

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: P249318

Luminaire Tested: **LSR8B80D010 EC8B80835 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249318
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: LSR8B80D010 EC8B80835 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8297.0 lumens
Efficiency: N/A
Efficacy: 111.5 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

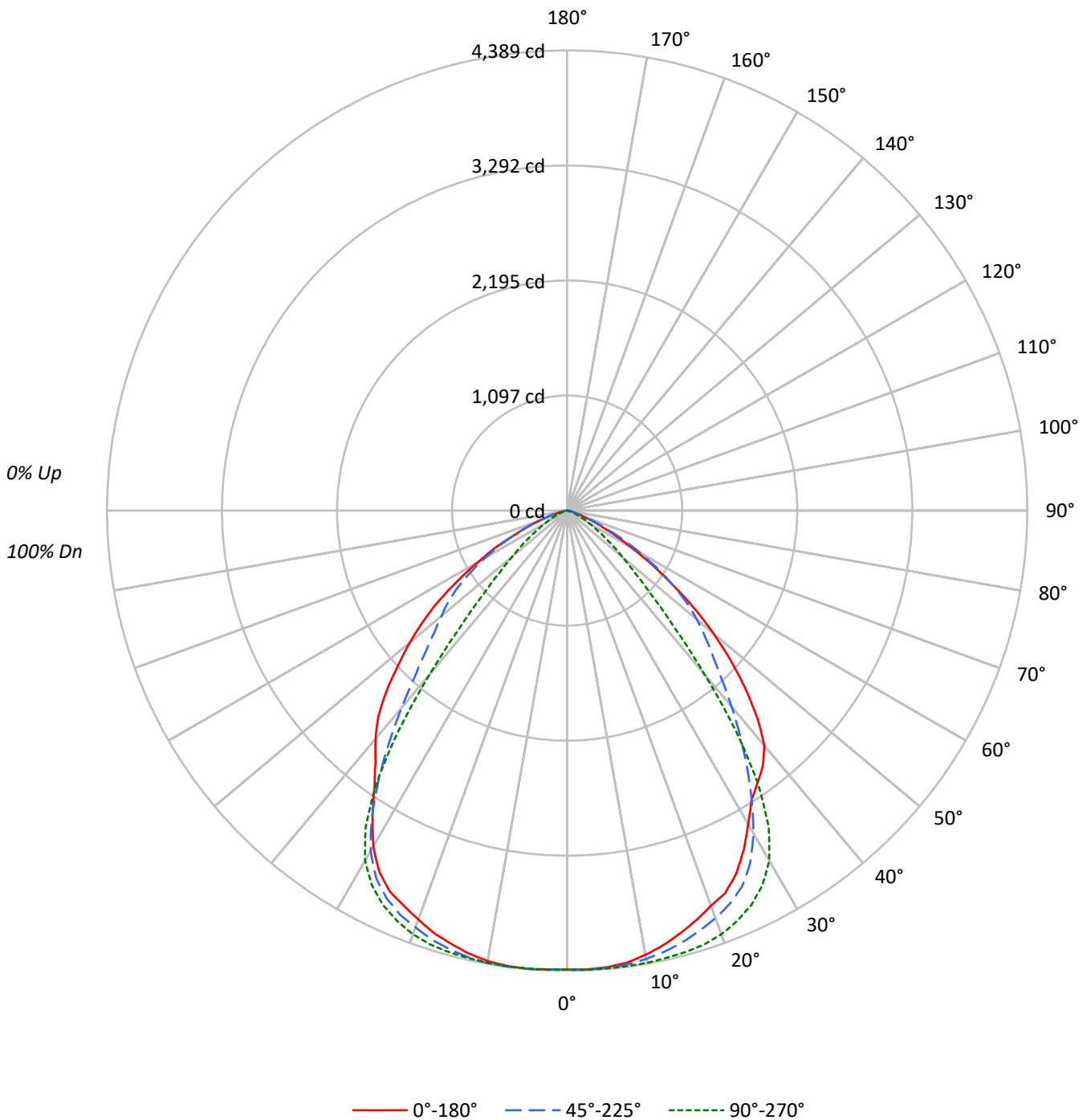
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	134992	134992	134992
5°	135288	135653	135799
10°	134720	137147	136558
15°	133226	139154	136527
20°	131626	141109	136174
25°	129918	141272	136314
30°	122911	137299	131695
35°	119238	119328	120567
40°	117763	82102	114454
45°	104932	49287	106367
50°	87253	32804	94012
55°	65438	22612	79712
60°	44343	15073	60143
65°	26749	9777	41320
70°	14831	5301	25425
75°	6720	2240	13153
80°	5842	2504	9181
85°	6652	3326	9164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	417.8	5.0
10°-20°	1213.3	14.6
20°-30°	1841.6	22.2
30°-40°	1934.2	23.3
40°-50°	1450.1	17.5
50°-60°	930.4	11.2
60°-70°	398.0	4.8
70°-80°	94.0	1.1
80°-90°	17.5	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°	3472.7	41.9
0°-40°	5406.9	65.2
0°-60°	7787.4	93.9
0°-90°	8297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8297.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4378	4378	4378	4378	4378	
5°	4371	4378	4382	4389	4387	415
15°	4173	4260	4359	4331	4277	1177
25°	3818	3952	4152	4077	4006	1744
35°	3168	2991	3170	3132	3203	1988
45°	2406	1967	1130	1910	2439	1843
55°	1217	1217	421	1269	1483	1104
65°	367	432	134	557	566	391
75°	56	66	19	113	110	82
85°	19	12	9	19	26	20
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°	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7
2.5°	4380.0	4384.7	4382.4	4382.4	4380.0	4382.4	4382.4	4387.1	4387.1	4382.4	4380.0
5°	4370.6	4375.3	4375.3	4370.6	4370.6	4382.4	4375.3	4380.0	4380.0	4377.7	4377.7
7.5°	4349.5	4349.5	4358.9	4351.8	4351.8	4358.9	4356.5	4361.2	4365.9	4368.3	4368.3
10°	4302.5	4307.2	4309.5	4309.5	4311.9	4318.9	4323.6	4333.0	4337.7	4342.4	4344.8
12.5°	4243.8	4250.8	4253.1	4250.8	4257.8	4267.2	4279.0	4290.7	4297.8	4307.2	4314.2
15°	4173.2	4173.2	4177.9	4185.0	4189.7	4203.8	4215.5	4229.6	4248.4	4260.2	4271.9
17.5°	4095.7	4100.4	4107.4	4107.4	4116.9	4140.3	4147.4	4168.5	4189.7	4201.4	4225.0
20°	4011.1	4015.8	4022.9	4027.6	4039.3	4058.1	4072.2	4091.0	4114.5	4135.7	4159.1
22.5°	3945.3	3935.9	3940.6	3945.3	3957.1	3973.5	3990.0	4013.4	4036.9	4058.1	4081.6
25°	3818.4	3820.8	3827.8	3832.5	3846.6	3860.7	3879.5	3907.7	3928.8	3952.4	3978.2
27.5°	3646.9	3649.2	3661.0	3661.0	3672.7	3696.2	3708.0	3731.5	3759.7	3783.2	3813.7
30°	3451.9	3456.5	3456.5	3466.0	3473.0	3484.8	3496.5	3520.0	3534.1	3555.2	3597.6
32.5°	3273.3	3277.9	3275.6	3273.3	3266.2	3263.9	3261.5	3266.2	3270.9	3277.9	3294.4
35°	3167.5	3155.8	3146.4	3129.9	3111.1	3087.6	3066.5	3038.3	3012.4	2991.3	2967.8
37.5°	3066.5	3064.1	3050.0	3026.5	2988.9	2946.7	2897.3	2836.2	2775.1	2709.3	2645.9
40°	2925.5	2918.4	2906.7	2873.8	2831.5	2779.8	2714.0	2638.8	2540.1	2439.1	2335.7
42.5°	2685.8	2688.2	2674.1	2648.2	2608.3	2558.9	2490.8	2408.5	2302.8	2182.9	2049.0
45°	2406.2	2406.2	2401.5	2380.3	2352.1	2312.2	2260.5	2192.4	2089.0	1966.8	1823.4
47.5°	2114.8	2117.2	2110.1	2105.4	2093.6	2067.8	2030.2	1978.5	1905.7	1788.2	1644.8
50°	1818.8	1818.8	1830.5	1828.1	1828.1	1818.8	1802.3	1771.7	1708.3	1614.3	1480.4
52.5°	1522.7	1527.4	1534.4	1543.8	1555.5	1574.3	1555.5	1541.5	1501.5	1428.7	1313.5
55°	1217.2	1221.9	1233.6	1250.1	1264.2	1283.0	1287.7	1287.7	1266.5	1217.2	1130.2
57.5°	956.4	949.3	958.7	972.8	991.6	1010.4	1024.5	1041.0	1038.6	1005.7	935.2
60°	719.0	721.4	728.4	742.6	756.6	773.1	791.9	806.0	813.0	796.6	751.9
62.5°	524.0	524.0	533.4	547.5	554.5	578.1	589.8	596.9	603.9	601.5	573.3
65°	366.6	371.3	376.0	383.0	390.1	404.1	411.2	425.3	430.0	432.4	411.2
67.5°	258.5	251.4	256.1	260.8	267.9	277.3	291.4	291.4	298.4	298.4	284.3
70°	164.5	164.5	166.9	173.9	178.6	180.9	185.7	190.3	197.4	195.0	195.0
72.5°	110.4	108.1	110.4	112.8	115.2	122.2	122.2	124.5	129.2	131.6	122.2
75°	56.4	58.8	63.4	61.1	68.1	63.4	65.8	72.8	70.5	65.8	65.8
77.5°	47.0	47.0	47.0	44.7	49.3	49.3	47.0	51.7	49.3	49.3	47.0
80°	32.9	35.2	32.9	30.5	32.9	30.5	30.5	30.5	30.5	30.5	28.2
82.5°	25.9	21.2	23.5	21.2	23.5	23.5	21.2	18.8	18.8	21.2	18.8
85°	18.8	14.1	16.4	16.4	14.1	14.1	14.1	14.1	14.1	11.7	11.7
87.5°	11.7	7.1	7.1	7.1	9.4	9.4	9.4	7.1	9.4	9.4	4.7
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°	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7
2.5°	4384.7	4382.4	4387.1	4384.7	4384.7	4382.4	4384.7	4382.4	4387.1	4377.7	4380.0
5°	4384.7	4380.0	4382.4	4384.7	4387.1	4382.4	4382.4	4382.4	4387.1	4382.4	4384.7
7.5°	4375.3	4372.9	4380.0	4384.7	4382.4	4380.0	4384.7	4382.4	4387.1	4384.7	4389.4
10°	4356.5	4358.9	4363.6	4370.6	4372.9	4375.3	4380.0	4380.0	4387.1	4377.7	4382.4
12.5°	4328.3	4337.7	4349.5	4354.1	4363.6	4363.6	4368.3	4370.6	4375.3	4372.9	4380.0
15°	4293.1	4304.8	4318.9	4330.7	4342.4	4349.5	4356.5	4358.9	4365.9	4358.9	4361.2
17.5°	4250.8	4264.9	4286.0	4300.1	4318.9	4326.0	4335.3	4340.1	4347.1	4342.4	4344.8
20°	4192.0	4208.5	4232.0	4253.1	4264.9	4281.3	4293.1	4300.1	4304.8	4300.1	4302.5
22.5°	4109.8	4133.3	4163.8	4180.3	4203.8	4217.9	4220.2	4236.7	4248.4	4236.7	4241.4
25°	4013.4	4036.9	4060.5	4095.7	4116.9	4133.3	4149.7	4152.1	4163.8	4161.5	4159.1
27.5°	3853.6	3884.2	3924.1	3952.4	3980.5	4006.4	4025.2	4029.9	4041.7	4036.9	4039.3
30°	3635.1	3668.0	3705.7	3750.3	3790.2	3816.0	3839.6	3856.0	3867.7	3860.7	3858.4
32.5°	3325.0	3357.9	3397.8	3442.4	3489.5	3527.0	3555.2	3576.4	3590.5	3585.8	3574.0
35°	2970.2	2979.5	3005.4	3040.7	3080.6	3120.5	3146.4	3169.9	3186.3	3191.0	3191.0
37.5°	2605.9	2575.4	2556.6	2556.6	2580.1	2596.5	2620.0	2634.1	2660.0	2669.4	2676.4
40°	2253.4	2182.9	2117.2	2067.8	2034.9	2032.6	2032.6	2039.6	2063.1	2093.6	2121.9
42.5°	1938.6	1825.8	1724.8	1633.1	1567.3	1529.7	1513.3	1515.6	1534.4	1562.6	1609.6
45°	1687.2	1546.2	1419.3	1308.8	1219.5	1160.8	1132.6	1130.2	1144.3	1177.2	1229.0
47.5°	1492.1	1341.7	1198.4	1071.5	975.2	911.7	878.8	869.4	878.8	909.4	970.5
50°	1330.0	1174.9	1026.9	895.3	791.9	726.1	695.5	683.8	695.5	721.4	782.5
52.5°	1179.6	1019.8	881.2	754.3	643.8	587.4	554.5	547.5	554.5	585.1	634.5
55°	1005.7	869.4	733.1	606.2	509.9	453.5	427.7	420.6	427.7	455.9	507.6
57.5°	834.2	716.7	596.9	481.7	399.5	350.1	326.6	317.2	333.6	352.4	413.6
60°	674.4	580.4	479.3	378.3	310.2	265.5	246.7	244.4	249.1	272.6	314.8
62.5°	528.7	451.2	371.3	289.0	232.6	213.8	190.3	188.0	192.7	206.8	239.7
65°	380.7	331.3	270.2	211.5	166.9	141.0	131.6	134.0	138.6	148.1	178.6
67.5°	265.5	230.3	188.0	148.1	115.2	103.4	94.0	91.6	94.0	110.4	126.9
70°	178.6	157.4	126.9	112.8	79.9	63.4	65.8	58.8	68.1	68.1	82.2
72.5°	117.5	103.4	84.6	65.8	56.4	44.7	44.7	42.3	47.0	49.3	61.1
75°	61.1	47.0	47.0	32.9	23.5	11.7	21.2	18.8	16.4	18.8	23.5
77.5°	42.3	35.2	32.9	25.9	23.5	18.8	18.8	18.8	18.8	21.2	23.5
80°	25.9	25.9	18.8	16.4	14.1	11.7	14.1	14.1	14.1	14.1	16.4
82.5°	16.4	14.1	14.1	11.7	11.7	9.4	9.4	9.4	9.4	9.4	14.1
85°	14.1	9.4	9.4	7.1	9.4	16.4	7.1	9.4	9.4	9.4	7.1
87.5°	4.7	7.1	7.1	7.1	4.7	2.4	4.7	7.1	7.1	11.7	9.4
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°	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7	4377.7
2.5°	4384.7	4387.1	4387.1	4384.7	4384.7	4380.0	4389.4	4382.4	4384.7	4394.1	4387.1
5°	4389.4	4391.7	4391.7	4389.4	4389.4	4389.4	4391.7	4391.7	4389.4	4387.1	4391.7
7.5°	4398.8	4396.5	4396.5	4391.7	4391.7	4387.1	4391.7	4384.7	4389.4	4384.7	4391.7
10°	4387.1	4389.4	4387.1	4384.7	4384.7	4382.4	4382.4	4375.3	4377.7	4370.6	4375.3
12.5°	4380.0	4377.7	4377.7	4372.9	4368.3	4363.6	4361.2	4354.1	4354.1	4337.7	4344.8
15°	4361.2	4363.6	4356.5	4347.1	4342.4	4330.7	4326.0	4316.5	4307.2	4295.4	4297.8
17.5°	4344.8	4337.7	4328.3	4318.9	4300.1	4290.7	4281.3	4267.2	4262.5	4248.4	4243.8
20°	4295.4	4290.7	4279.0	4262.5	4250.8	4229.6	4220.2	4206.1	4194.4	4180.3	4173.2
22.5°	4232.0	4227.3	4213.2	4196.7	4177.9	4168.5	4159.1	4133.3	4121.5	4107.4	4105.1
25°	4152.1	4145.0	4130.9	4112.1	4102.7	4076.9	4067.5	4048.7	4044.0	4029.9	4027.6
27.5°	4029.9	4020.5	4004.1	3980.5	3964.1	3947.7	3938.3	3924.1	3919.5	3905.3	3903.0
30°	3846.6	3834.8	3802.0	3792.6	3764.4	3747.9	3747.9	3729.1	3731.5	3722.1	3722.1
32.5°	3557.6	3538.8	3512.9	3494.1	3475.3	3466.0	3466.0	3458.9	3463.6	3463.6	3468.3
35°	3174.6	3148.7	3134.6	3122.9	3122.9	3132.2	3160.5	3167.5	3181.6	3193.4	3202.8
37.5°	2683.4	2681.1	2697.6	2711.7	2746.9	2786.9	2836.2	2878.5	2918.4	2946.7	2974.8
40°	2152.4	2211.2	2258.1	2324.0	2378.0	2455.5	2544.8	2617.7	2685.8	2735.2	2786.9
42.5°	1680.1	1755.3	1854.0	1950.3	2046.7	2152.4	2269.9	2370.9	2460.2	2528.4	2582.4
45°	1308.8	1412.2	1532.1	1654.3	1778.8	1910.4	2032.6	2136.0	2230.0	2300.5	2354.5
47.5°	1055.0	1167.9	1304.1	1438.1	1579.1	1717.7	1854.0	1943.3	2020.8	2077.2	2126.6
50°	871.7	991.6	1135.0	1287.7	1428.7	1567.3	1684.8	1771.7	1835.2	1884.5	1915.1
52.5°	728.4	855.3	1008.1	1160.8	1301.8	1428.7	1534.4	1600.2	1651.9	1687.2	1715.3
55°	601.5	723.8	867.1	1010.4	1149.1	1268.9	1355.8	1405.2	1445.1	1466.3	1482.7
57.5°	491.1	603.9	735.5	867.1	986.9	1085.6	1153.8	1203.1	1221.9	1238.3	1236.0
60°	385.4	491.1	610.9	723.8	827.1	907.0	956.4	984.6	998.6	1005.7	1001.0
62.5°	303.1	399.5	491.1	589.8	665.0	733.1	780.2	780.2	787.2	789.5	796.6
65°	225.6	298.4	378.3	451.2	512.2	556.9	582.8	589.8	599.2	596.9	592.1
67.5°	166.9	220.9	279.6	333.6	376.0	404.1	422.9	439.4	437.1	432.4	430.0
70°	115.2	150.4	202.1	235.0	265.5	293.7	298.4	300.8	303.1	305.5	300.8
72.5°	79.9	105.7	134.0	162.1	180.9	192.7	204.5	206.8	206.8	206.8	204.5
75°	40.0	54.0	79.9	91.6	108.1	112.8	122.2	122.2	129.2	119.8	117.5
77.5°	35.2	42.3	56.4	65.8	72.8	79.9	82.2	89.3	86.9	82.2	84.6
80°	21.2	25.9	35.2	40.0	49.3	51.7	54.0	56.4	54.0	56.4	56.4
82.5°	16.4	18.8	23.5	23.5	30.5	30.5	32.9	32.9	35.2	35.2	35.2
85°	9.4	16.4	14.1	28.2	18.8	18.8	23.5	28.2	23.5	23.5	28.2
87.5°	9.4	9.4	7.1	9.4	9.4	9.4	11.7	14.1	14.1	16.4	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: P249318

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4377.7	4377.7	4377.7	4377.7
2.5°	4384.7	4389.4	4382.4	4380.0
5°	4391.7	4391.7	4387.1	4387.1
7.5°	4391.7	4391.7	4384.7	4380.0
10°	4372.9	4372.9	4365.9	4361.2
12.5°	4337.7	4337.7	4335.3	4328.3
15°	4293.1	4293.1	4283.7	4276.6
17.5°	4232.0	4236.7	4225.0	4225.0
20°	4166.2	4163.8	4154.5	4149.7
22.5°	4098.1	4093.3	4091.0	4076.9
25°	4025.2	4020.5	4013.4	4006.4
27.5°	3900.7	3898.3	3891.2	3881.9
30°	3710.3	3708.0	3698.6	3698.6
32.5°	3463.6	3461.2	3451.9	3454.2
35°	3207.5	3216.9	3212.2	3202.8
37.5°	2993.6	3000.7	3005.4	3000.7
40°	2815.0	2836.2	2838.6	2843.3
42.5°	2624.7	2652.9	2662.3	2667.0
45°	2396.8	2422.6	2443.8	2439.1
47.5°	2164.1	2182.9	2201.7	2187.7
50°	1940.9	1952.7	1959.7	1959.7
52.5°	1729.5	1729.5	1727.1	1729.5
55°	1487.4	1487.4	1478.0	1482.7
57.5°	1233.6	1238.3	1231.3	1219.5
60°	998.6	986.9	982.2	975.2
62.5°	777.8	777.8	761.4	782.5
65°	582.8	575.7	568.6	566.3
67.5°	422.9	420.6	413.6	411.2
70°	298.4	289.0	286.7	282.0
72.5°	199.7	199.7	195.0	195.0
75°	122.2	110.4	108.1	110.4
77.5°	84.6	82.2	82.2	79.9
80°	56.4	54.0	58.8	51.7
82.5°	35.2	37.6	35.2	37.6
85°	23.5	28.2	25.9	25.9
87.5°	14.1	14.1	14.1	14.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)