

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: P249618

Luminaire Tested: **LSR8B120D010 EC8B1209730 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249618  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B120D010 EC8B1209730 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9107.0 lumens  
Efficiency: N/A  
Efficacy: 77.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

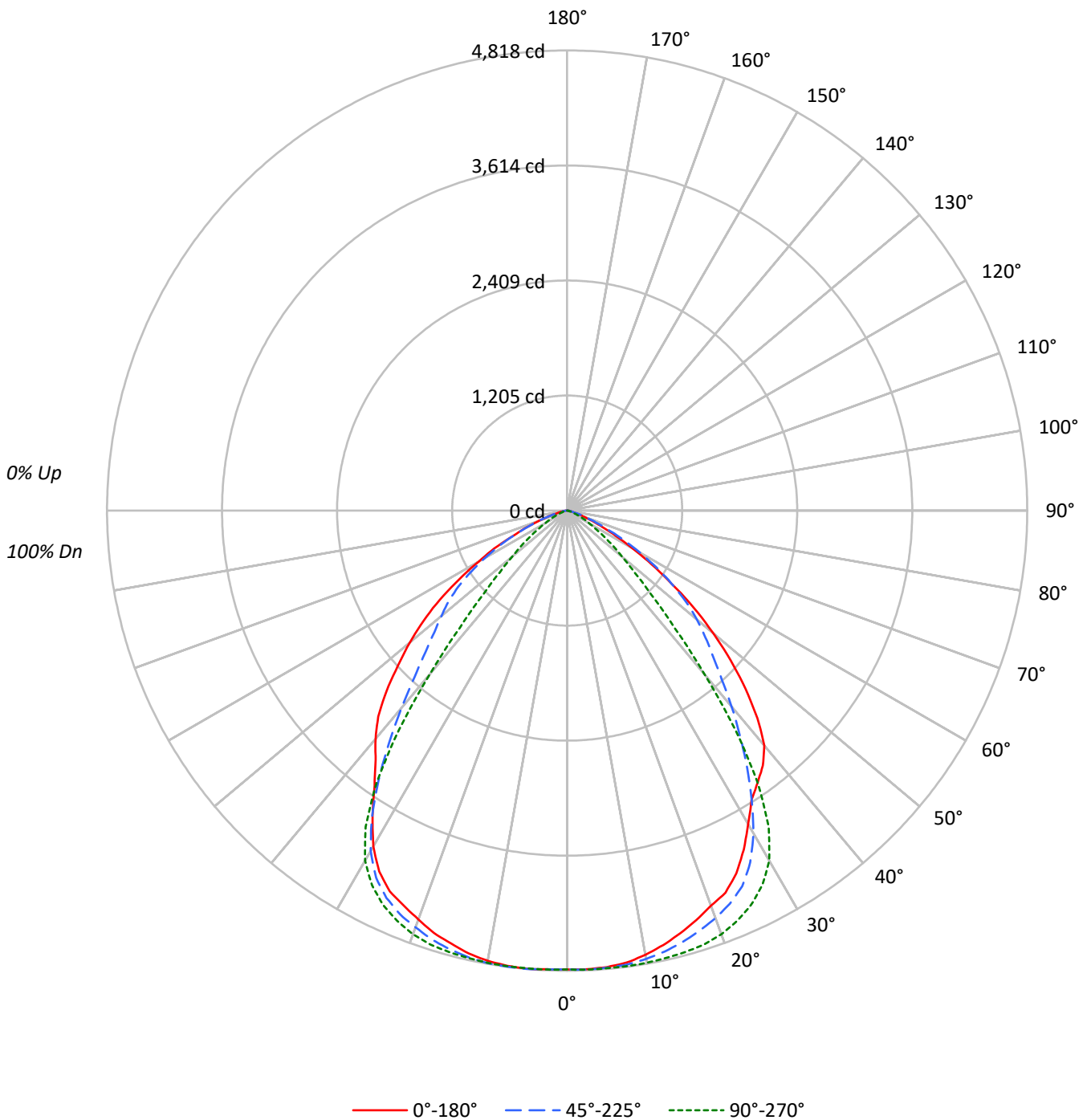
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249618

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0MW

### Luminous Intensity Polar Plot





TEST NUMBER: P249618

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0MW

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

**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°			



TEST NUMBER: P249618

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	458.6	5.0
10°-20°	1331.8	14.6
20°-30°	2021.4	22.2
30°-40°	2123.0	23.3
40°-50°	1591.7	17.5
50°-60°	1021.3	11.2
60°-70°	436.9	4.8
70°-80°	103.2	1.1
80°-90°	19.2	0.2
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°	3811.7	41.9
0°-40°	5934.7	65.2
0°-60°	8547.7	93.9
0°-90°	9107.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9107.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4805	4805	4805	4805	4805	
5°	4797	4805	4810	4818	4815	456
15°	4581	4676	4784	4754	4694	1292
25°	4191	4338	4558	4475	4398	1915
35°	3477	3283	3479	3438	3516	2182
45°	2641	2159	1241	2097	2677	2023
55°	1336	1336	462	1393	1627	1212
65°	402	475	147	611	622	430
75°	62	72	21	124	121	90
85°	21	13	10	21	28	22
90°	0	0	0	0	0	



TEST NUMBER: P249618

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0MW

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0
2.5°	4807.6	4812.8	4810.2	4810.2	4807.6	4810.2	4810.2	4815.4	4815.4	4810.2	4807.6
5°	4797.3	4802.4	4802.4	4797.3	4797.3	4810.2	4802.4	4807.6	4807.6	4805.0	4805.0
7.5°	4774.1	4774.1	4784.4	4776.7	4776.7	4784.4	4781.8	4787.0	4792.2	4794.7	4794.7
10°	4722.5	4727.7	4730.2	4730.2	4732.8	4740.5	4745.7	4756.1	4761.2	4766.3	4768.9
12.5°	4658.1	4665.8	4668.3	4665.8	4673.5	4683.8	4696.7	4709.6	4717.4	4727.7	4735.4
15°	4580.6	4580.6	4585.8	4593.6	4598.7	4614.2	4627.1	4642.5	4663.2	4676.1	4689.0
17.5°	4495.5	4500.7	4508.4	4508.4	4518.8	4544.5	4552.3	4575.5	4598.7	4611.6	4637.4
20°	4402.7	4407.8	4415.6	4420.8	4433.6	4454.3	4469.7	4490.4	4516.2	4539.4	4565.2
22.5°	4330.5	4320.2	4325.3	4330.5	4343.4	4361.4	4379.5	4405.2	4431.1	4454.3	4480.1
25°	4191.2	4193.8	4201.5	4206.6	4222.2	4237.6	4258.3	4289.2	4312.4	4338.2	4366.6
27.5°	4002.9	4005.5	4018.4	4018.4	4031.3	4057.1	4069.9	4095.8	4126.7	4152.5	4186.1
30°	3788.9	3794.0	3794.0	3804.3	3812.0	3825.0	3837.8	3863.6	3879.1	3902.3	3948.8
32.5°	3592.8	3598.0	3595.4	3592.8	3585.1	3582.5	3579.9	3585.1	3590.3	3598.0	3616.0
35°	3476.8	3463.8	3453.6	3435.5	3414.9	3389.1	3365.8	3334.9	3306.5	3283.3	3257.5
37.5°	3365.8	3363.3	3347.8	3322.0	3280.7	3234.3	3180.2	3113.1	3046.0	2973.8	2904.2
40°	3211.1	3203.3	3190.5	3154.4	3107.9	3051.2	2979.0	2896.4	2788.1	2677.2	2563.7
42.5°	2948.0	2950.6	2935.1	2906.7	2862.9	2808.7	2733.9	2643.7	2527.6	2396.0	2249.1
45°	2641.1	2641.1	2635.9	2612.7	2581.8	2537.9	2481.2	2406.4	2292.9	2158.8	2001.4
47.5°	2321.3	2323.9	2316.1	2311.0	2298.0	2269.7	2228.4	2171.7	2091.7	1962.7	1805.4
50°	1996.3	1996.3	2009.2	2006.6	2006.6	1996.3	1978.3	1944.7	1875.1	1771.9	1624.9
52.5°	1671.3	1676.5	1684.2	1694.5	1707.4	1728.0	1707.4	1691.9	1648.1	1568.1	1441.8
55°	1336.0	1341.2	1354.1	1372.1	1387.6	1408.3	1413.4	1413.4	1390.2	1336.0	1240.6
57.5°	1049.7	1042.0	1052.3	1067.8	1088.4	1109.1	1124.5	1142.6	1140.0	1103.9	1026.5
60°	789.2	791.8	799.5	815.0	830.5	848.6	869.2	884.7	892.4	874.4	825.3
62.5°	575.2	575.2	585.5	600.9	608.7	634.5	647.4	655.1	662.8	660.2	629.3
65°	402.4	407.5	412.7	420.4	428.1	443.6	451.4	466.8	472.0	474.6	451.4
67.5°	283.7	276.0	281.1	286.3	294.0	304.4	319.8	319.8	327.5	327.5	312.1
70°	180.6	180.6	183.1	190.8	196.0	198.6	203.8	208.9	216.7	214.1	214.1
72.5°	121.2	118.6	121.2	123.8	126.4	134.1	134.1	136.7	141.9	144.5	134.1
75°	61.9	64.5	69.6	67.1	74.8	69.6	72.2	80.0	77.4	72.2	72.2
77.5°	51.6	51.6	51.6	49.0	54.1	54.1	51.6	56.7	54.1	54.1	51.6
80°	36.1	38.7	36.1	33.5	36.1	33.5	33.5	33.5	33.5	33.5	30.9
82.5°	28.4	23.2	25.8	23.2	25.8	25.8	23.2	20.6	20.6	23.2	20.6
85°	20.6	15.5	18.0	18.0	15.5	15.5	15.5	15.5	15.5	12.9	12.9
87.5°	12.9	7.8	7.8	7.8	10.3	10.3	10.3	7.8	10.3	10.3	5.2
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: P249618

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0
2.5°	4812.8	4810.2	4815.4	4812.8	4812.8	4810.2	4812.8	4810.2	4815.4	4805.0	4807.6
5°	4812.8	4807.6	4810.2	4812.8	4815.4	4810.2	4810.2	4810.2	4815.4	4810.2	4812.8
7.5°	4802.4	4799.9	4807.6	4812.8	4810.2	4807.6	4812.8	4810.2	4815.4	4812.8	4817.9
10°	4781.8	4784.4	4789.6	4797.3	4799.9	4802.4	4807.6	4807.6	4815.4	4805.0	4810.2
12.5°	4750.9	4761.2	4774.1	4779.2	4789.6	4789.6	4794.7	4797.3	4802.4	4799.9	4807.6
15°	4712.2	4725.1	4740.5	4753.5	4766.3	4774.1	4781.8	4784.4	4792.2	4784.4	4787.0
17.5°	4665.8	4681.2	4704.4	4719.9	4740.5	4748.3	4758.6	4763.8	4771.5	4766.3	4768.9
20°	4601.3	4619.4	4645.1	4668.3	4681.2	4699.3	4712.2	4719.9	4725.1	4719.9	4722.5
22.5°	4511.0	4536.8	4570.3	4588.4	4614.2	4629.7	4632.2	4650.3	4663.2	4650.3	4655.5
25°	4405.2	4431.1	4456.9	4495.5	4518.8	4536.8	4554.9	4557.5	4570.3	4567.7	4565.2
27.5°	4229.9	4263.4	4307.2	4338.2	4369.1	4397.5	4418.2	4423.3	4436.2	4431.1	4433.6
30°	3990.0	4026.1	4067.4	4116.4	4160.3	4188.6	4214.4	4232.4	4245.3	4237.6	4235.0
32.5°	3649.6	3685.7	3729.5	3778.5	3830.1	3871.3	3902.3	3925.5	3941.0	3935.8	3923.0
35°	3260.1	3270.4	3298.8	3337.5	3381.3	3425.2	3453.6	3479.3	3497.4	3502.5	3502.5
37.5°	2860.3	2826.8	2806.2	2806.2	2831.9	2850.0	2875.8	2891.3	2919.7	2929.9	2937.7
40°	2473.4	2396.0	2323.9	2269.7	2233.6	2231.0	2231.0	2238.7	2264.5	2298.0	2329.0
42.5°	2127.8	2004.0	1893.1	1792.5	1720.3	1679.1	1661.0	1663.6	1684.2	1715.2	1766.7
45°	1851.9	1697.1	1557.8	1436.6	1338.6	1274.1	1243.2	1240.6	1256.1	1292.2	1348.9
47.5°	1637.8	1472.7	1315.4	1176.1	1070.4	1000.7	964.6	954.3	964.6	998.1	1065.2
50°	1459.8	1289.6	1127.1	982.7	869.2	797.0	763.4	750.6	763.4	791.8	858.8
52.5°	1294.7	1119.4	967.2	827.9	706.7	644.8	608.7	600.9	608.7	642.2	696.4
55°	1103.9	954.3	804.7	665.4	559.7	497.8	469.4	461.7	469.4	500.4	557.1
57.5°	915.6	786.6	655.1	528.7	438.5	384.3	358.5	348.2	366.2	386.9	453.9
60°	740.2	637.1	526.1	415.3	340.5	291.4	270.8	268.2	273.4	299.2	345.6
62.5°	580.3	495.2	407.5	317.2	255.3	234.7	208.9	206.4	211.5	226.9	263.1
65°	417.8	363.7	296.6	232.1	183.1	154.7	144.5	147.0	152.2	162.5	196.0
67.5°	291.4	252.8	206.4	162.5	126.4	113.5	103.2	100.6	103.2	121.2	139.3
70°	196.0	172.8	139.3	123.8	87.7	69.6	72.2	64.5	74.8	74.8	90.2
72.5°	128.9	113.5	92.8	72.2	61.9	49.0	49.0	46.4	51.6	54.1	67.1
75°	67.1	51.6	51.6	36.1	25.8	12.9	23.2	20.6	18.0	20.6	25.8
77.5°	46.4	38.7	36.1	28.4	25.8	20.6	20.6	20.6	20.6	23.2	25.8
80°	28.4	28.4	20.6	18.0	15.5	12.9	15.5	15.5	15.5	15.5	18.0
82.5°	18.0	15.5	15.5	12.9	12.9	10.3	10.3	10.3	10.3	10.3	15.5
85°	15.5	10.3	10.3	7.8	10.3	18.0	7.8	10.3	10.3	10.3	7.8
87.5°	5.2	7.8	7.8	7.8	5.2	2.6	5.2	7.8	7.8	12.9	10.3
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: P249618

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0
2.5°	4812.8	4815.4	4815.4	4812.8	4812.8	4807.6	4817.9	4810.2	4812.8	4823.1	4815.4
5°	4817.9	4820.5	4820.5	4817.9	4817.9	4817.9	4820.5	4820.5	4817.9	4815.4	4820.5
7.5°	4828.3	4825.7	4825.7	4820.5	4820.5	4815.4	4820.5	4812.8	4817.9	4812.8	4820.5
10°	4815.4	4817.9	4815.4	4812.8	4812.8	4810.2	4810.2	4802.4	4805.0	4797.3	4802.4
12.5°	4807.6	4805.0	4805.0	4799.9	4794.7	4789.6	4787.0	4779.2	4779.2	4761.2	4768.9
15°	4787.0	4789.6	4781.8	4771.5	4766.3	4753.5	4748.3	4737.9	4727.7	4714.8	4717.4
17.5°	4768.9	4761.2	4750.9	4740.5	4719.9	4709.6	4699.3	4683.8	4678.6	4663.2	4658.1
20°	4714.8	4709.6	4696.7	4678.6	4665.8	4642.5	4632.2	4616.8	4603.8	4588.4	4580.6
22.5°	4645.1	4639.9	4624.5	4606.4	4585.8	4575.5	4565.2	4536.8	4523.9	4508.4	4505.8
25°	4557.5	4549.7	4534.2	4513.6	4503.2	4474.9	4464.6	4443.9	4438.8	4423.3	4420.8
27.5°	4423.3	4413.0	4395.0	4369.1	4351.1	4333.0	4322.8	4307.2	4302.1	4286.6	4284.1
30°	4222.2	4209.2	4173.1	4162.8	4131.9	4113.8	4113.8	4093.2	4095.8	4085.5	4085.5
32.5°	3904.9	3884.3	3855.9	3835.2	3814.6	3804.3	3804.3	3796.6	3801.7	3801.7	3806.9
35°	3484.5	3456.1	3440.6	3427.7	3427.7	3438.0	3469.0	3476.8	3492.2	3505.1	3515.5
37.5°	2945.4	2942.9	2960.9	2976.4	3015.1	3058.9	3113.1	3159.5	3203.3	3234.3	3265.2
40°	2362.5	2427.0	2478.6	2550.9	2610.1	2695.2	2793.3	2873.2	2948.0	3002.2	3058.9
42.5°	1844.1	1926.6	2035.0	2140.7	2246.5	2362.5	2491.5	2602.4	2700.4	2775.2	2834.5
45°	1436.6	1550.1	1681.7	1815.8	1952.5	2096.9	2231.0	2344.5	2447.7	2525.0	2584.4
47.5°	1158.0	1281.9	1431.4	1578.5	1733.2	1885.4	2035.0	2133.0	2218.1	2280.0	2334.2
50°	956.9	1088.4	1245.8	1413.4	1568.1	1720.3	1849.3	1944.7	2014.4	2068.5	2102.0
52.5°	799.5	938.8	1106.5	1274.1	1428.8	1568.1	1684.2	1756.4	1813.2	1851.9	1882.8
55°	660.2	794.4	951.7	1109.1	1261.2	1392.7	1488.2	1542.4	1586.2	1609.4	1627.4
57.5°	539.1	662.8	807.3	951.7	1083.3	1191.6	1266.4	1320.5	1341.2	1359.2	1356.6
60°	423.0	539.1	670.6	794.4	907.9	995.5	1049.7	1080.7	1096.1	1103.9	1098.7
62.5°	332.7	438.5	539.1	647.4	729.9	804.7	856.3	856.3	864.0	866.6	874.4
65°	247.6	327.5	415.3	495.2	562.2	611.3	639.7	647.4	657.7	655.1	650.0
67.5°	183.1	242.5	306.9	366.2	412.7	443.6	464.2	482.3	479.8	474.6	472.0
70°	126.4	165.1	221.8	257.9	291.4	322.4	327.5	330.1	332.7	335.3	330.1
72.5°	87.7	116.1	147.0	178.0	198.6	211.5	224.4	226.9	226.9	226.9	224.4
75°	43.9	59.3	87.7	100.6	118.6	123.8	134.1	134.1	141.9	131.5	128.9
77.5°	38.7	46.4	61.9	72.2	80.0	87.7	90.2	98.0	95.4	90.2	92.8
80°	23.2	28.4	38.7	43.9	54.1	56.7	59.3	61.9	59.3	61.9	61.9
82.5°	18.0	20.6	25.8	25.8	33.5	33.5	36.1	36.1	38.7	38.7	38.7
85°	10.3	18.0	15.5	30.9	20.6	20.6	25.8	30.9	25.8	25.8	30.9
87.5°	10.3	10.3	7.8	10.3	10.3	10.3	12.9	15.5	15.5	18.0	15.5
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: P249618

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4805.0	4805.0	4805.0	4805.0
2.5°	4812.8	4817.9	4810.2	4807.6
5°	4820.5	4820.5	4815.4	4815.4
7.5°	4820.5	4820.5	4812.8	4807.6
10°	4799.9	4799.9	4792.2	4787.0
12.5°	4761.2	4761.2	4758.6	4750.9
15°	4712.2	4712.2	4701.9	4694.1
17.5°	4645.1	4650.3	4637.4	4637.4
20°	4572.9	4570.3	4560.0	4554.9
22.5°	4498.1	4493.0	4490.4	4474.9
25°	4418.2	4413.0	4405.2	4397.5
27.5°	4281.5	4278.9	4271.1	4260.8
30°	4072.5	4069.9	4059.7	4059.7
32.5°	3801.7	3799.1	3788.9	3791.4
35°	3520.6	3530.9	3525.8	3515.5
37.5°	3285.9	3293.6	3298.8	3293.6
40°	3089.9	3113.1	3115.7	3120.8
42.5°	2881.0	2911.9	2922.2	2927.4
45°	2630.7	2659.1	2682.4	2677.2
47.5°	2375.4	2396.0	2416.7	2401.2
50°	2130.4	2143.3	2151.1	2151.1
52.5°	1898.3	1898.3	1895.7	1898.3
55°	1632.6	1632.6	1622.3	1627.4
57.5°	1354.1	1359.2	1351.5	1338.6
60°	1096.1	1083.3	1078.1	1070.4
62.5°	853.7	853.7	835.7	858.8
65°	639.7	631.9	624.1	621.6
67.5°	464.2	461.7	453.9	451.4
70°	327.5	317.2	314.7	309.5
72.5°	219.2	219.2	214.1	214.1
75°	134.1	121.2	118.6	121.2
77.5°	92.8	90.2	90.2	87.7
80°	61.9	59.3	64.5	56.7
82.5°	38.7	41.3	38.7	41.3
85°	25.8	30.9	28.4	28.4
87.5°	15.5	15.5	15.5	15.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)