

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: P249192

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249192
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 EC8B80827 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7920.9 lumens
Efficiency: N/A
Efficacy: 106.5 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

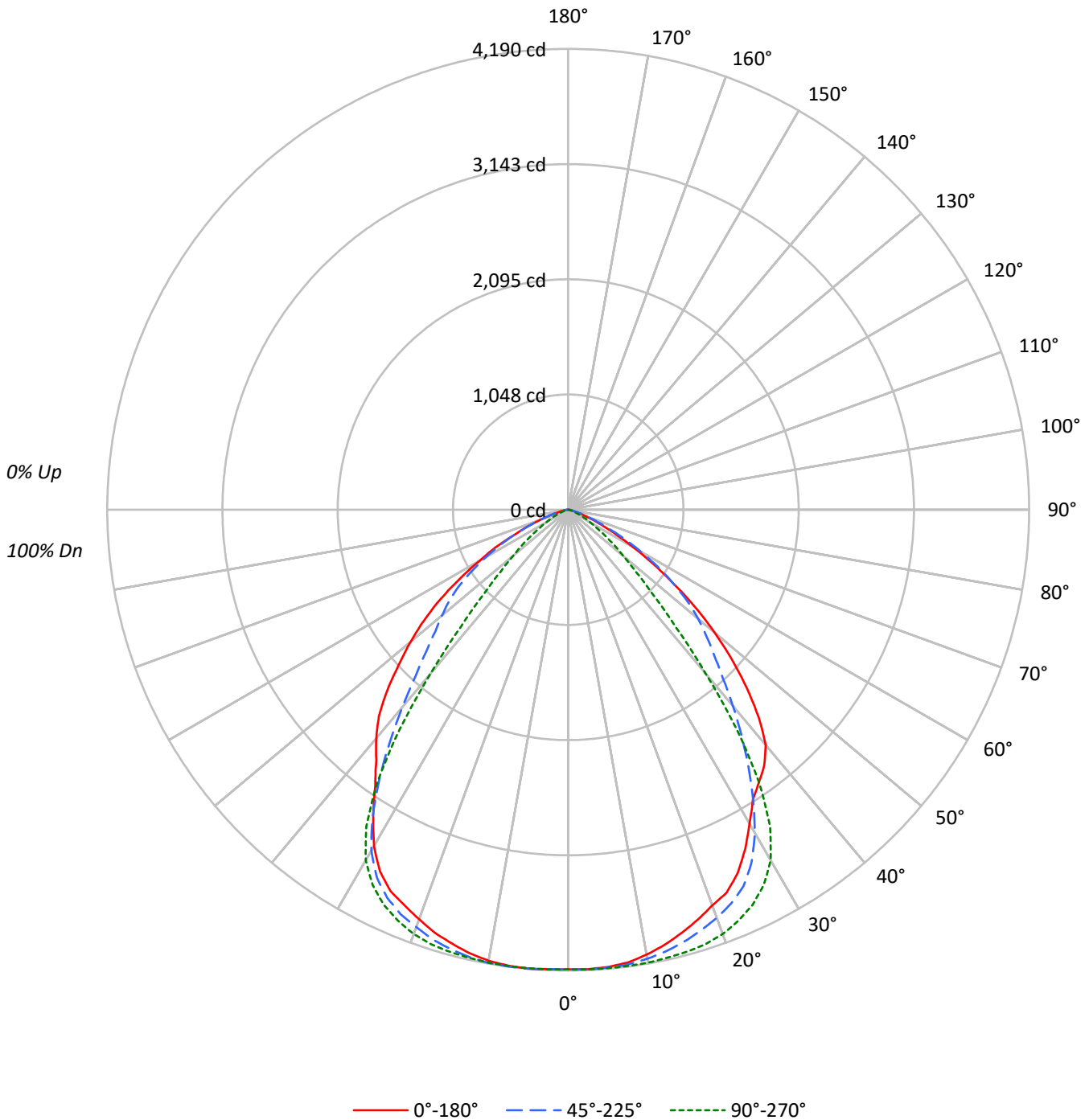
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	52	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°	128874	128874	128874
5°	129156	129506	129645
10°	128614	130931	130371
15°	127189	132846	130340
20°	125660	134713	130004
25°	124031	134868	130135
30°	117338	131079	125727
35°	113836	113919	115105
40°	112425	78382	109265
45°	100175	47054	101544
50°	83295	31317	89752
55°	62471	21591	76099
60°	42338	14388	57417
65°	25538	9332	39445
70°	14155	5058	24271
75°	6410	2133	12558
80°	5576	2380	8755
85°	6333	3149	8739



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	398.9	5.0
10°-20°	1158.3	14.6
20°-30°	1758.1	22.2
30°-40°	1846.5	23.3
40°-50°	1384.4	17.5
50°-60°	888.3	11.2
60°-70°	380.0	4.8
70°-80°	89.8	1.1
80°-90°	16.7	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°	3315.3	41.9
0°-40°	5161.8	65.2
0°-60°	7434.5	93.9
0°-90°	7920.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7920.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4179	4179	4179	4179	4179	
5°	4172	4179	4184	4190	4188	396
15°	3984	4067	4161	4134	4083	1124
25°	3645	3773	3964	3892	3825	1665
35°	3024	2856	3026	2990	3058	1898
45°	2297	1878	1079	1824	2328	1759
55°	1162	1162	402	1211	1416	1054
65°	350	413	128	532	541	374
75°	54	63	18	108	105	78
85°	18	11	9	18	25	19
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°	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3
2.5°	4181.5	4186.0	4183.8	4183.8	4181.5	4183.8	4183.8	4188.3	4188.3	4183.8	4181.5
5°	4172.5	4177.0	4177.0	4172.5	4172.5	4183.8	4177.0	4181.5	4181.5	4179.3	4179.3
7.5°	4152.4	4152.4	4161.3	4154.6	4154.6	4161.3	4159.1	4163.6	4168.1	4170.3	4170.3
10°	4107.5	4112.0	4114.2	4114.2	4116.5	4123.2	4127.7	4136.7	4141.1	4145.6	4147.9
12.5°	4051.4	4058.1	4060.4	4058.1	4064.9	4073.8	4085.1	4096.3	4103.0	4112.0	4118.7
15°	3984.1	3984.1	3988.6	3995.3	3999.8	4013.3	4024.5	4037.9	4055.9	4067.1	4078.3
17.5°	3910.1	3914.6	3921.3	3921.3	3930.3	3952.7	3959.4	3979.6	3999.8	4011.0	4033.5
20°	3829.3	3833.8	3840.5	3845.0	3856.2	3874.2	3887.6	3905.6	3928.0	3948.2	3970.6
22.5°	3766.5	3757.6	3762.0	3766.5	3777.8	3793.5	3809.2	3831.5	3854.0	3874.2	3896.6
25°	3645.4	3647.6	3654.4	3658.8	3672.3	3685.8	3703.7	3730.6	3750.8	3773.3	3797.9
27.5°	3481.6	3483.9	3495.1	3495.1	3506.3	3528.7	3539.9	3562.4	3589.3	3611.7	3640.9
30°	3295.4	3299.9	3299.9	3308.9	3315.6	3326.8	3338.0	3360.5	3373.9	3394.1	3434.5
32.5°	3124.9	3129.4	3127.1	3124.9	3118.2	3115.9	3113.7	3118.2	3122.7	3129.4	3145.1
35°	3024.0	3012.8	3003.8	2988.1	2970.2	2947.7	2927.5	2900.6	2875.9	2855.7	2833.3
37.5°	2927.5	2925.3	2911.8	2889.4	2853.5	2813.1	2766.0	2707.7	2649.3	2586.5	2526.0
40°	2792.9	2786.2	2775.0	2743.6	2703.2	2653.8	2591.0	2519.2	2425.0	2328.5	2229.9
42.5°	2564.1	2566.3	2552.9	2528.2	2490.1	2442.9	2377.9	2299.4	2198.5	2084.0	1956.2
45°	2297.1	2297.1	2292.6	2272.4	2245.6	2207.4	2158.1	2093.0	1994.3	1877.6	1740.8
47.5°	2019.0	2021.2	2014.5	2010.0	1998.8	1974.1	1938.2	1888.9	1819.3	1707.1	1570.3
50°	1736.3	1736.3	1747.5	1745.3	1745.3	1736.3	1720.6	1691.4	1630.9	1541.1	1413.3
52.5°	1453.7	1458.2	1464.9	1473.9	1485.1	1503.0	1485.1	1471.6	1433.5	1363.9	1254.0
55°	1162.0	1166.5	1177.7	1193.4	1206.9	1224.9	1229.3	1229.3	1209.1	1162.0	1079.0
57.5°	913.0	906.3	915.3	928.7	946.7	964.6	978.1	993.8	991.5	960.1	892.8
60°	686.5	688.7	695.4	708.9	722.4	738.1	756.0	769.4	776.2	760.5	717.9
62.5°	500.3	500.3	509.2	522.7	529.4	551.9	563.1	569.8	576.5	574.3	547.4
65°	350.0	354.4	358.9	365.7	372.4	385.8	392.6	406.0	410.5	412.8	392.6
67.5°	246.8	240.0	244.5	249.0	255.7	264.7	278.2	278.2	284.9	284.9	271.4
70°	157.0	157.0	159.3	166.0	170.5	172.7	177.2	181.7	188.4	186.2	186.2
72.5°	105.4	103.2	105.4	107.7	109.9	116.6	116.6	118.9	123.4	125.6	116.6
75°	53.8	56.1	60.5	58.3	65.0	60.5	62.8	69.5	67.3	62.8	62.8
77.5°	44.8	44.8	44.8	42.6	47.1	47.1	44.8	49.3	47.1	47.1	44.8
80°	31.4	33.6	31.4	29.1	31.4	29.1	29.1	29.1	29.1	29.1	26.9
82.5°	24.7	20.2	22.4	20.2	22.4	22.4	20.2	17.9	17.9	20.2	17.9
85°	17.9	13.4	15.7	15.7	13.4	13.4	13.4	13.4	13.4	11.2	11.2
87.5°	11.2	6.8	6.8	6.8	8.9	8.9	8.9	6.8	8.9	8.9	4.5
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°	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3
2.5°	4186.0	4183.8	4188.3	4186.0	4186.0	4183.8	4186.0	4183.8	4188.3	4179.3	4181.5
5°	4186.0	4181.5	4183.8	4186.0	4188.3	4183.8	4183.8	4183.8	4188.3	4183.8	4186.0
7.5°	4177.0	4174.8	4181.5	4186.0	4183.8	4181.5	4186.0	4183.8	4188.3	4186.0	4190.5
10°	4159.1	4161.3	4165.8	4172.5	4174.8	4177.0	4181.5	4181.5	4188.3	4179.3	4183.8
12.5°	4132.2	4141.1	4152.4	4156.8	4165.8	4165.8	4170.3	4172.5	4177.0	4174.8	4181.5
15°	4098.5	4109.7	4123.2	4134.4	4145.6	4152.4	4159.1	4161.3	4168.1	4161.3	4163.6
17.5°	4058.1	4071.6	4091.8	4105.2	4123.2	4129.9	4138.9	4143.4	4150.1	4145.6	4147.9
20°	4002.0	4017.8	4040.2	4060.4	4071.6	4087.3	4098.5	4105.2	4109.7	4105.2	4107.5
22.5°	3923.5	3946.0	3975.1	3990.8	4013.3	4026.7	4029.0	4044.7	4055.9	4044.7	4049.2
25°	3831.5	3854.0	3876.4	3910.1	3930.3	3946.0	3961.7	3963.9	3975.1	3972.9	3970.6
27.5°	3679.0	3708.2	3746.3	3773.3	3800.2	3824.8	3842.8	3847.2	3858.5	3854.0	3856.2
30°	3470.4	3501.8	3537.7	3580.3	3618.5	3643.1	3665.6	3681.3	3692.5	3685.8	3683.5
32.5°	3174.3	3205.7	3243.8	3286.4	3331.3	3367.2	3394.1	3414.3	3427.8	3423.3	3412.1
35°	2835.6	2844.5	2869.2	2902.9	2941.0	2979.1	3003.8	3026.2	3041.9	3046.4	3046.4
37.5°	2487.8	2458.7	2440.7	2440.7	2463.1	2478.8	2501.3	2514.7	2539.4	2548.4	2555.1
40°	2151.3	2084.0	2021.2	1974.1	1942.7	1940.5	1940.5	1947.2	1969.6	1998.8	2025.7
42.5°	1850.7	1743.0	1646.6	1559.1	1496.3	1460.4	1444.7	1447.0	1464.9	1491.8	1536.6
45°	1610.7	1476.1	1355.0	1249.5	1164.3	1108.2	1081.3	1079.0	1092.5	1123.9	1173.3
47.5°	1424.5	1280.9	1144.1	1022.9	931.0	870.4	839.0	830.0	839.0	868.1	926.5
50°	1269.7	1121.7	980.3	854.7	756.0	693.2	664.0	652.8	664.0	688.7	747.0
52.5°	1126.1	973.6	841.2	720.1	614.7	560.8	529.4	522.7	529.4	558.6	605.7
55°	960.1	830.0	699.9	578.8	486.8	433.0	408.3	401.6	408.3	435.2	484.6
57.5°	796.4	684.2	569.8	459.9	381.4	334.2	311.8	302.8	318.5	336.5	394.8
60°	643.8	554.1	457.6	361.2	296.1	253.5	235.5	233.3	237.8	260.2	300.6
62.5°	504.8	430.7	354.4	275.9	222.1	204.1	181.7	179.5	183.9	197.4	228.8
65°	363.4	316.3	258.0	201.9	159.3	134.6	125.6	127.9	132.3	141.3	170.5
67.5°	253.5	219.8	179.5	141.3	109.9	98.7	89.7	87.5	89.7	105.4	121.1
70°	170.5	150.3	121.1	107.7	76.3	60.5	62.8	56.1	65.0	65.0	78.5
72.5°	112.1	98.7	80.7	62.8	53.8	42.6	42.6	40.4	44.8	47.1	58.3
75°	58.3	44.8	44.8	31.4	22.4	11.2	20.2	17.9	15.7	17.9	22.4
77.5°	40.4	33.6	31.4	24.7	22.4	17.9	17.9	17.9	17.9	20.2	22.4
80°	24.7	24.7	17.9	15.7	13.4	11.2	13.4	13.4	13.4	13.4	15.7
82.5°	15.7	13.4	13.4	11.2	11.2	8.9	8.9	8.9	8.9	8.9	13.4
85°	13.4	8.9	8.9	6.8	8.9	15.7	6.8	8.9	8.9	8.9	6.8
87.5°	4.5	6.8	6.8	6.8	4.5	2.3	4.5	6.8	6.8	11.2	8.9
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°	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3	4179.3
2.5°	4186.0	4188.3	4188.3	4186.0	4186.0	4181.5	4190.5	4183.8	4186.0	4195.0	4188.3
5°	4190.5	4192.7	4192.7	4190.5	4190.5	4190.5	4192.7	4192.7	4190.5	4188.3	4192.7
7.5°	4199.5	4197.2	4197.2	4192.7	4192.7	4188.3	4192.7	4186.0	4190.5	4186.0	4192.7
10°	4188.3	4190.5	4188.3	4186.0	4186.0	4183.8	4183.8	4177.0	4179.3	4172.5	4177.0
12.5°	4181.5	4179.3	4179.3	4174.8	4170.3	4165.8	4163.6	4156.8	4156.8	4141.1	4147.9
15°	4163.6	4165.8	4159.1	4150.1	4145.6	4134.4	4129.9	4120.9	4112.0	4100.8	4103.0
17.5°	4147.9	4141.1	4132.2	4123.2	4105.2	4096.3	4087.3	4073.8	4069.3	4055.9	4051.4
20°	4100.8	4096.3	4085.1	4069.3	4058.1	4037.9	4029.0	4015.5	4004.3	3990.8	3984.1
22.5°	4040.2	4035.7	4022.2	4006.5	3988.6	3979.6	3970.6	3946.0	3934.7	3921.3	3919.0
25°	3963.9	3957.2	3943.7	3925.8	3916.8	3892.1	3883.1	3865.2	3860.7	3847.2	3845.0
27.5°	3847.2	3838.3	3822.6	3800.2	3784.5	3768.8	3759.8	3746.3	3741.9	3728.4	3726.2
30°	3672.3	3661.1	3629.7	3620.7	3593.8	3578.1	3578.1	3560.1	3562.4	3553.4	3553.4
32.5°	3396.4	3378.4	3353.7	3335.8	3317.8	3308.9	3308.9	3302.1	3306.6	3306.6	3311.1
35°	3030.7	3006.1	2992.6	2981.4	2981.4	2990.3	3017.3	3024.0	3037.5	3048.6	3057.7
37.5°	2561.8	2559.6	2575.3	2588.8	2622.4	2660.6	2707.7	2748.1	2786.2	2813.1	2840.0
40°	2054.9	2111.0	2155.8	2218.7	2270.2	2344.2	2429.5	2499.0	2564.1	2611.2	2660.6
42.5°	1603.9	1675.7	1770.0	1861.9	1953.9	2054.9	2167.1	2263.5	2348.7	2413.8	2465.4
45°	1249.5	1348.2	1462.7	1579.3	1698.2	1823.8	1940.5	2039.2	2128.9	2196.2	2247.8
47.5°	1007.2	1114.9	1245.0	1372.9	1507.5	1639.8	1770.0	1855.2	1929.2	1983.1	2030.2
50°	832.2	946.7	1083.5	1229.3	1363.9	1496.3	1608.4	1691.4	1752.0	1799.1	1828.3
52.5°	695.4	816.5	962.4	1108.2	1242.8	1363.9	1464.9	1527.7	1577.0	1610.7	1637.6
55°	574.3	691.0	827.8	964.6	1097.0	1211.4	1294.4	1341.5	1379.6	1399.8	1415.5
57.5°	468.9	576.5	702.2	827.8	942.2	1036.4	1101.5	1148.6	1166.5	1182.2	1180.0
60°	367.9	468.9	583.3	691.0	789.6	865.9	913.0	939.9	953.4	960.1	955.6
62.5°	289.4	381.4	468.9	563.1	634.9	699.9	744.8	744.8	751.5	753.8	760.5
65°	215.3	284.9	361.2	430.7	489.0	531.7	556.4	563.1	572.1	569.8	565.3
67.5°	159.3	210.9	266.9	318.5	358.9	385.8	403.8	419.5	417.3	412.8	410.5
70°	109.9	143.6	192.9	224.3	253.5	280.4	284.9	287.1	289.4	291.6	287.1
72.5°	76.3	100.9	127.9	154.8	172.7	183.9	195.2	197.4	197.4	197.4	195.2
75°	38.1	51.6	76.3	87.5	103.2	107.7	116.6	116.6	123.4	114.4	112.1
77.5°	33.6	40.4	53.8	62.8	69.5	76.3	78.5	85.2	83.0	78.5	80.7
80°	20.2	24.7	33.6	38.1	47.1	49.3	51.6	53.8	51.6	53.8	53.8
82.5°	15.7	17.9	22.4	22.4	29.1	29.1	31.4	31.4	33.6	33.6	33.6
85°	8.9	15.7	13.4	26.9	17.9	17.9	22.4	26.9	22.4	22.4	26.9
87.5°	8.9	8.9	6.8	8.9	8.9	8.9	11.2	13.4	13.4	15.7	13.4
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: P249192

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4179.3	4179.3	4179.3	4179.3
2.5°	4186.0	4190.5	4183.8	4181.5
5°	4192.7	4192.7	4188.3	4188.3
7.5°	4192.7	4192.7	4186.0	4181.5
10°	4174.8	4174.8	4168.1	4163.6
12.5°	4141.1	4141.1	4138.9	4132.2
15°	4098.5	4098.5	4089.5	4082.8
17.5°	4040.2	4044.7	4033.5	4033.5
20°	3977.4	3975.1	3966.2	3961.7
22.5°	3912.3	3907.8	3905.6	3892.1
25°	3842.8	3838.3	3831.5	3824.8
27.5°	3723.9	3721.7	3714.9	3706.0
30°	3542.2	3539.9	3531.0	3531.0
32.5°	3306.6	3304.4	3295.4	3297.7
35°	3062.1	3071.1	3066.6	3057.7
37.5°	2858.0	2864.7	2869.2	2864.7
40°	2687.5	2707.7	2709.9	2714.4
42.5°	2505.8	2532.7	2541.7	2546.1
45°	2288.1	2312.8	2333.0	2328.5
47.5°	2066.1	2084.0	2102.0	2088.5
50°	1853.0	1864.2	1870.9	1870.9
52.5°	1651.1	1651.1	1648.8	1651.1
55°	1420.0	1420.0	1411.1	1415.5
57.5°	1177.7	1182.2	1175.5	1164.3
60°	953.4	942.2	937.7	931.0
62.5°	742.6	742.6	726.9	747.0
65°	556.4	549.6	542.9	540.6
67.5°	403.8	401.6	394.8	392.6
70°	284.9	275.9	273.7	269.2
72.5°	190.7	190.7	186.2	186.2
75°	116.6	105.4	103.2	105.4
77.5°	80.7	78.5	78.5	76.3
80°	53.8	51.6	56.1	49.3
82.5°	33.6	35.9	33.6	35.9
85°	22.4	26.9	24.7	24.7
87.5°	13.4	13.4	13.4	13.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)