

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: P248358

Luminaire Tested: **LSR8B120D010 EC8B120840 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248358
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B120D010 EC8B120840 8LBDWOLI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12873.0 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

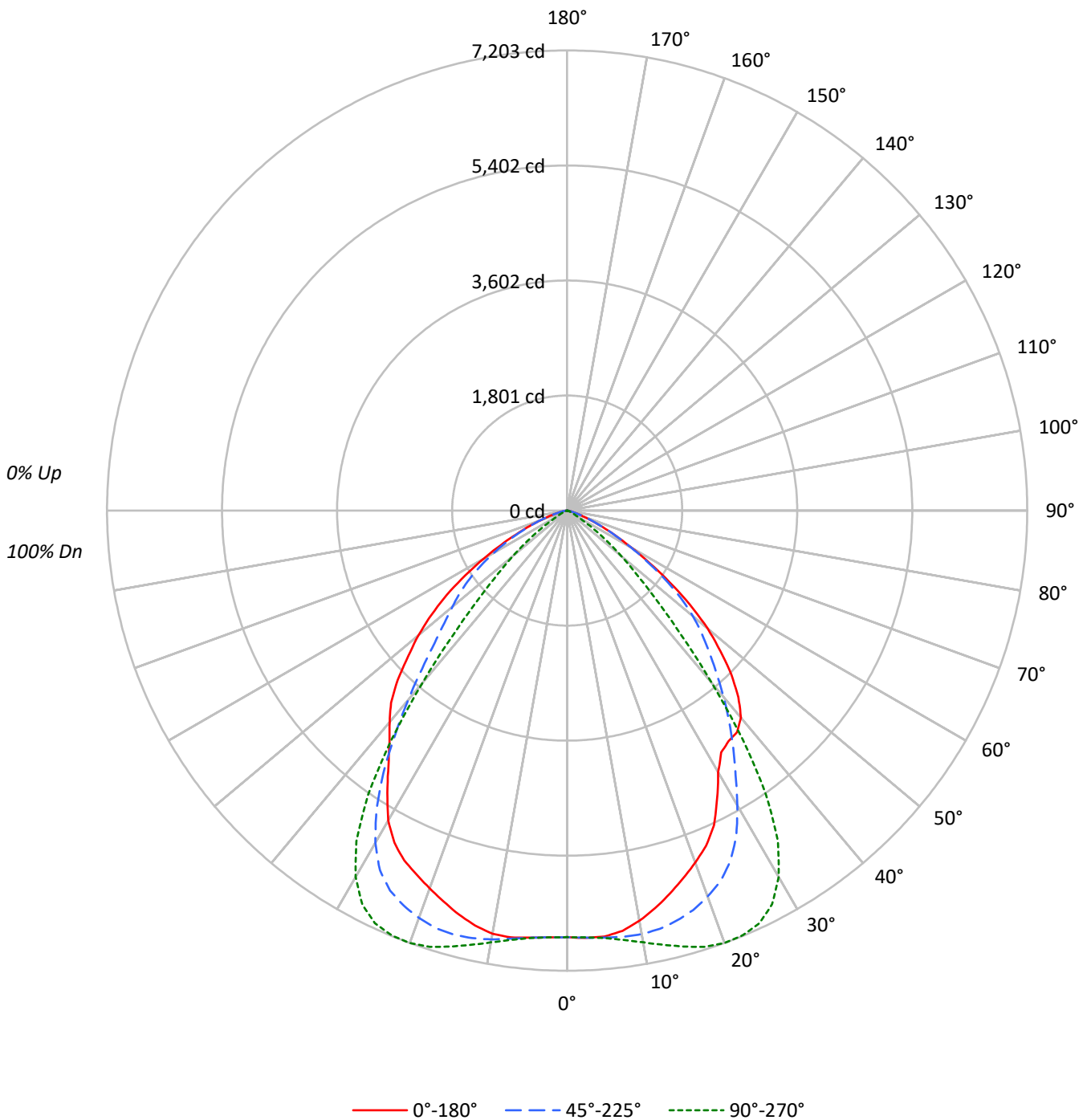
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	92	90																
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79																
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70																
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56																
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50																
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45																
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41																
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38																
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34																

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	205928	205928	205928
5°	207154	207922	207702
10°	204110	214876	210661
15°	198143	225525	209004
20°	192393	236359	206467
25°	185006	242412	205509
30°	168366	235766	199415
35°	165860	204291	183474
40°	170367	141686	173933
45°	158598	85635	163547
50°	137567	52885	145732
55°	105571	27633	123678
60°	71923	11144	93348
65°	44742	5691	64399
70°	24289	3516	39309
75°	12665	1680	23233
80°	5665	1900	12590
85°	3786	1274	11286



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	642.2	5.0
10°-20°	1902.5	14.8
20°-30°	2902.4	22.5
30°-40°	3028.8	23.5
40°-50°	2275.0	17.7
50°-60°	1399.8	10.9
60°-70°	569.6	4.4
70°-80°	134.2	1.0
80°-90°	18.5	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°	5447.2	42.3
0°-40°	8475.9	65.8
0°-60°	12150.7	94.4
0°-90°	12873.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12873.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6678	6678	6678	6678	6678	
5°	6692	6710	6717	6710	6710	633
15°	6207	6643	7064	6870	6547	1748
25°	5438	6047	7125	6561	6040	2472
35°	4406	4530	5427	5016	4874	2782
45°	3637	3148	1964	2931	3750	2775
55°	1964	1864	514	1864	2300	1765
65°	613	620	78	833	883	640
75°	106	106	14	188	195	128
85°	11	11	4	25	32	15
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°	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1
2.5°	6695.8	6685.2	6695.8	6695.8	6699.4	6692.3	6695.8	6699.4	6692.3	6692.3	6692.3
5°	6692.3	6685.2	6692.3	6688.7	6695.8	6695.8	6702.9	6702.9	6710.0	6710.0	6720.6
7.5°	6635.6	6621.4	6635.6	6646.2	6653.3	6667.5	6685.2	6699.4	6713.5	6727.8	6745.4
10°	6518.6	6518.6	6529.2	6550.5	6571.7	6596.5	6628.4	6663.9	6699.4	6731.2	6763.1
12.5°	6373.3	6362.6	6383.9	6412.2	6444.1	6483.2	6532.8	6585.9	6642.7	6706.4	6756.1
15°	6206.7	6196.0	6220.8	6249.2	6288.2	6344.9	6405.2	6476.1	6557.6	6642.7	6724.2
17.5°	6036.5	6033.0	6057.8	6096.8	6128.7	6188.9	6266.9	6351.9	6444.1	6557.6	6663.9
20°	5862.9	5859.3	5884.1	5916.0	5958.5	6015.3	6093.2	6192.4	6302.3	6430.0	6554.0
22.5°	5682.0	5685.6	5706.8	5742.3	5777.8	5838.0	5919.5	6018.8	6139.3	6277.5	6415.8
25°	5437.5	5419.8	5448.1	5483.6	5543.8	5593.4	5671.5	5777.8	5901.8	6047.2	6210.2
27.5°	5083.0	5079.4	5104.3	5136.1	5189.3	5249.6	5334.7	5444.6	5575.7	5735.2	5894.7
30°	4728.5	4735.6	4746.3	4778.2	4813.6	4873.9	4959.0	5051.1	5175.2	5327.6	5497.7
32.5°	4487.5	4487.5	4501.7	4523.0	4547.8	4579.7	4640.0	4707.3	4803.0	4909.3	5033.4
35°	4406.0	4391.8	4406.0	4409.5	4413.1	4420.2	4430.8	4452.1	4483.9	4530.1	4576.1
37.5°	4370.6	4359.9	4359.9	4345.8	4328.0	4306.7	4278.4	4246.5	4211.1	4164.9	4129.5
40°	4232.3	4225.2	4218.1	4204.0	4164.9	4122.4	4076.3	4001.9	3920.3	3806.9	3693.5
42.5°	3966.5	3959.4	3955.8	3927.5	3892.0	3842.4	3789.2	3711.2	3608.5	3463.1	3300.0
45°	3636.8	3622.6	3612.0	3587.2	3562.3	3519.8	3470.2	3399.3	3296.5	3147.7	2952.7
47.5°	3254.0	3246.9	3243.3	3232.7	3207.9	3183.0	3151.2	3094.5	3002.3	2860.5	2658.5
50°	2867.6	2853.5	2860.5	2857.0	2846.4	2828.7	2807.3	2768.4	2697.4	2569.9	2385.5
52.5°	2424.5	2424.5	2421.0	2431.6	2435.2	2431.6	2435.2	2392.7	2332.4	2236.6	2080.7
55°	1963.7	1963.7	1974.4	1988.6	2002.7	2006.3	2002.7	1985.0	1942.4	1864.5	1726.2
57.5°	1531.2	1524.2	1545.5	1566.7	1580.9	1595.1	1584.4	1570.3	1545.5	1481.6	1375.3
60°	1166.2	1166.2	1180.3	1194.6	1208.7	1222.9	1219.4	1215.8	1194.6	1152.0	1067.0
62.5°	857.8	861.3	861.3	872.0	886.1	900.4	910.9	900.4	889.7	861.3	804.6
65°	613.2	609.6	613.2	623.9	634.5	648.7	655.8	652.2	641.6	620.3	577.8
67.5°	411.2	407.6	421.8	425.3	432.4	446.7	443.1	446.7	443.1	425.3	389.9
70°	269.4	262.3	269.4	265.8	276.5	280.1	287.1	290.6	287.1	276.5	265.8
72.5°	166.6	163.1	166.6	170.2	173.7	177.2	184.3	184.3	180.7	173.7	159.5
75°	106.3	95.7	99.2	92.2	99.2	99.2	106.3	109.9	106.3	106.3	99.2
77.5°	63.8	63.8	63.8	63.8	63.8	63.8	63.8	67.4	70.9	63.8	60.3
80°	31.9	31.9	35.5	35.5	35.5	39.0	35.5	35.5	35.5	39.0	28.4
82.5°	24.8	21.3	21.3	21.3	24.8	21.3	21.3	21.3	21.3	21.3	21.3
85°	10.7	14.1	10.7	7.1	10.7	10.7	14.1	10.7	10.7	10.7	14.1
87.5°	3.6	3.6	0.0	0.0	0.0	3.6	0.0	3.6	3.6	7.1	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1
2.5°	6695.8	6688.7	6688.7	6685.2	6692.3	6685.2	6688.7	6685.2	6685.2	6692.3	6685.2
5°	6720.6	6724.2	6717.1	6713.5	6724.2	6724.2	6724.2	6717.1	6717.1	6720.6	6717.1
7.5°	6756.1	6763.1	6766.7	6770.3	6777.4	6780.9	6780.9	6777.4	6773.8	6784.5	6770.3
10°	6795.1	6805.7	6827.0	6837.6	6855.3	6855.3	6862.4	6862.4	6855.3	6862.4	6858.9
12.5°	6780.9	6844.7	6880.1	6904.9	6929.8	6951.0	6958.1	6961.7	6958.1	6972.3	6958.1
15°	6805.7	6858.9	6915.6	6958.1	7004.2	7029.0	7036.1	7064.4	7071.6	7075.1	7053.9
17.5°	6766.7	6862.4	6922.6	6986.5	7053.9	7099.9	7142.4	7160.2	7163.8	7170.8	7142.4
20°	6678.1	6784.5	6876.6	6968.8	7046.8	7117.6	7153.1	7202.7	7188.6	7216.9	7177.9
22.5°	6557.6	6678.1	6795.1	6915.6	6997.1	7082.2	7156.6	7192.0	7209.8	7209.8	7167.2
25°	6366.2	6508.0	6635.6	6759.6	6883.7	6986.5	7071.6	7124.7	7135.4	7131.8	7082.2
27.5°	6068.4	6220.8	6369.7	6511.5	6663.9	6784.5	6883.7	6947.4	6965.2	6965.2	6912.1
30°	5657.2	5820.3	5965.6	6135.7	6291.8	6426.4	6564.7	6621.4	6653.3	6653.3	6593.1
32.5°	5168.1	5306.3	5441.0	5607.6	5777.8	5930.2	6061.3	6139.3	6178.3	6174.8	6121.6
35°	4636.4	4703.7	4806.6	4930.6	5083.0	5224.8	5352.4	5426.9	5494.2	5490.6	5441.0
37.5°	4104.7	4087.0	4097.6	4143.7	4239.3	4338.7	4437.9	4508.8	4565.5	4590.3	4579.7
40°	3583.7	3491.5	3402.8	3371.0	3378.0	3413.5	3466.7	3519.8	3583.7	3615.6	3629.7
42.5°	3115.7	2959.8	2803.8	2686.9	2619.5	2598.2	2623.0	2640.7	2679.7	2725.8	2771.9
45°	2740.0	2530.9	2325.3	2144.5	2031.1	1963.7	1949.5	1963.7	1985.0	2031.1	2091.4
47.5°	2431.6	2187.0	1956.7	1754.6	1588.0	1499.4	1474.6	1467.5	1488.7	1531.2	1612.8
50°	2158.7	1914.1	1658.9	1424.9	1251.3	1152.0	1116.6	1102.4	1127.2	1159.1	1233.5
52.5°	1860.9	1619.9	1357.6	1130.7	950.0	847.2	808.2	786.9	801.1	843.6	918.1
55°	1538.4	1315.0	1077.6	843.6	669.9	574.2	528.1	514.0	528.1	574.2	648.7
57.5°	1215.8	1027.9	829.4	609.6	453.7	358.0	311.9	297.7	336.8	354.5	432.4
60°	950.0	797.6	627.4	446.7	311.9	237.5	191.4	180.7	198.5	230.4	294.2
62.5°	712.5	616.7	482.1	319.0	230.4	152.4	127.6	117.0	127.6	152.4	202.1
65°	517.5	443.1	336.8	233.9	155.9	113.4	85.1	78.0	88.6	106.3	148.9
67.5°	354.5	297.7	233.9	163.1	106.3	70.9	60.3	60.3	63.8	78.0	109.9
70°	230.4	195.0	148.9	106.3	70.9	53.2	46.1	39.0	46.1	56.7	74.4
72.5°	145.4	124.0	95.7	74.4	53.2	39.0	31.9	28.4	35.5	42.5	56.7
75°	88.6	67.4	49.6	39.0	28.4	28.4	28.4	14.1	17.7	28.4	35.5
77.5°	53.2	46.1	39.0	31.9	24.8	14.1	14.1	14.1	17.7	21.3	31.9
80°	28.4	24.8	17.7	17.7	14.1	10.7	14.1	10.7	7.1	17.7	21.3
82.5°	17.7	14.1	14.1	14.1	17.7	7.1	10.7	7.1	10.7	14.1	10.7
85°	10.7	10.7	10.7	7.1	17.7	7.1	7.1	3.6	3.6	7.1	7.1
87.5°	0.0	3.6	3.6	0.0	3.6	0.0	3.6	3.6	3.6	3.6	3.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1	6678.1
2.5°	6688.7	6685.2	6688.7	6685.2	6685.2	6685.2	6688.7	6688.7	6685.2	6685.2	6692.3
5°	6717.1	6717.1	6717.1	6713.5	6710.0	6710.0	6717.1	6717.1	6706.4	6717.1	6717.1
7.5°	6777.4	6766.7	6777.4	6763.1	6756.1	6759.6	6763.1	6756.1	6749.0	6752.6	6752.6
10°	6855.3	6844.7	6844.7	6834.1	6823.4	6816.3	6809.3	6791.5	6773.8	6770.3	6756.1
12.5°	6947.4	6929.8	6919.2	6897.8	6880.1	6855.3	6834.1	6805.7	6770.3	6745.4	6720.6
15°	7039.6	7011.3	6986.5	6951.0	6912.1	6869.5	6823.4	6777.4	6720.6	6671.0	6628.4
17.5°	7114.1	7075.1	7029.0	6972.3	6915.6	6851.8	6784.5	6717.1	6635.6	6571.7	6522.1
20°	7138.9	7082.2	7021.9	6947.4	6873.0	6784.5	6699.4	6610.8	6518.6	6451.3	6394.5
22.5°	7107.0	7039.6	6965.2	6887.3	6787.9	6692.3	6593.1	6490.2	6408.7	6316.6	6263.4
25°	7018.4	6936.9	6855.3	6763.1	6667.5	6561.1	6454.8	6348.5	6249.2	6199.6	6132.3
27.5°	6837.6	6749.0	6660.4	6564.7	6454.8	6348.5	6238.6	6135.7	6050.7	5983.3	5944.4
30°	6518.6	6415.8	6313.0	6210.2	6114.5	6004.6	5901.8	5816.7	5731.6	5678.5	5639.5
32.5°	6029.4	5937.3	5834.5	5735.2	5646.6	5554.5	5469.4	5395.0	5334.7	5299.2	5270.8
35°	5370.1	5278.0	5200.0	5129.1	5054.6	5015.7	4962.5	4919.9	4895.1	4881.0	4877.4
37.5°	4540.7	4487.5	4462.7	4448.5	4434.3	4423.7	4430.8	4448.5	4462.7	4487.5	4515.8
40°	3654.5	3700.6	3714.8	3764.4	3810.5	3870.7	3938.1	4016.1	4079.8	4161.4	4218.1
42.5°	2846.4	2931.4	3030.7	3137.0	3250.4	3360.3	3495.0	3619.0	3732.5	3835.3	3923.9
45°	2187.0	2318.2	2467.1	2619.5	2771.9	2931.4	3094.5	3246.9	3381.6	3491.5	3583.7
47.5°	1705.0	1850.3	2041.7	2229.6	2413.9	2601.8	2782.5	2942.0	3055.5	3161.8	3243.3
50°	1350.5	1517.1	1726.2	1942.4	2144.5	2343.0	2534.4	2683.3	2796.7	2881.8	2942.0
52.5°	1045.6	1244.2	1456.8	1683.7	1899.9	2116.2	2293.4	2431.6	2523.8	2598.2	2644.3
55°	779.8	974.8	1201.7	1435.6	1655.4	1864.5	2031.1	2151.6	2233.2	2275.7	2300.5
57.5°	563.6	740.9	967.7	1201.7	1400.1	1598.6	1733.3	1843.2	1889.3	1914.1	1924.7
60°	411.2	574.2	776.2	978.3	1166.2	1325.7	1442.7	1517.1	1552.6	1566.7	1563.2
62.5°	301.3	443.1	616.7	786.9	939.3	1070.4	1162.6	1212.2	1230.0	1237.1	1226.5
65°	230.4	340.2	489.2	620.3	737.3	833.0	900.4	932.3	942.9	939.3	932.3
67.5°	170.2	255.2	365.1	464.4	549.4	623.9	659.3	687.7	694.7	684.1	673.5
70°	120.6	187.9	265.8	333.2	397.0	439.6	478.5	482.1	482.1	478.5	471.5
72.5°	85.1	131.1	180.7	226.9	265.8	297.7	311.9	322.6	319.0	315.4	308.4
75°	56.7	81.5	131.1	141.8	177.2	187.9	202.1	202.1	205.6	195.0	195.0
77.5°	35.5	56.7	78.0	92.2	106.3	120.6	127.6	127.6	131.1	127.6	127.6
80°	21.3	35.5	42.5	63.8	63.8	74.4	78.0	81.5	74.4	85.1	74.4
82.5°	14.1	21.3	31.9	31.9	39.0	46.1	46.1	49.6	49.6	46.1	46.1
85°	10.7	14.1	17.7	21.3	21.3	24.8	21.3	21.3	24.8	28.4	24.8
87.5°	3.6	7.1	3.6	7.1	7.1	14.1	10.7	10.7	10.7	14.1	14.1
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: P248358

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6678.1	6678.1	6678.1	6678.1
2.5°	6685.2	6688.7	6685.2	6685.2
5°	6717.1	6713.5	6717.1	6710.0
7.5°	6741.9	6741.9	6738.3	6738.3
10°	6741.9	6727.8	6727.8	6727.8
12.5°	6688.7	6671.0	6660.4	6653.3
15°	6596.5	6564.7	6550.5	6546.9
17.5°	6476.1	6447.7	6430.0	6419.3
20°	6337.8	6309.4	6288.2	6291.8
22.5°	6217.3	6185.4	6171.2	6164.1
25°	6096.8	6057.8	6047.2	6040.1
27.5°	5901.8	5880.6	5869.9	5859.3
30°	5604.1	5593.4	5575.7	5600.5
32.5°	5260.3	5242.5	5228.3	5239.0
35°	4881.0	4870.3	4881.0	4873.9
37.5°	4533.6	4544.2	4558.4	4565.5
40°	4260.7	4299.6	4313.8	4320.9
42.5°	3987.7	4033.8	4062.2	4079.8
45°	3651.0	3697.0	3728.9	3750.3
47.5°	3303.6	3342.6	3374.5	3371.0
50°	2988.2	3009.4	3023.5	3037.8
52.5°	2669.1	2669.1	2672.6	2672.6
55°	2307.6	2300.5	2296.9	2300.5
57.5°	1910.5	1903.5	1899.9	1889.3
60°	1549.0	1527.8	1513.6	1513.6
62.5°	1212.2	1187.4	1176.9	1173.3
65°	910.9	907.4	886.1	882.6
67.5°	659.3	645.1	631.0	634.5
70°	464.4	443.1	443.1	436.0
72.5°	301.3	290.6	287.1	287.1
75°	187.9	187.9	180.7	195.0
77.5°	124.0	124.0	120.6	124.0
80°	74.4	74.4	74.4	70.9
82.5°	46.1	49.6	46.1	46.1
85°	24.8	28.4	21.3	31.9
87.5°	14.1	17.7	14.1	17.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)