

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: P250270

Luminaire Tested: **LSR8B120D010 EC8B120950 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250270  
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 EC8B120950 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11591.0 lumens  
Efficiency: N/A  
Efficacy: 98.0 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

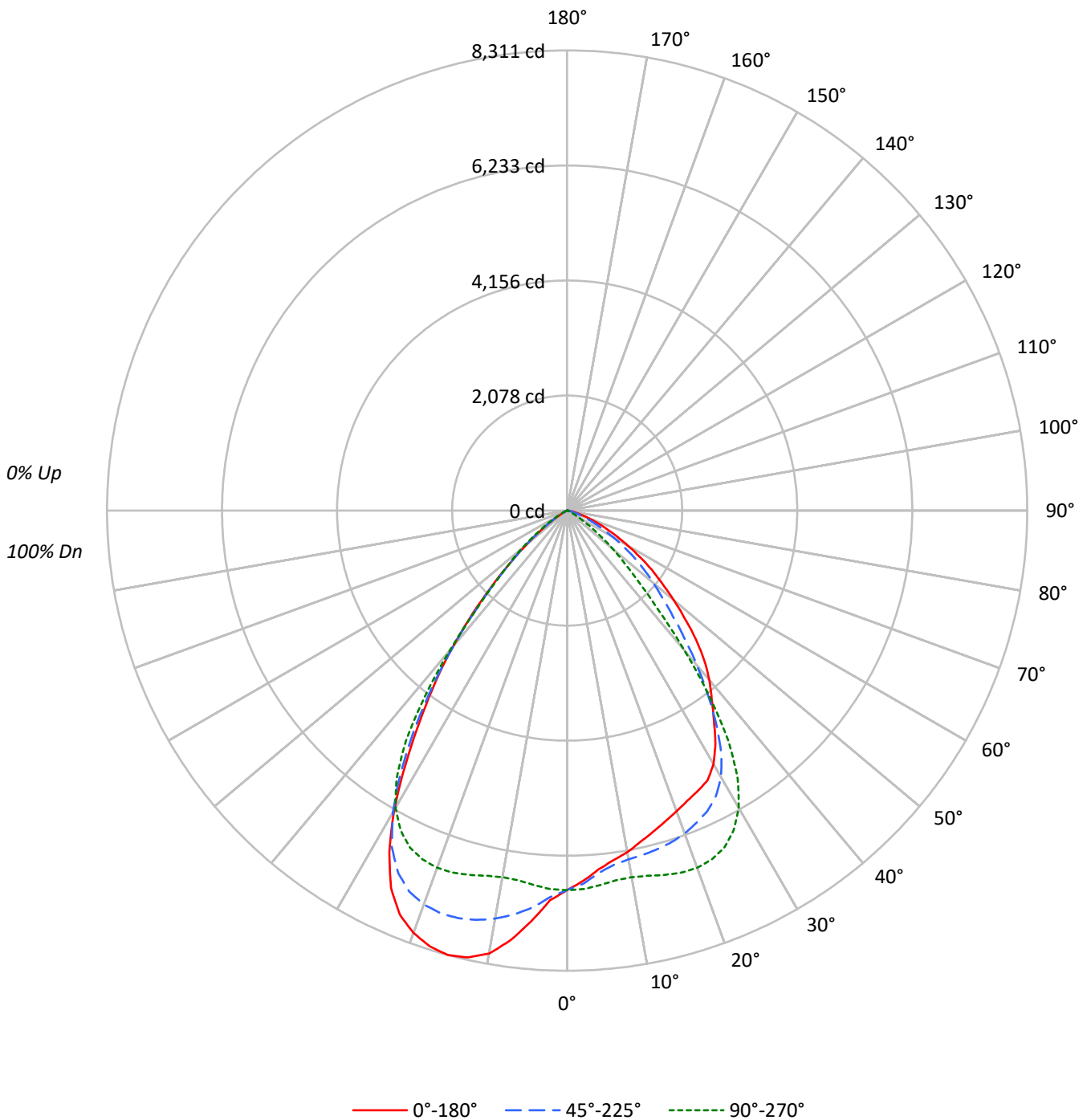
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	211346	211346	211346
5°	201347	210169	230398
10°	196154	210495	254319
15°	191707	217470	265321
20°	189597	225330	266316
25°	190042	228513	255970
30°	188278	220665	222602
35°	173976	190973	174214
40°	160766	132403	129183
45°	143156	79892	82543
50°	120455	51470	46711
55°	100211	28236	21354
60°	78219	12242	6716
65°	57723	6078	3269
70°	40139	3760	1443
75°	24424	774	0
80°	17634	1154	0
85°	11322	1132	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	658.9	5.7
10°-20°	1972.0	17.0
20°-30°	3019.9	26.1
30°-40°	2960.5	25.5
40°-50°	1782.8	15.4
50°-60°	820.6	7.1
60°-70°	288.3	2.5
70°-80°	75.4	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°	5650.7	48.8
0°-40°	8611.1	74.3
0°-60°	11214.5	96.8
0°-90°	11591.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11591.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6854	6854	6854	6854	6854	
5°	6505	6566	6790	7196	7443	614
15°	6005	6329	6812	7619	8311	1697
25°	5586	5989	6716	7222	7523	2573
35°	4622	4686	5073	4782	4628	2894
45°	3283	2703	1832	1845	1893	2517
55°	1864	1476	525	413	397	1663
65°	791	548	83	42	45	806
75°	205	118	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°	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8
2.5°	6693.6	6700.1	6700.1	6700.1	6712.9	6716.2	6712.9	6716.2	6722.5	6744.9	6754.5
5°	6504.7	6495.1	6501.5	6498.2	6514.3	6524.0	6517.5	6527.1	6549.5	6565.6	6581.6
7.5°	6370.2	6370.2	6370.2	6376.6	6386.2	6405.4	6402.3	6408.6	6431.0	6453.4	6475.8
10°	6264.5	6261.4	6261.4	6277.3	6290.1	6312.5	6319.0	6338.2	6366.9	6395.8	6421.4
12.5°	6126.8	6130.1	6146.0	6162.1	6190.8	6226.0	6245.3	6271.0	6315.8	6363.8	6392.7
15°	6005.1	6008.2	6021.2	6053.1	6088.4	6130.1	6171.6	6213.2	6267.7	6328.6	6379.9
17.5°	5886.6	5889.7	5899.4	5934.7	5979.5	6034.0	6081.9	6136.4	6206.9	6277.3	6341.4
20°	5777.7	5774.5	5790.5	5822.5	5880.2	5931.4	5979.5	6043.6	6120.4	6206.9	6280.5
22.5°	5672.0	5672.0	5688.0	5720.1	5771.4	5822.5	5873.8	5941.0	6017.9	6101.2	6187.7
25°	5585.5	5582.3	5604.7	5620.8	5659.2	5710.5	5764.9	5819.3	5896.2	5989.1	6072.3
27.5°	5492.7	5489.5	5492.7	5511.9	5547.1	5585.5	5627.1	5675.3	5739.3	5816.2	5896.2
30°	5287.7	5290.8	5290.8	5306.9	5326.2	5367.7	5390.1	5438.2	5495.8	5559.9	5630.4
32.5°	4983.4	4986.6	4986.6	4993.1	5009.0	5028.3	5047.5	5082.7	5127.5	5182.0	5246.0
35°	4621.6	4621.6	4618.3	4621.6	4631.2	4631.2	4647.1	4631.2	4653.6	4685.6	4733.6
37.5°	4288.4	4282.0	4275.7	4269.2	4259.6	4243.6	4221.2	4182.7	4173.1	4160.3	4163.5
40°	3993.8	3990.6	3971.4	3955.3	3923.3	3884.9	3830.5	3763.2	3708.8	3644.7	3590.3
42.5°	3667.1	3663.8	3647.9	3619.0	3583.8	3526.2	3439.7	3350.1	3241.2	3145.1	3045.8
45°	3282.7	3292.4	3270.0	3237.9	3196.3	3141.8	3045.8	2936.8	2827.9	2703.1	2578.1
47.5°	2882.4	2879.2	2863.3	2844.0	2808.8	2754.4	2690.3	2571.8	2456.5	2341.2	2213.1
50°	2510.9	2498.1	2491.6	2472.5	2450.1	2405.3	2337.9	2241.8	2139.4	2030.5	1912.0
52.5°	2158.7	2158.7	2142.6	2129.8	2110.5	2075.3	2017.7	1940.9	1854.4	1751.8	1627.0
55°	1864.0	1857.6	1841.6	1825.5	1806.3	1783.9	1732.7	1668.7	1575.7	1476.5	1367.6
57.5°	1550.1	1546.9	1540.5	1521.3	1511.7	1489.2	1431.6	1367.6	1287.5	1201.1	1111.3
60°	1268.3	1255.5	1242.6	1229.8	1213.9	1191.4	1153.0	1098.5	1031.3	954.4	864.8
62.5°	1015.3	1034.4	996.1	996.1	964.0	944.8	909.6	877.6	807.0	736.6	659.8
65°	791.1	791.1	775.0	762.2	743.0	720.6	685.4	653.3	602.1	547.6	493.2
67.5°	605.3	602.1	586.1	573.3	557.2	544.4	518.9	480.4	442.0	397.2	352.2
70°	445.2	442.0	438.7	416.3	403.5	387.6	368.3	342.7	313.9	281.8	240.2
72.5°	320.2	320.2	310.7	301.1	288.3	275.4	256.3	240.2	214.6	192.2	163.3
75°	205.0	201.8	201.8	185.7	185.7	166.5	153.7	144.1	131.3	118.5	92.9
77.5°	147.4	144.1	140.9	134.5	128.1	121.7	112.1	99.3	89.6	76.9	67.2
80°	99.3	92.9	89.6	89.6	80.0	76.9	80.0	60.9	57.6	48.0	41.7
82.5°	60.9	60.9	57.6	57.6	54.4	51.3	41.7	41.7	38.5	35.2	28.9
85°	32.0	41.7	28.9	32.0	28.9	32.0	28.9	22.4	19.2	16.0	16.0
87.5°	19.2	12.8	12.8	19.2	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



TEST NUMBER: P250270

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8
2.5°	6748.2	6770.6	6767.3	6796.2	6805.8	6828.2	6828.2	6844.2	6853.8	6876.2	6895.4
5°	6588.0	6623.2	6632.8	6668.0	6696.9	6732.1	6754.5	6789.7	6821.7	6869.9	6914.7
7.5°	6488.8	6517.5	6536.7	6578.4	6610.4	6648.8	6687.3	6735.3	6780.1	6837.8	6901.9
10°	6440.6	6479.1	6507.9	6549.5	6588.0	6629.7	6668.0	6722.5	6773.8	6847.5	6917.9
12.5°	6427.9	6472.7	6507.9	6565.6	6604.0	6648.8	6693.6	6754.5	6809.0	6885.8	6966.0
15°	6427.9	6488.8	6536.7	6600.8	6645.6	6703.2	6751.4	6812.1	6873.0	6953.0	7029.9
17.5°	6415.1	6488.8	6549.5	6623.2	6680.8	6738.6	6799.3	6857.1	6921.0	6998.0	7084.3
20°	6363.8	6456.7	6530.3	6616.8	6677.7	6741.7	6802.6	6866.6	6933.9	7014.0	7087.6
22.5°	6274.1	6383.0	6466.3	6559.2	6629.7	6693.6	6754.5	6818.6	6892.3	6969.1	7046.0
25°	6155.6	6258.1	6347.8	6443.8	6514.3	6584.7	6642.5	6716.2	6783.4	6857.1	6917.9
27.5°	5976.2	6085.1	6171.6	6271.0	6334.9	6402.3	6450.3	6511.2	6575.2	6636.0	6684.1
30°	5707.3	5806.6	5896.2	5985.8	6049.9	6098.0	6149.2	6197.3	6238.9	6280.5	6322.1
32.5°	5313.3	5403.0	5489.5	5572.7	5624.0	5665.6	5704.0	5732.9	5755.3	5777.7	5780.8
35°	4772.1	4845.7	4900.1	4973.8	5021.9	5060.3	5060.3	5073.1	5069.9	5060.3	5050.7
37.5°	4166.8	4195.5	4217.9	4246.8	4249.9	4249.9	4230.8	4214.8	4189.2	4182.7	4163.5
40°	3535.8	3497.4	3468.5	3430.1	3407.7	3359.6	3318.1	3289.2	3247.5	3241.2	3234.8
42.5°	2936.8	2847.2	2767.2	2699.9	2623.1	2555.7	2494.9	2450.1	2418.1	2414.8	2418.1
45°	2450.1	2347.6	2229.1	2136.2	2049.8	1966.5	1886.4	1832.0	1803.1	1796.7	1803.1
47.5°	2081.8	1963.3	1847.9	1742.2	1649.4	1556.5	1476.5	1402.8	1367.6	1357.9	1354.8
50°	1790.3	1668.7	1546.9	1438.0	1335.5	1242.6	1143.3	1072.9	1028.1	1012.0	999.2
52.5°	1505.3	1396.4	1271.5	1159.4	1056.9	948.0	845.5	765.4	720.6	701.4	688.5
55°	1255.5	1146.6	1031.3	922.4	813.5	704.6	602.1	525.2	477.2	454.8	438.7
57.5°	1002.4	900.0	800.7	691.8	602.1	496.5	393.9	326.7	285.0	259.4	246.6
60°	775.0	695.0	608.5	518.9	432.4	345.9	262.6	198.5	166.5	147.4	131.3
62.5°	586.1	518.9	461.1	384.3	317.0	243.4	179.4	128.1	99.3	83.3	76.9
65°	422.8	371.5	320.2	272.2	224.2	169.8	121.7	83.3	57.6	48.0	44.8
67.5°	301.1	259.4	220.9	188.9	153.7	121.7	86.5	57.6	44.8	38.5	35.2
70°	211.3	179.4	153.7	125.0	102.4	80.0	67.2	41.7	25.6	28.9	22.4
72.5°	140.9	118.5	105.7	86.5	70.4	57.6	41.7	28.9	28.9	22.4	19.2
75°	76.9	70.4	54.4	41.7	35.2	32.0	12.8	6.5	3.2	9.6	3.2
77.5°	54.4	48.0	41.7	35.2	28.9	22.4	12.8	12.8	9.6	12.8	6.5
80°	35.2	28.9	25.6	25.6	16.0	9.6	6.5	6.5	9.6	3.2	3.2
82.5°	22.4	19.2	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°	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8	6853.8
2.5°	6908.2	6921.0	6937.1	6949.9	6978.8	6985.1	6998.0	7010.8	7020.4	7029.9	7033.2
5°	6953.0	7001.2	7046.0	7094.0	7154.9	7196.5	7244.5	7286.2	7327.8	7363.0	7388.6
7.5°	6966.0	7039.5	7106.9	7190.1	7279.7	7356.7	7436.7	7516.7	7600.1	7664.1	7718.6
10°	6991.5	7081.2	7167.7	7266.9	7382.3	7484.7	7584.0	7689.7	7795.4	7885.1	7965.2
12.5°	7036.4	7135.6	7228.6	7337.5	7456.0	7571.2	7680.1	7798.6	7910.8	8010.0	8099.7
15°	7110.1	7202.9	7292.6	7395.1	7513.6	7619.3	7728.2	7843.4	7955.6	8058.0	8141.3
17.5°	7158.0	7244.5	7334.2	7427.1	7526.4	7622.5	7724.9	7827.5	7929.9	8022.8	8099.7
20°	7158.0	7241.4	7308.6	7391.9	7484.7	7568.0	7651.3	7741.0	7830.6	7907.5	7981.2
22.5°	7100.4	7180.4	7231.7	7295.8	7375.8	7446.3	7491.2	7590.4	7657.7	7724.9	7779.3
25°	6966.0	7023.6	7065.2	7110.1	7174.1	7222.1	7260.6	7318.2	7385.4	7411.1	7449.5
27.5°	6722.5	6764.1	6786.6	6796.2	6828.2	6853.8	6860.2	6885.8	6914.7	6921.0	6937.1
30°	6338.2	6341.4	6331.8	6328.6	6312.5	6293.4	6290.1	6286.9	6274.1	6261.4	6264.5
32.5°	5758.4	5742.5	5704.0	5662.5	5620.8	5576.0	5550.3	5518.3	5499.0	5479.9	5457.5
35°	5009.0	4970.6	4916.2	4864.9	4816.9	4781.6	4724.0	4704.7	4685.6	4659.9	4653.6
37.5°	4128.3	4105.9	4054.6	4016.2	3990.6	3974.6	3945.7	3926.6	3926.6	3917.0	3910.5
40°	3218.7	3212.3	3193.1	3202.7	3189.9	3196.3	3193.1	3186.6	3202.7	3202.7	3209.2
42.5°	2414.8	2418.1	2427.7	2434.0	2453.3	2456.5	2472.5	2472.5	2482.2	2491.6	2498.1
45°	1796.7	1809.6	1809.6	1822.4	1841.6	1844.8	1851.1	1854.4	1860.7	1876.8	1883.1
47.5°	1348.3	1351.5	1351.5	1354.8	1361.1	1367.6	1364.4	1367.6	1377.2	1370.7	1377.2
50°	996.1	999.2	989.6	980.0	989.6	989.6	986.5	976.8	986.5	973.7	980.0
52.5°	679.0	675.7	666.1	669.4	663.0	659.8	659.8	653.3	653.3	653.3	640.5
55°	429.2	429.2	422.8	422.8	419.6	413.1	410.0	406.7	403.5	400.4	400.4
57.5°	240.2	243.4	233.9	230.6	233.9	230.6	224.2	224.2	224.2	214.6	220.9
60°	131.3	128.1	125.0	121.7	118.5	121.7	121.7	115.3	115.3	115.3	118.5
62.5°	70.4	70.4	67.2	67.2	64.1	64.1	70.4	60.9	64.1	60.9	64.1
65°	38.5	48.0	35.2	35.2	44.8	41.7	38.5	38.5	41.7	35.2	38.5
67.5°	41.7	28.9	25.6	28.9	25.6	25.6	25.6	32.0	28.9	22.4	28.9
70°	19.2	22.4	22.4	16.0	25.6	12.8	22.4	12.8	19.2	16.0	19.2
72.5°	19.2	19.2	19.2	12.8	19.2	12.8	16.0	16.0	12.8	12.8	19.2
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: P250270

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6853.8	6853.8	6853.8	6853.8
2.5°	7036.4	7039.5	7046.0	7042.8
5°	7407.8	7433.6	7446.3	7443.2
7.5°	7756.9	7801.9	7827.5	7827.5
10°	8026.0	8077.3	8115.6	8122.1
12.5°	8170.1	8227.8	8279.1	8266.2
15°	8211.7	8269.5	8320.6	8311.0
17.5°	8163.7	8221.3	8259.8	8253.4
20°	8032.4	8080.4	8118.9	8115.6
22.5°	7827.5	7869.1	7901.1	7897.8
25°	7481.5	7510.4	7536.0	7523.2
27.5°	6949.9	6959.5	6975.5	6956.3
30°	6242.1	6248.4	6254.9	6251.7
32.5°	5447.9	5444.6	5438.2	5431.8
35°	4644.0	4644.0	4647.1	4627.9
37.5°	3913.7	3910.5	3920.1	3910.5
40°	3215.5	3212.3	3225.1	3209.2
42.5°	2507.7	2517.4	2520.5	2520.5
45°	1886.4	1889.6	1892.8	1892.8
47.5°	1377.2	1380.4	1396.4	1377.2
50°	973.7	976.8	980.0	973.7
52.5°	643.7	647.0	643.7	634.1
55°	393.9	397.2	397.2	397.2
57.5°	211.3	214.6	214.6	211.3
60°	115.3	112.1	115.3	108.9
62.5°	60.9	67.2	64.1	57.6
65°	38.5	38.5	38.5	44.8
67.5°	32.0	25.6	28.9	22.4
70°	19.2	22.4	22.4	16.0
72.5°	16.0	16.0	16.0	19.2
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)