

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: P249519

Luminaire Tested: **LSR8B120D010 EC8B120827 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249519
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 EC8B120827 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11598.0 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

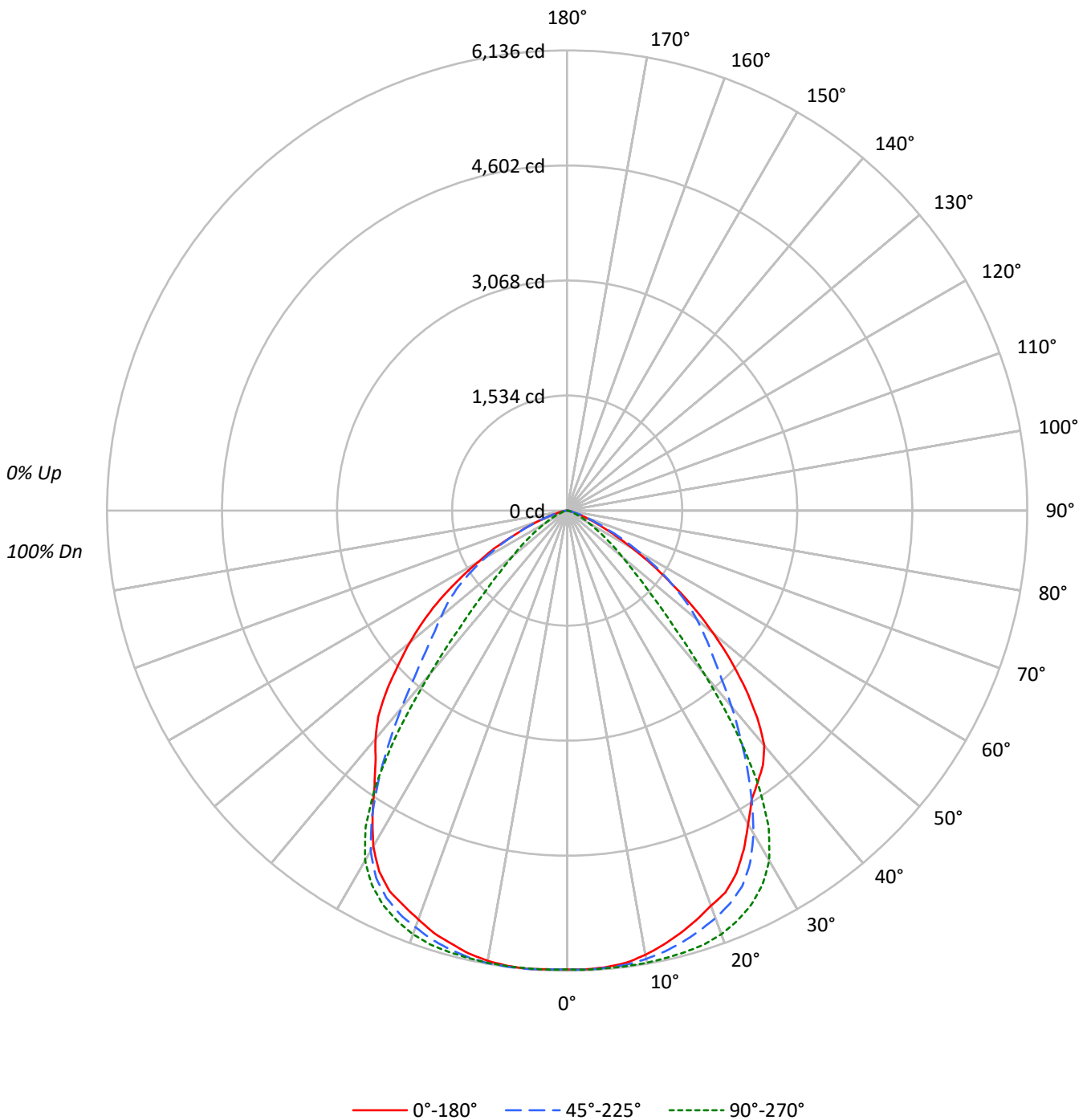
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	188697	188697	188697
5°	189111	189622	189826
10°	188317	191711	190887
15°	186229	194517	190845
20°	183996	197250	190352
25°	181607	197476	190549
30°	171809	191924	184090
35°	166681	166801	168533
40°	164615	114768	159989
45°	146679	68898	148685
50°	121966	45852	131417
55°	91470	31612	111426
60°	61987	21067	84072
65°	37387	13666	57759
70°	20728	7402	35532
75°	9388	3133	18396
80°	8169	3498	12839
85°	9305	4635	12808



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	584.0	5.0
10°-20°	1696.0	14.6
20°-30°	2574.3	22.2
30°-40°	2703.7	23.3
40°-50°	2027.1	17.5
50°-60°	1300.6	11.2
60°-70°	556.4	4.8
70°-80°	131.4	1.1
80°-90°	24.5	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°	4854.3	41.9
0°-40°	7558.0	65.2
0°-60°	10885.7	93.9
0°-90°	11598.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11598.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6119	6119	6119	6119	6119	
5°	6109	6119	6126	6136	6132	580
15°	5834	5955	6093	6054	5978	1645
25°	5338	5525	5804	5699	5600	2438
35°	4428	4181	4431	4378	4477	2779
45°	3364	2749	1580	2670	3410	2576
55°	1701	1701	588	1774	2073	1543
65°	512	604	187	778	792	547
75°	79	92	26	158	154	115
85°	26	16	13	26	36	28
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°	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3
2.5°	6122.6	6129.2	6125.9	6125.9	6122.6	6125.9	6125.9	6132.5	6132.5	6125.9	6122.6
5°	6109.4	6116.0	6116.0	6109.4	6109.4	6125.9	6116.0	6122.6	6122.6	6119.3	6119.3
7.5°	6079.9	6079.9	6093.1	6083.2	6083.2	6093.1	6089.8	6096.3	6102.9	6106.2	6106.2
10°	6014.2	6020.8	6024.1	6024.1	6027.4	6037.2	6043.8	6057.0	6063.5	6070.1	6073.4
12.5°	5932.1	5942.0	5945.3	5942.0	5951.8	5964.9	5981.4	5997.8	6007.7	6020.8	6030.7
15°	5833.5	5833.5	5840.1	5850.0	5856.6	5876.3	5892.7	5912.4	5938.7	5955.1	5971.5
17.5°	5725.2	5731.8	5741.6	5741.6	5754.8	5787.6	5797.4	5827.0	5856.6	5873.0	5905.9
20°	5607.0	5613.5	5623.4	5630.0	5646.4	5672.6	5692.3	5718.6	5751.5	5781.1	5813.8
22.5°	5514.9	5501.8	5508.4	5514.9	5531.4	5554.4	5577.4	5610.2	5643.1	5672.6	5705.5
25°	5337.6	5340.9	5350.7	5357.3	5377.0	5396.7	5423.0	5462.4	5492.0	5524.8	5560.9
27.5°	5097.8	5101.1	5117.5	5117.5	5133.9	5166.8	5183.2	5216.0	5255.5	5288.3	5331.1
30°	4825.2	4831.7	4831.7	4844.9	4854.7	4871.2	4887.6	4920.4	4940.1	4969.7	5028.9
32.5°	4575.6	4582.1	4578.8	4575.6	4565.7	4562.4	4559.1	4565.7	4572.3	4582.1	4605.1
35°	4427.8	4411.3	4398.2	4375.2	4348.9	4316.1	4286.5	4247.1	4210.9	4181.4	4148.6
37.5°	4286.5	4283.2	4263.5	4230.6	4178.1	4119.0	4050.0	3964.6	3879.2	3787.2	3698.6
40°	4089.4	4079.5	4063.1	4017.2	3958.0	3885.8	3793.8	3688.7	3550.7	3409.5	3265.0
42.5°	3754.4	3757.6	3738.0	3701.8	3646.0	3577.0	3481.7	3366.8	3219.0	3051.4	2864.2
45°	3363.5	3363.5	3356.9	3327.3	3288.0	3232.1	3159.8	3064.6	2920.1	2749.2	2548.9
47.5°	2956.2	2959.5	2949.6	2943.1	2926.6	2890.5	2838.0	2765.7	2663.9	2499.6	2299.2
50°	2542.4	2542.4	2558.8	2555.5	2555.5	2542.4	2519.4	2476.6	2388.0	2256.6	2069.4
52.5°	2128.5	2135.0	2144.9	2158.0	2174.4	2200.7	2174.4	2154.7	2098.9	1997.0	1836.1
55°	1701.4	1708.0	1724.4	1747.4	1767.2	1793.5	1800.0	1800.0	1770.4	1701.4	1579.9
57.5°	1336.9	1327.0	1340.2	1359.9	1386.1	1412.4	1432.1	1455.1	1451.8	1405.8	1307.3
60°	1005.1	1008.4	1018.2	1038.0	1057.7	1080.7	1106.9	1126.6	1136.5	1113.5	1051.1
62.5°	732.5	732.5	745.6	765.3	775.2	808.0	824.4	834.3	844.1	840.8	801.5
65°	512.4	519.0	525.5	535.4	545.2	564.9	574.8	594.5	601.1	604.4	574.8
67.5°	361.3	351.5	358.0	364.6	374.4	387.6	407.3	407.3	417.1	417.1	397.4
70°	229.9	229.9	233.2	243.0	249.6	252.9	259.5	266.0	275.9	272.6	272.6
72.5°	154.4	151.1	154.4	157.7	161.0	170.8	170.8	174.1	180.7	184.0	170.8
75°	78.8	82.1	88.7	85.4	95.2	88.7	91.9	101.8	98.5	91.9	91.9
77.5°	65.7	65.7	65.7	62.4	69.0	69.0	65.7	72.3	69.0	69.0	65.7
80°	46.0	49.3	46.0	42.7	46.0	42.7	42.7	42.7	42.7	42.7	39.4
82.5°	36.2	29.6	32.9	29.6	32.9	32.9	29.6	26.3	26.3	29.6	26.3
85°	26.3	19.7	23.0	23.0	19.7	19.7	19.7	19.7	19.7	16.4	16.4
87.5°	16.4	9.9	9.9	9.9	13.1	13.1	13.1	9.9	13.1	13.1	6.6
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°	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3
2.5°	6129.2	6125.9	6132.5	6129.2	6129.2	6125.9	6129.2	6125.9	6132.5	6119.3	6122.6
5°	6129.2	6122.6	6125.9	6129.2	6132.5	6125.9	6125.9	6125.9	6132.5	6125.9	6129.2
7.5°	6116.0	6112.7	6122.6	6129.2	6125.9	6122.6	6129.2	6125.9	6132.5	6129.2	6135.7
10°	6089.8	6093.1	6099.6	6109.4	6112.7	6116.0	6122.6	6122.6	6132.5	6119.3	6125.9
12.5°	6050.4	6063.5	6079.9	6086.5	6099.6	6099.6	6106.2	6109.4	6116.0	6112.7	6122.6
15°	6001.1	6017.5	6037.2	6053.7	6070.1	6079.9	6089.8	6093.1	6102.9	6093.1	6096.3
17.5°	5942.0	5961.6	5991.2	6010.9	6037.2	6047.1	6060.2	6066.8	6076.7	6070.1	6073.4
20°	5859.8	5882.9	5915.7	5945.3	5961.6	5984.6	6001.1	6010.9	6017.5	6010.9	6014.2
22.5°	5744.9	5777.8	5820.4	5843.4	5876.3	5896.0	5899.3	5922.3	5938.7	5922.3	5928.9
25°	5610.2	5643.1	5675.9	5725.2	5754.8	5777.8	5800.7	5804.0	5820.4	5817.1	5813.8
27.5°	5386.8	5429.6	5485.4	5524.8	5564.2	5600.4	5626.7	5633.2	5649.6	5643.1	5646.4
30°	5081.3	5127.4	5180.0	5242.3	5298.2	5334.3	5367.1	5390.1	5406.5	5396.7	5393.4
32.5°	4647.8	4693.8	4749.7	4812.0	4877.8	4930.3	4969.7	4999.3	5019.0	5012.4	4996.0
35°	4151.9	4165.0	4201.1	4250.4	4306.2	4362.0	4398.2	4431.0	4454.0	4460.6	4460.6
37.5°	3642.7	3600.0	3573.8	3573.8	3606.5	3629.5	3662.4	3682.1	3718.3	3731.4	3741.2
40°	3150.0	3051.4	2959.5	2890.5	2844.6	2841.3	2841.3	2851.1	2883.9	2926.6	2966.1
42.5°	2709.9	2552.2	2411.0	2282.8	2190.9	2138.3	2115.4	2118.6	2144.9	2184.3	2250.0
45°	2358.4	2161.3	1983.9	1829.6	1704.7	1622.6	1583.2	1579.9	1599.6	1645.6	1717.9
47.5°	2085.8	1875.5	1675.2	1497.8	1363.2	1274.4	1228.5	1215.4	1228.5	1271.1	1356.6
50°	1859.1	1642.4	1435.4	1251.5	1106.9	1015.0	972.2	955.8	972.2	1008.4	1093.8
52.5°	1648.9	1425.5	1231.8	1054.4	900.0	821.1	775.2	765.3	775.2	817.9	886.9
55°	1405.8	1215.4	1024.8	847.4	712.8	634.0	597.8	588.0	597.8	637.3	709.5
57.5°	1166.1	1001.8	834.3	673.3	558.4	489.4	456.6	443.4	466.4	492.7	578.1
60°	942.7	811.3	670.1	528.8	433.6	371.2	344.9	341.6	348.2	381.0	440.1
62.5°	739.1	630.7	519.0	404.0	325.2	298.9	266.0	262.8	269.3	289.0	335.1
65°	532.1	463.2	377.7	295.6	233.2	197.1	184.0	187.3	193.8	207.0	249.6
67.5°	371.2	321.9	262.8	207.0	161.0	144.5	131.4	128.1	131.4	154.4	177.4
70°	249.6	220.1	177.4	157.7	111.7	88.7	91.9	82.1	95.2	95.2	114.9
72.5°	164.2	144.5	118.2	91.9	78.8	62.4	62.4	59.2	65.7	69.0	85.4
75°	85.4	65.7	65.7	46.0	32.9	16.4	29.6	26.3	23.0	26.3	32.9
77.5°	59.2	49.3	46.0	36.2	32.9	26.3	26.3	26.3	26.3	29.6	32.9
80°	36.2	36.2	26.3	23.0	19.7	16.4	19.7	19.7	19.7	19.7	23.0
82.5°	23.0	19.7	19.7	16.4	16.4	13.1	13.1	13.1	13.1	13.1	19.7
85°	19.7	13.1	13.1	9.9	13.1	23.0	9.9	13.1	13.1	13.1	9.9
87.5°	6.6	9.9	9.9	9.9	6.6	3.3	6.6	9.9	9.9	16.4	13.1
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°	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3	6119.3
2.5°	6129.2	6132.5	6132.5	6129.2	6129.2	6122.6	6135.7	6125.9	6129.2	6142.3	6132.5
5°	6135.7	6139.0	6139.0	6135.7	6135.7	6135.7	6139.0	6139.0	6135.7	6132.5	6139.0
7.5°	6148.9	6145.6	6145.6	6139.0	6139.0	6132.5	6139.0	6129.2	6135.7	6129.2	6139.0
10°	6132.5	6135.7	6132.5	6129.2	6129.2	6125.9	6125.9	6116.0	6119.3	6109.4	6116.0
12.5°	6122.6	6119.3	6119.3	6112.7	6106.2	6099.6	6096.3	6086.5	6086.5	6063.5	6073.4
15°	6096.3	6099.6	6089.8	6076.7	6070.1	6053.7	6047.1	6033.9	6020.8	6004.4	6007.7
17.5°	6073.4	6063.5	6050.4	6037.2	6010.9	5997.8	5984.6	5964.9	5958.4	5938.7	5932.1
20°	6004.4	5997.8	5981.4	5958.4	5942.0	5912.4	5899.3	5879.6	5863.1	5843.4	5833.5
22.5°	5915.7	5909.1	5889.4	5866.4	5840.1	5827.0	5813.8	5777.8	5761.3	5741.6	5738.3
25°	5804.0	5794.2	5774.5	5748.2	5735.0	5698.9	5685.7	5659.5	5652.9	5633.2	5630.0
27.5°	5633.2	5620.1	5597.1	5564.2	5541.2	5518.2	5505.1	5485.4	5478.9	5459.1	5455.9
30°	5377.0	5360.6	5314.6	5301.5	5262.0	5239.0	5239.0	5212.8	5216.0	5202.9	5202.9
32.5°	4973.0	4946.7	4910.6	4884.3	4858.0	4844.9	4844.9	4835.0	4841.6	4841.6	4848.2
35°	4437.6	4401.5	4381.7	4365.3	4365.3	4378.4	4417.9	4427.8	4447.5	4463.9	4477.0
37.5°	3751.1	3747.8	3770.8	3790.5	3839.8	3895.6	3964.6	4023.7	4079.5	4119.0	4158.4
40°	3008.8	3090.9	3156.6	3248.6	3324.0	3432.5	3557.3	3659.1	3754.4	3823.4	3895.6
42.5°	2348.5	2453.6	2591.6	2726.3	2861.0	3008.8	3173.0	3314.2	3439.1	3534.3	3609.8
45°	1829.6	1974.1	2141.6	2312.4	2486.5	2670.5	2841.3	2985.8	3117.2	3215.7	3291.3
47.5°	1474.8	1632.5	1823.0	2010.2	2207.3	2401.1	2591.6	2716.4	2824.8	2903.6	2972.7
50°	1218.6	1386.1	1586.5	1800.0	1997.0	2190.9	2355.1	2476.6	2565.3	2634.3	2677.0
52.5°	1018.2	1195.6	1409.1	1622.6	1819.7	1997.0	2144.9	2236.9	2309.1	2358.4	2397.8
55°	840.8	1011.7	1212.1	1412.4	1606.2	1773.7	1895.2	1964.3	2020.0	2049.6	2072.6
57.5°	686.5	844.1	1028.1	1212.1	1379.6	1517.6	1612.8	1681.8	1708.0	1731.0	1727.7
60°	538.7	686.5	854.0	1011.7	1156.2	1267.8	1336.9	1376.3	1396.0	1405.8	1399.3
62.5°	423.7	558.4	686.5	824.4	929.6	1024.8	1090.5	1090.5	1100.4	1103.6	1113.5
65°	315.3	417.1	528.8	630.7	716.0	778.5	814.6	824.4	837.6	834.3	827.7
67.5°	233.2	308.8	390.8	466.4	525.5	564.9	591.2	614.3	611.0	604.4	601.1
70°	161.0	210.2	282.5	328.5	371.2	410.6	417.1	420.4	423.7	427.0	420.4
72.5°	111.7	147.8	187.3	226.6	252.9	269.3	285.8	289.0	289.0	289.0	285.8
75°	55.9	75.5	111.7	128.1	151.1	157.7	170.8	170.8	180.7	167.5	164.2
77.5°	49.3	59.2	78.8	91.9	101.8	111.7	114.9	124.8	121.5	114.9	118.2
80°	29.6	36.2	49.3	55.9	69.0	72.3	75.5	78.8	75.5	78.8	78.8
82.5°	23.0	26.3	32.9	32.9	42.7	42.7	46.0	46.0	49.3	49.3	49.3
85°	13.1	23.0	19.7	39.4	26.3	26.3	32.9	39.4	32.9	32.9	39.4
87.5°	13.1	13.1	9.9	13.1	13.1	13.1	16.4	19.7	19.7	23.0	19.7
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: P249519

CATALOG NUMBER: LSR8B120D010 EC8B120827 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6119.3	6119.3	6119.3	6119.3
2.5°	6129.2	6135.7	6125.9	6122.6
5°	6139.0	6139.0	6132.5	6132.5
7.5°	6139.0	6139.0	6129.2	6122.6
10°	6112.7	6112.7	6102.9	6096.3
12.5°	6063.5	6063.5	6060.2	6050.4
15°	6001.1	6001.1	5987.9	5978.1
17.5°	5915.7	5922.3	5905.9	5905.9
20°	5823.7	5820.4	5807.3	5800.7
22.5°	5728.5	5721.9	5718.6	5698.9
25°	5626.7	5620.1	5610.2	5600.4
27.5°	5452.6	5449.3	5439.4	5426.3
30°	5186.5	5183.2	5170.1	5170.1
32.5°	4841.6	4838.3	4825.2	4828.5
35°	4483.6	4496.7	4490.1	4477.0
37.5°	4184.7	4194.5	4201.1	4194.5
40°	3935.0	3964.6	3967.9	3974.5
42.5°	3669.0	3708.4	3721.6	3728.1
45°	3350.3	3386.5	3416.1	3409.5
47.5°	3025.1	3051.4	3077.7	3058.0
50°	2713.1	2729.5	2739.4	2739.4
52.5°	2417.5	2417.5	2414.2	2417.5
55°	2079.2	2079.2	2066.1	2072.6
57.5°	1724.4	1731.0	1721.1	1704.7
60°	1396.0	1379.6	1373.0	1363.2
62.5°	1087.3	1087.3	1064.3	1093.8
65°	814.6	804.7	794.9	791.6
67.5°	591.2	588.0	578.1	574.8
70°	417.1	404.0	400.7	394.1
72.5°	279.2	279.2	272.6	272.6
75°	170.8	154.4	151.1	154.4
77.5°	118.2	114.9	114.9	111.7
80°	78.8	75.5	82.1	72.3
82.5°	49.3	52.6	49.3	52.6
85°	32.9	39.4	36.2	36.2
87.5°	19.7	19.7	19.7	19.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)