	6127.5	48.8
0°-40°	9337.7	74.3
0°-60°	12160.7	96.8
0°-90°	12569.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12569.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7432	7432	7432	7432	7432	
5°	7054	7120	7363	7804	8071	666
15°	6512	6863	7387	8262	9012	1840
25°	6057	6494	7283	7832	8158	2790
35°	5012	5081	5501	5185	5018	3139
45°	3560	2931	1987	2000	2052	2730
55°	2021	1601	570	448	431	1804
65°	858	594	90	45	49	874
75°	222	128	7	0	0	269
85°	35	17	3	0	0	48
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°	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1
2.5°	7258.4	7265.4	7265.4	7265.4	7279.3	7282.8	7279.3	7282.8	7289.7	7314.0	7324.4
5°	7053.5	7043.1	7050.1	7046.5	7064.0	7074.4	7067.4	7077.8	7102.1	7119.6	7136.9
7.5°	6907.7	6907.7	6907.7	6914.6	6925.0	6945.9	6942.5	6949.3	6973.6	6997.9	7022.2
10°	6793.1	6789.7	6789.7	6807.0	6820.8	6845.1	6852.1	6873.0	6904.2	6935.5	6963.2
12.5°	6643.7	6647.3	6664.6	6682.0	6713.2	6751.4	6772.2	6800.1	6848.7	6900.7	6932.0
15°	6511.8	6515.2	6529.2	6563.8	6602.1	6647.3	6692.3	6737.5	6796.5	6862.6	6918.2
17.5°	6383.3	6386.7	6397.1	6435.4	6484.0	6543.1	6595.1	6654.1	6730.6	6807.0	6876.4
20°	6265.2	6261.8	6279.0	6313.8	6376.4	6431.9	6484.0	6553.5	6636.8	6730.6	6810.4
22.5°	6150.5	6150.5	6168.0	6202.7	6258.3	6313.8	6369.4	6442.3	6525.6	6616.0	6709.8
25°	6056.8	6053.3	6077.6	6095.1	6136.7	6192.3	6251.3	6310.4	6393.7	6494.5	6584.7
27.5°	5956.1	5952.7	5956.1	5977.0	6015.2	6056.8	6101.9	6154.1	6223.6	6306.9	6393.7
30°	5733.8	5737.3	5737.3	5754.7	5775.6	5820.6	5844.9	5897.1	5959.6	6029.0	6105.5
32.5°	5403.9	5407.3	5407.3	5414.3	5431.6	5452.5	5473.4	5511.6	5560.2	5619.2	5688.7
35°	5011.5	5011.5	5007.9	5011.5	5022.0	5022.0	5039.2	5022.0	5046.3	5081.0	5133.0
37.5°	4650.3	4643.3	4636.4	4629.4	4619.0	4601.7	4577.4	4535.6	4525.2	4511.3	4514.8
40°	4330.8	4327.4	4306.5	4289.1	4254.3	4212.7	4153.7	4080.8	4021.7	3952.3	3893.2
42.5°	3976.6	3973.0	3955.7	3924.4	3886.2	3823.8	3730.0	3632.8	3514.7	3410.5	3302.8
45°	3559.7	3570.2	3545.9	3511.1	3465.9	3406.9	3302.8	3184.6	3066.5	2931.2	2795.7
47.5°	3125.6	3122.2	3104.9	3084.0	3045.8	2986.8	2917.3	2788.8	2663.7	2538.8	2399.8
50°	2722.8	2708.9	2701.9	2681.2	2656.9	2608.3	2535.2	2431.0	2319.9	2201.8	2073.3
52.5°	2340.8	2340.8	2323.4	2309.5	2288.6	2250.5	2188.0	2104.6	2010.9	1899.7	1764.3
55°	2021.3	2014.3	1997.0	1979.6	1958.7	1934.4	1878.9	1809.5	1708.7	1601.0	1483.0
57.5°	1680.9	1677.4	1670.5	1649.6	1639.2	1614.9	1552.4	1483.0	1396.2	1302.4	1205.1
60°	1375.3	1361.4	1347.4	1333.6	1316.3	1292.0	1250.2	1191.2	1118.3	1035.0	937.7
62.5°	1101.0	1121.7	1080.1	1080.1	1045.4	1024.5	986.4	951.6	875.1	798.8	715.5
65°	857.8	857.8	840.4	826.5	805.7	781.4	743.2	708.5	652.8	593.8	534.8
67.5°	656.4	652.8	635.6	621.7	604.2	590.4	562.6	520.9	479.3	430.7	382.0
70°	482.7	479.3	475.7	451.4	437.6	420.3	399.4	371.7	340.4	305.6	260.5
72.5°	347.2	347.2	336.9	326.5	312.6	298.6	277.9	260.5	232.7	208.4	177.1
75°	222.3	218.9	218.9	201.4	201.4	180.5	166.7	156.2	142.4	128.5	100.8
77.5°	159.8	156.2	152.8	145.8	138.9	131.9	121.5	107.6	97.2	83.3	72.9
80°	107.6	100.8	97.2	97.2	86.8	83.3	86.8	66.0	62.5	52.0	45.2
82.5°	66.0	66.0	62.5	62.5	59.0	55.6	45.2	45.2	41.7	38.2	31.3
85°	34.7	45.2	31.3	34.7	31.3	34.7	31.3	24.3	20.9	17.3	17.3
87.5°	20.9	13.9	13.9	20.9	17.3	13.9	13.9	13.9	10.4	7.0	7.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1
2.5°	7317.6	7341.9	7338.3	7369.6	7380.0	7404.3	7404.3	7421.6	7432.1	7456.4	7477.2
5°	7143.9	7182.1	7192.5	7230.7	7262.0	7300.1	7324.4	7362.6	7397.3	7449.5	7498.1
7.5°	7036.2	7067.4	7088.3	7133.5	7168.2	7209.8	7251.5	7303.6	7352.2	7414.8	7484.3
10°	6984.1	7025.8	7057.0	7102.1	7143.9	7189.1	7230.7	7289.7	7345.3	7425.2	7501.5
12.5°	6970.2	7018.8	7057.0	7119.6	7161.2	7209.8	7258.4	7324.4	7383.5	7466.8	7553.7
15°	6970.2	7036.2	7088.3	7157.8	7206.4	7268.8	7321.0	7386.9	7452.9	7539.7	7623.1
17.5°	6956.3	7036.2	7102.1	7182.1	7244.5	7307.1	7373.0	7435.7	7505.0	7588.5	7682.1
20°	6900.7	7001.5	7081.3	7175.1	7241.1	7310.6	7376.6	7445.9	7519.0	7605.8	7685.7
22.5°	6803.5	6921.6	7011.9	7112.6	7189.1	7258.4	7324.4	7393.9	7473.8	7557.2	7640.5
25°	6675.0	6786.1	6883.4	6987.5	7064.0	7140.3	7202.9	7282.8	7355.7	7435.7	7501.5
27.5°	6480.5	6598.5	6692.3	6800.1	6869.4	6942.5	6994.5	7060.6	7130.0	7195.9	7248.1
30°	6188.8	6296.5	6393.7	6490.9	6560.4	6612.5	6668.0	6720.2	6765.4	6810.4	6855.6
32.5°	5761.6	5858.9	5952.7	6042.9	6098.5	6143.7	6185.3	6216.6	6240.9	6265.2	6268.6
35°	5174.8	5254.5	5313.6	5393.5	5445.7	5487.3	5487.3	5501.1	5497.7	5487.3	5476.8
37.5°	4518.3	4549.5	4573.8	4605.1	4608.5	4608.5	4587.8	4570.4	4542.6	4535.6	4514.8
40°	3834.2	3792.4	3761.1	3719.5	3695.2	3643.1	3598.0	3566.7	3521.6	3514.7	3507.7
42.5°	3184.6	3087.4	3000.6	2927.7	2844.4	2771.4	2705.5	2656.9	2622.1	2618.5	2622.1
45°	2656.9	2545.6	2417.1	2316.5	2222.7	2132.4	2045.6	1986.6	1955.3	1948.3	1955.3
47.5°	2257.5	2128.9	2003.9	1889.2	1788.6	1687.8	1601.0	1521.1	1483.0	1472.5	1469.1
50°	1941.4	1809.5	1677.4	1559.3	1448.2	1347.4	1239.8	1163.5	1114.9	1097.4	1083.6
52.5°	1632.3	1514.3	1378.7	1257.2	1146.0	1027.9	916.9	830.0	781.4	760.6	746.6
55°	1361.4	1243.4	1118.3	1000.2	882.1	764.1	652.8	569.5	517.5	493.2	475.7
57.5°	1087.0	975.9	868.3	750.2	652.8	538.3	427.1	354.2	309.1	281.3	267.5
60°	840.4	753.6	659.9	562.6	468.9	375.1	284.8	215.3	180.5	159.8	142.4
62.5°	635.6	562.6	500.0	416.7	343.8	263.9	194.6	138.9	107.6	90.3	83.3
65°	458.4	402.8	347.2	295.2	243.2	184.1	131.9	90.3	62.5	52.0	48.6
67.5°	326.5	281.3	239.6	204.8	166.7	131.9	93.8	62.5	48.6	41.7	38.2
70°	229.1	194.6	166.7	135.5	111.1	86.8	72.9	45.2	27.7	31.3	24.3
72.5°	152.8	128.5	114.6	93.8	76.3	62.5	45.2	31.3	31.3	24.3	20.9
75°	83.3	76.3	59.0	45.2	38.2	34.7	13.9	7.0	3.4	10.4	3.4
77.5°	59.0	52.0	45.2	38.2	31.3	24.3	13.9	13.9	10.4	13.9	7.0
80°	38.2	31.3	27.7	27.7	17.3	10.4	7.0	7.0	10.4	3.4	3.4
82.5°	24.3	20.9	17.3	17.3	17.3	10.4	10.4	10.4	10.4	7.0	7.0
85°	13.9	10.4	7.0	7.0	3.4	7.0	0.0	3.4	3.4	0.0	0.0
87.5°	7.0	3.4	3.4	3.4	3.4	0.0	0.0	3.4	0.0	3.4	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°	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1	7432.1
2.5°	7491.1	7505.0	7522.4	7536.3	7567.6	7574.5	7588.5	7602.3	7612.8	7623.1	7626.6
5°	7539.7	7591.9	7640.5	7692.5	7758.6	7803.7	7855.8	7901.0	7946.1	7984.3	8012.0
7.5°	7553.7	7633.5	7706.5	7796.7	7893.9	7977.4	8064.2	8151.0	8241.3	8310.8	8369.8
10°	7581.5	7678.7	7772.4	7880.1	8005.2	8116.2	8223.9	8338.5	8453.2	8550.4	8637.3
12.5°	7630.1	7737.7	7838.5	7956.6	8085.1	8210.0	8328.1	8456.6	8578.2	8685.9	8783.1
15°	7710.0	7810.6	7908.0	8019.0	8147.5	8262.2	8380.3	8505.2	8626.8	8737.9	8828.3
17.5°	7762.0	7855.8	7953.0	8053.8	8161.4	8265.6	8376.7	8487.9	8599.0	8699.8	8783.1
20°	7762.0	7852.3	7925.3	8015.6	8116.2	8206.6	8296.9	8394.1	8491.3	8574.7	8654.6
22.5°	7699.5	7786.3	7841.9	7911.4	7998.2	8074.6	8123.2	8230.9	8303.8	8376.7	8435.7
25°	7553.7	7616.2	7661.4	7710.0	7779.4	7831.5	7873.2	7935.7	8008.6	8036.5	8078.1
27.5°	7289.7	7334.9	7359.2	7369.6	7404.3	7432.1	7439.1	7466.8	7498.1	7505.0	7522.4
30°	6873.0	6876.4	6866.0	6862.6	6845.1	6824.4	6820.8	6817.4	6803.5	6789.7	6793.1
32.5°	6244.3	6227.0	6185.3	6140.2	6095.1	6046.5	6018.6	5983.9	5963.0	5942.3	5918.0
35°	5431.6	5390.0	5331.0	5275.4	5223.4	5185.1	5122.6	5101.7	5081.0	5053.1	5046.3
37.5°	4476.6	4452.3	4396.7	4355.1	4327.4	4309.9	4278.6	4257.9	4257.9	4247.5	4240.4
40°	3490.2	3483.4	3462.5	3473.0	3459.1	3465.9	3462.5	3455.5	3473.0	3473.0	3480.0
42.5°	2618.5	2622.1	2632.6	2639.4	2660.3	2663.7	2681.2	2681.2	2691.6	2701.9	2708.9
45°	1948.3	1962.3	1962.3	1976.1	1997.0	2000.4	2007.3	2010.9	2017.7	2035.2	2042.0
47.5°	1462.1	1465.5	1465.5	1469.1	1476.0	1483.0	1479.5	1483.0	1493.4	1486.4	1493.4
50°	1080.1	1083.6	1073.1	1062.7	1073.1	1073.1	1069.7	1059.3	1069.7	1055.8	1062.7
52.5°	736.3	732.8	722.3	725.9	718.9	715.5	715.5	708.5	708.5	708.5	694.6
55°	465.4	465.4	458.4	458.4	455.0	448.0	444.6	441.0	437.6	434.1	434.1
57.5°	260.5	263.9	253.6	250.0	253.6	250.0	243.2	243.2	243.2	232.7	239.6
60°	142.4	138.9	135.5	131.9	128.5	131.9	131.9	125.1	125.1	125.1	128.5
62.5°	76.3	76.3	72.9	72.9	69.5	69.5	76.3	66.0	69.5	66.0	69.5
65°	41.7	52.0	38.2	38.2	48.6	45.2	41.7	41.7	45.2	38.2	41.7
67.5°	45.2	31.3	27.7	31.3	27.7	27.7	27.7	34.7	31.3	24.3	31.3
70°	20.9	24.3	24.3	17.3	27.7	13.9	24.3	13.9	20.9	17.3	20.9
72.5°	20.9	20.9	20.9	13.9	20.9	13.9	17.3	17.3	13.9	13.9	20.9
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°	7.0	7.0	3.4	3.4	3.4	3.4	7.0	7.0	7.0	0.0	3.4
80°	7.0	7.0	0.0	3.4	0.0	0.0	3.4	0.0	3.4	0.0	7.0
82.5°	3.4	7.0	3.4	3.4	7.0	7.0	7.0	3.4	3.4	3.4	3.4
85°	0.0	3.4	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	3.4
87.5°	0.0	3.4	0.0	0.0	0.0	0.0	3.4	3.4	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: P250221

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7432.1	7432.1	7432.1	7432.1
2.5°	7630.1	7633.5	7640.5	7637.1
5°	8032.9	8060.8	8074.6	8071.2
7.5°	8411.4	8460.2	8487.9	8487.9
10°	8703.2	8758.8	8800.4	8807.4
12.5°	8859.4	8922.0	8977.6	8963.6
15°	8904.6	8967.2	9022.7	9012.2
17.5°	8852.6	8915.0	8956.8	8949.8
20°	8710.2	8762.2	8804.0	8800.4
22.5°	8487.9	8533.1	8567.8	8564.2
25°	8112.8	8144.1	8171.8	8158.0
27.5°	7536.3	7546.7	7564.0	7543.3
30°	6768.8	6775.7	6782.7	6779.2
32.5°	5907.5	5903.9	5897.1	5890.1
35°	5035.8	5035.8	5039.2	5018.4
37.5°	4243.9	4240.4	4250.9	4240.4
40°	3486.8	3483.4	3497.3	3480.0
42.5°	2719.3	2729.8	2733.2	2733.2
45°	2045.6	2049.0	2052.5	2052.5
47.5°	1493.4	1496.8	1514.3	1493.4
50°	1055.8	1059.3	1062.7	1055.8
52.5°	698.0	701.6	698.0	687.6
55°	427.1	430.7	430.7	430.7
57.5°	229.1	232.7	232.7	229.1
60°	125.1	121.5	125.1	118.1
62.5°	66.0	72.9	69.5	62.5
65°	41.7	41.7	41.7	48.6
67.5°	34.7	27.7	31.3	24.3
70°	20.9	24.3	24.3	17.3
72.5°	17.3	17.3	17.3	20.9
75°	0.0	0.0	0.0	0.0
77.5°	7.0	7.0	7.0	3.4
80°	3.4	0.0	3.4	0.0
82.5°	3.4	3.4	7.0	3.4
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)