

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: P250894

Luminaire Tested: **LSR8B60D010 EC8B60840 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250894
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B60D010 EC8B60840 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE 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: 6550.0 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

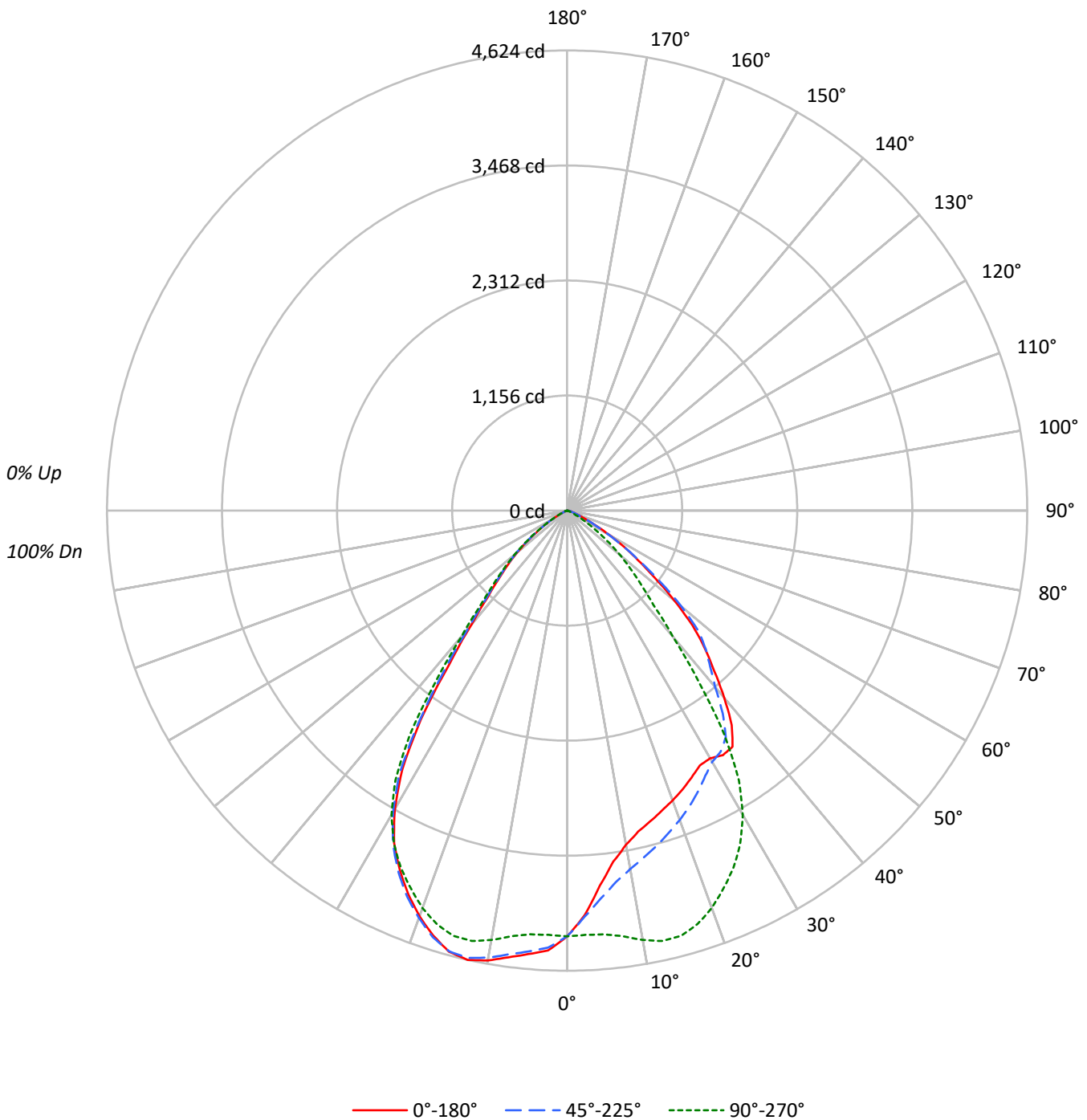
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67					67			
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	131949	131949	131949
5°	117072	132279	138473
10°	106736	137187	143735
15°	103153	141197	146474
20°	101678	139459	142333
25°	100681	134647	135491
30°	102319	125660	123338
35°	109067	103985	96452
40°	98840	66572	60280
45°	85308	45545	42410
50°	67311	33226	31283
55°	46724	20429	19220
60°	29745	10330	9220
65°	14848	4101	3116
70°	8214	2029	1118
75°	5898	1477	536
80°	4795	994	195
85°	5166	778	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	398.8	6.1
10°-20°	1151.9	17.6
20°-30°	1671.9	25.5
30°-40°	1646.6	25.1
40°-50°	1032.2	15.8
50°-60°	498.1	7.6
60°-70°	120.5	1.8
70°-80°	24.4	0.4
80°-90°	5.6	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°	3222.6	49.2
0°-40°	4869.2	74.3
0°-60°	6399.5	97.7
0°-90°	6550.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6550.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4279	4279	4279	4279	4279	
5°	3782	3910	4273	4446	4474	350
15°	3231	3485	4423	4585	4588	914
25°	2959	3113	3957	4011	3982	1369
35°	2897	2779	2762	2605	2562	1753
45°	1956	1970	1044	1001	972	1496
55°	869	897	380	376	358	800
65°	204	201	56	48	43	232
75°	50	43	12	6	4	56
85°	15	11	2	0	0	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0
2.5°	4067.6	4041.8	3993.4	4051.9	4051.9	4019.3	4084.5	4045.1	4076.6	4126.1	4082.2
5°	3782.1	3760.7	3720.2	3782.1	3789.9	3759.6	3838.3	3809.0	3855.1	3915.8	3910.2
7.5°	3556.1	3529.1	3492.0	3556.1	3568.4	3548.2	3623.5	3610.0	3670.8	3749.4	3762.9
10°	3408.8	3380.7	3348.1	3406.5	3415.5	3402.0	3478.5	3470.6	3530.2	3621.3	3657.3
12.5°	3304.2	3280.6	3244.7	3306.5	3316.6	3297.5	3369.4	3366.1	3427.9	3523.5	3568.4
15°	3231.2	3203.1	3170.4	3223.3	3236.8	3215.4	3284.0	3277.3	3340.2	3434.7	3485.2
17.5°	3162.6	3136.7	3103.0	3152.5	3166.0	3143.5	3210.9	3199.7	3253.6	3343.6	3395.3
20°	3098.5	3070.4	3040.0	3090.6	3098.5	3072.6	3140.1	3125.5	3173.8	3257.0	3307.6
22.5°	3032.2	3002.9	2971.5	3020.9	3028.8	3002.9	3064.8	3047.9	3092.9	3168.2	3214.3
25°	2959.1	2932.1	2900.6	2946.7	2953.5	2925.4	2990.6	2969.2	3008.6	3074.9	3113.1
27.5°	2886.0	2860.1	2825.3	2872.5	2875.9	2848.9	2908.5	2879.3	2911.9	2972.6	3005.2
30°	2873.6	2844.4	2808.4	2846.7	2847.8	2812.9	2869.1	2834.3	2852.3	2897.3	2916.4
32.5°	2913.0	2883.8	2846.7	2878.1	2874.8	2836.5	2890.5	2847.8	2853.4	2877.0	2872.5
35°	2897.3	2862.4	2818.6	2852.3	2852.3	2806.2	2860.1	2809.6	2803.9	2807.3	2779.2
37.5°	2718.5	2691.5	2649.9	2682.5	2679.1	2644.3	2685.9	2644.3	2625.2	2617.3	2566.7
40°	2455.4	2422.8	2391.3	2426.2	2429.6	2392.5	2446.4	2399.2	2393.6	2371.1	2311.5
42.5°	2189.0	2177.7	2147.4	2176.6	2192.3	2160.9	2205.8	2183.3	2186.7	2181.1	2124.9
45°	1956.2	1937.1	1914.6	1948.4	1958.5	1942.7	1987.7	1974.2	1987.7	2015.8	1969.7
47.5°	1705.5	1686.4	1661.7	1697.7	1715.6	1686.4	1724.6	1720.1	1740.4	1788.7	1784.2
50°	1403.1	1389.6	1385.1	1389.6	1400.8	1387.4	1414.3	1415.5	1429.0	1495.3	1499.8
52.5°	1110.8	1107.4	1091.7	1106.3	1106.3	1084.9	1111.9	1099.5	1113.0	1158.0	1187.2
55°	869.1	865.7	855.6	869.1	854.4	846.6	854.4	842.1	832.0	866.8	897.2
57.5°	676.8	665.6	653.2	658.8	657.7	640.8	649.8	635.2	627.3	639.7	666.7
60°	482.3	478.9	467.7	473.3	477.8	465.4	474.4	467.7	454.2	464.3	465.4
62.5°	320.4	322.7	315.9	317.0	313.7	311.4	317.0	320.4	317.0	312.5	313.7
65°	203.5	202.4	201.2	202.4	204.6	200.1	203.5	205.7	202.4	202.4	201.2
67.5°	134.9	131.5	128.2	130.4	132.7	129.3	132.7	131.5	132.7	131.5	128.2
70°	91.1	89.9	88.8	89.9	89.9	87.7	89.9	88.8	89.9	88.8	85.4
72.5°	66.3	66.3	65.2	66.3	66.3	64.1	65.2	63.0	64.1	63.0	60.7
75°	49.5	49.5	48.3	49.5	48.3	47.2	48.3	47.2	45.0	45.0	42.7
77.5°	36.0	36.0	36.0	36.0	36.0	34.9	34.9	33.7	32.6	31.5	31.5
80°	27.0	25.9	25.9	25.9	25.9	24.7	25.9	24.7	23.6	22.5	21.4
82.5°	19.1	20.2	19.1	19.1	19.1	18.0	19.1	18.0	18.0	16.9	14.6
85°	14.6	14.6	14.6	14.6	14.6	13.5	13.5	13.5	12.4	12.4	11.2
87.5°	7.9	7.9	7.9	9.0	7.9	7.9	7.9	6.7	6.7	5.6	5.6
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0
2.5°	4140.7	4146.3	4134.0	4153.1	4227.3	4167.7	4192.4	4200.3	4256.5	4266.6	4259.9
5°	3983.3	4008.0	4023.8	4066.5	4148.6	4105.8	4149.7	4177.8	4249.8	4273.4	4279.0
7.5°	3859.6	3911.3	3949.6	4019.3	4116.0	4083.4	4149.7	4195.8	4283.5	4313.8	4328.5
10°	3767.4	3846.1	3912.5	4008.0	4117.1	4095.7	4182.3	4247.5	4345.3	4381.3	4399.3
12.5°	3697.7	3793.3	3882.1	4003.5	4121.6	4111.5	4216.0	4290.2	4393.7	4429.6	4451.0
15°	3621.3	3731.5	3834.9	3970.9	4098.0	4095.7	4208.2	4286.9	4392.5	4422.9	4443.1
17.5°	3530.2	3648.3	3761.8	3909.1	4035.0	4037.3	4150.8	4228.4	4331.8	4356.6	4370.0
20°	3438.0	3555.0	3668.5	3820.3	3943.9	3947.3	4058.6	4130.6	4229.5	4249.8	4253.1
22.5°	3340.2	3449.3	3562.8	3713.5	3832.6	3834.9	3945.1	4012.5	4096.8	4107.0	4116.0
25°	3228.9	3335.7	3442.5	3592.1	3705.6	3712.3	3812.4	3872.0	3949.6	3957.4	3960.8
27.5°	3113.1	3200.8	3303.1	3431.3	3546.0	3541.5	3635.9	3703.4	3773.1	3768.6	3767.4
30°	2996.2	3069.3	3132.2	3255.9	3340.2	3343.6	3432.4	3465.0	3538.1	3529.1	3528.0
32.5°	2914.1	2933.2	2950.1	3013.1	3092.9	3064.8	3125.5	3166.0	3216.5	3213.2	3214.3
35°	2763.5	2728.6	2678.0	2687.0	2735.4	2691.5	2724.1	2723.0	2774.7	2762.3	2777.0
37.5°	2506.0	2407.1	2294.6	2230.6	2239.6	2184.5	2173.2	2200.2	2218.2	2183.3	2195.7
40°	2231.7	2085.5	1910.1	1764.0	1756.1	1687.5	1675.2	1648.2	1683.0	1653.8	1662.8
42.5°	2029.3	1835.9	1605.5	1427.8	1389.6	1332.3	1298.5	1294.0	1304.2	1283.9	1278.3
45°	1874.2	1668.4	1404.2	1200.7	1158.0	1096.2	1062.4	1050.1	1051.2	1044.4	1038.8
47.5°	1692.0	1485.2	1217.6	1009.6	961.3	902.8	869.1	861.2	865.7	856.7	850.0
50°	1440.2	1254.7	1010.7	820.7	778.0	735.3	708.3	700.4	699.3	692.6	688.1
52.5°	1169.2	1015.2	803.9	645.3	607.1	565.5	546.4	536.3	537.4	530.7	523.9
55°	905.0	809.5	622.8	487.9	453.1	420.5	402.5	390.1	386.7	380.0	376.6
57.5°	673.4	609.4	466.6	351.9	331.7	300.2	282.2	267.6	265.3	262.0	260.8
60°	472.2	426.1	328.3	250.7	227.1	208.0	190.0	175.4	168.6	167.5	164.1
62.5°	305.8	277.7	215.9	167.5	149.5	136.0	118.0	107.9	103.4	98.9	100.1
65°	190.0	168.6	134.9	107.9	97.8	87.7	74.2	65.2	60.7	56.2	57.3
67.5°	118.0	105.7	85.4	69.7	63.0	55.1	45.0	38.2	34.9	31.5	29.2
70°	79.8	68.6	58.5	49.5	45.0	39.3	32.6	27.0	24.7	22.5	20.2
72.5°	56.2	50.6	42.7	37.1	33.7	29.2	24.7	21.4	19.1	16.9	14.6
75°	40.5	36.0	31.5	27.0	24.7	22.5	19.1	16.9	14.6	12.4	10.1
77.5°	29.2	25.9	22.5	20.2	19.1	15.7	13.5	12.4	11.2	9.0	6.7
80°	20.2	18.0	14.6	13.5	13.5	11.2	10.1	9.0	7.9	5.6	4.5
82.5°	13.5	12.4	11.2	10.1	9.0	7.9	7.9	5.6	4.5	3.4	2.2
85°	10.1	9.0	7.9	6.7	6.7	5.6	4.5	3.4	3.4	2.2	1.1
87.5°	5.6	5.6	4.5	3.4	3.4	2.2	2.2	1.1	1.1	1.1	1.1
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0
2.5°	4317.2	4320.6	4339.7	4325.1	4362.2	4389.2	4375.7	4406.0	4395.9	4393.7	4428.5
5°	4346.4	4354.3	4380.2	4366.7	4407.1	4436.4	4422.9	4456.6	4446.5	4444.3	4480.2
7.5°	4402.7	4410.5	4433.0	4421.8	4464.5	4490.3	4473.5	4510.6	4497.1	4496.0	4530.8
10°	4473.5	4484.7	4503.8	4492.6	4531.9	4554.4	4537.6	4573.5	4561.2	4555.6	4593.8
12.5°	4526.3	4534.2	4553.3	4544.3	4582.5	4599.4	4584.8	4619.6	4603.9	4599.4	4633.1
15°	4514.0	4521.8	4537.6	4529.7	4565.7	4581.4	4562.3	4600.5	4584.8	4575.8	4606.1
17.5°	4435.3	4439.8	4451.0	4443.1	4481.4	4491.5	4470.1	4508.3	4493.7	4478.0	4507.2
20°	4319.5	4317.2	4324.0	4320.6	4352.1	4357.7	4344.2	4372.3	4355.4	4346.4	4363.3
22.5°	4175.5	4173.3	4177.8	4168.8	4200.3	4203.7	4183.4	4217.1	4200.3	4183.4	4211.5
25°	4015.9	4003.5	4001.3	4004.7	4026.0	4029.4	4008.0	4032.8	4011.4	3997.9	4024.9
27.5°	3819.2	3803.4	3800.0	3803.4	3824.8	3809.0	3791.0	3809.0	3787.7	3775.3	3792.2
30°	3576.3	3553.8	3543.7	3537.0	3559.4	3553.8	3512.2	3532.5	3498.7	3480.7	3493.1
32.5°	3249.1	3236.8	3209.8	3194.1	3215.4	3172.7	3146.8	3146.8	3133.3	3103.0	3109.7
35°	2794.9	2775.8	2751.1	2737.6	2741.0	2683.6	2640.9	2649.9	2604.9	2597.1	2600.4
37.5°	2220.4	2189.0	2180.0	2151.9	2158.6	2108.0	2049.5	2050.7	2027.1	2002.3	1994.5
40°	1668.4	1662.8	1653.8	1630.2	1639.2	1584.1	1561.6	1562.7	1547.0	1529.0	1538.0
42.5°	1289.5	1271.6	1265.9	1258.1	1260.3	1251.3	1222.1	1225.5	1212.0	1207.5	1203.0
45°	1047.8	1028.7	1015.2	1022.0	1022.0	1011.8	1000.6	1007.3	1000.6	991.6	996.1
47.5°	863.4	845.5	838.7	837.6	845.5	838.7	827.5	829.7	828.6	825.2	823.0
50°	689.2	684.7	679.1	675.7	679.1	676.8	666.7	672.3	675.7	664.4	667.8
52.5°	525.0	525.0	523.9	516.0	522.8	516.0	514.9	517.2	513.8	509.3	508.2
55°	384.5	381.1	375.5	374.4	376.6	374.4	372.1	373.3	375.5	364.3	364.3
57.5°	263.1	260.8	257.5	257.5	262.0	256.3	253.0	257.5	253.0	248.5	248.5
60°	168.6	167.5	164.1	164.1	164.1	163.0	159.6	160.8	163.0	156.3	157.4
62.5°	101.2	97.8	96.7	95.6	96.7	95.6	95.6	94.4	93.3	93.3	89.9
65°	55.1	52.8	50.6	51.7	51.7	50.6	50.6	50.6	48.3	47.2	46.1
67.5°	28.1	25.9	25.9	24.7	24.7	24.7	24.7	23.6	23.6	23.6	22.5
70°	18.0	16.9	15.7	15.7	15.7	14.6	14.6	14.6	14.6	14.6	13.5
72.5°	12.4	11.2	10.1	10.1	10.1	9.0	9.0	9.0	9.0	7.9	7.9
75°	9.0	7.9	6.7	6.7	6.7	5.6	5.6	5.6	5.6	5.6	5.6
77.5°	5.6	4.5	4.5	4.5	4.5	3.4	3.4	3.4	3.4	3.4	2.2
80°	3.4	3.4	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1
82.5°	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0
87.5°	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P250894

CATALOG NUMBER: LSR8B60D010 EC8B60840 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0	4279.0
2.5°	4416.1	4407.1	4412.8	4454.4	4436.4	4430.8	4383.5	4425.1
5°	4469.0	4462.2	4462.2	4509.5	4488.1	4483.6	4437.5	4473.5
7.5°	4518.5	4511.7	4512.8	4561.2	4544.3	4537.6	4491.5	4527.4
10°	4582.5	4578.0	4579.2	4625.3	4607.3	4600.5	4553.3	4590.4
12.5°	4620.8	4614.0	4614.0	4663.5	4643.2	4633.1	4588.2	4624.1
15°	4591.5	4581.4	4581.4	4630.9	4608.4	4593.8	4554.4	4588.2
17.5°	4491.5	4481.4	4481.4	4524.1	4507.2	4485.8	4445.4	4476.9
20°	4352.1	4339.7	4336.3	4385.8	4362.2	4343.1	4307.1	4337.4
22.5°	4194.7	4189.0	4178.9	4228.4	4207.0	4186.8	4148.6	4172.2
25°	4005.8	3996.8	3986.7	4035.0	4013.7	3993.4	3963.1	3982.2
27.5°	3770.8	3771.9	3766.3	3804.5	3783.2	3771.9	3734.8	3766.3
30°	3486.4	3474.0	3469.5	3514.5	3494.2	3479.6	3433.5	3463.9
32.5°	3115.4	3097.4	3073.8	3124.4	3089.5	3077.1	3037.8	3081.6
35°	2575.7	2570.1	2548.7	2591.4	2572.3	2549.9	2525.1	2562.2
37.5°	1991.1	1995.6	1993.3	2004.6	1993.3	1978.7	1951.7	1938.2
40°	1520.0	1508.8	1499.8	1520.0	1496.4	1496.4	1480.7	1497.5
42.5°	1191.7	1187.2	1198.5	1203.0	1189.5	1187.2	1185.0	1183.9
45°	983.7	983.7	986.0	990.5	986.0	983.7	977.0	972.5
47.5°	810.6	815.1	810.6	825.2	817.3	815.1	801.6	807.2
50°	656.6	651.0	656.6	661.1	662.2	655.5	648.7	652.1
52.5°	509.3	500.3	498.1	504.8	500.3	500.3	495.8	494.7
55°	358.6	362.0	356.4	362.0	359.8	356.4	353.0	357.5
57.5°	242.8	244.0	241.7	245.1	239.5	240.6	239.5	238.3
60°	157.4	152.9	152.9	156.3	150.7	150.7	149.5	149.5
62.5°	89.9	88.8	88.8	87.7	86.6	86.6	86.6	84.3
65°	46.1	45.0	43.8	43.8	43.8	43.8	42.7	42.7
67.5°	22.5	21.4	21.4	22.5	21.4	21.4	21.4	21.4
70°	13.5	13.5	12.4	13.5	12.4	12.4	12.4	12.4
72.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
75°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
77.5°	3.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)