

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: P249543

Luminaire Tested: **LSR8B80D010 EC8B80840 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249543
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 EC8B80840 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8337.0 lumens
Efficiency: N/A
Efficacy: 112.1 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

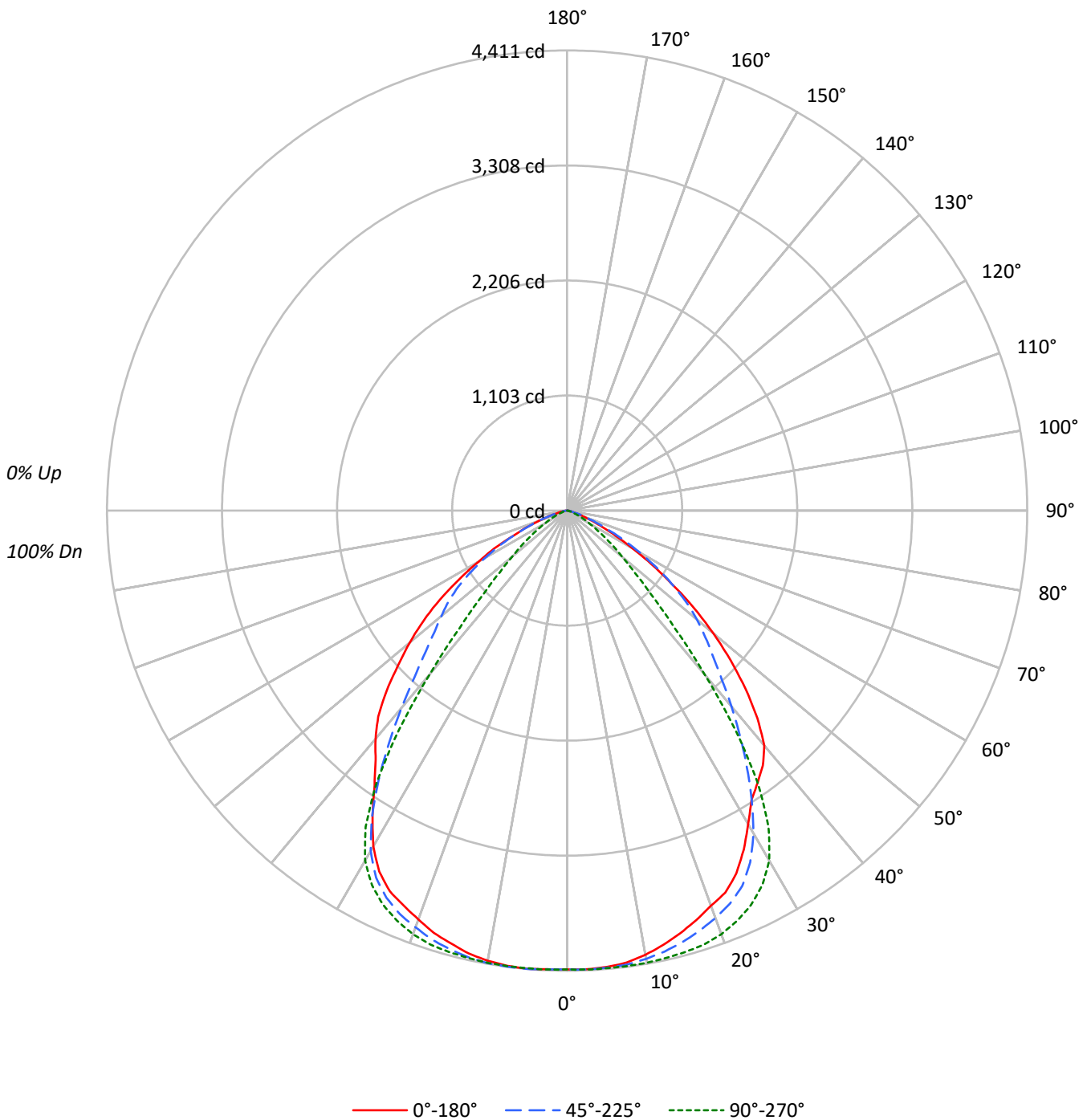
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	135643	135643	135643
5°	135941	136306	136452
10°	135368	137807	137216
15°	133867	139824	137187
20°	132262	141788	136833
25°	130544	141952	136971
30°	123502	137962	132329
35°	119814	119901	121147
40°	118331	82496	115006
45°	105438	49527	106877
50°	87670	32962	94468
55°	65756	22725	80094
60°	44558	15141	60433
65°	26880	9821	41517
70°	14903	5319	25542
75°	6755	2252	13225
80°	5860	2522	9216
85°	6687	3326	9199



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	419.8	5.0
10°-20°	1219.2	14.6
20°-30°	1850.5	22.2
30°-40°	1943.5	23.3
40°-50°	1457.1	17.5
50°-60°	934.9	11.2
60°-70°	399.9	4.8
70°-80°	94.5	1.1
80°-90°	17.6	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°	3489.4	41.9
0°-40°	5432.9	65.2
0°-60°	7825.0	93.9
0°-90°	8337.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8337.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4399	4399	4399	4399	4399	
5°	4392	4399	4404	4411	4408	417
15°	4193	4281	4380	4352	4297	1183
25°	3837	3971	4172	4097	4026	1753
35°	3183	3006	3185	3147	3218	1998
45°	2418	1976	1136	1920	2451	1852
55°	1223	1223	423	1275	1490	1109
65°	368	434	135	560	569	393
75°	57	66	19	113	111	83
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°	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8
2.5°	4401.1	4405.9	4403.5	4403.5	4401.1	4403.5	4403.5	4408.2	4408.2	4403.5	4401.1
5°	4391.7	4396.4	4396.4	4391.7	4391.7	4403.5	4396.4	4401.1	4401.1	4398.8	4398.8
7.5°	4370.5	4370.5	4379.9	4372.8	4372.8	4379.9	4377.5	4382.2	4387.0	4389.3	4389.3
10°	4323.2	4327.9	4330.3	4330.3	4332.7	4339.7	4344.5	4353.9	4358.6	4363.4	4365.7
12.5°	4264.2	4271.3	4273.6	4271.3	4278.4	4287.8	4299.6	4311.4	4318.5	4327.9	4335.0
15°	4193.3	4193.3	4198.1	4205.2	4209.9	4224.1	4235.8	4250.0	4268.9	4280.7	4292.5
17.5°	4115.4	4120.2	4127.2	4127.2	4136.7	4160.3	4167.4	4188.6	4209.9	4221.7	4245.3
20°	4030.5	4035.1	4042.2	4047.0	4058.8	4077.7	4091.8	4110.7	4134.3	4155.6	4179.2
22.5°	3964.3	3954.9	3959.6	3964.3	3976.2	3992.7	4009.2	4032.8	4056.4	4077.7	4101.3
25°	3836.8	3839.2	3846.3	3851.0	3865.2	3879.3	3898.2	3926.5	3947.8	3971.4	3997.4
27.5°	3664.5	3666.8	3678.6	3678.6	3690.4	3714.0	3725.8	3749.5	3777.8	3801.4	3832.1
30°	3468.5	3473.2	3473.2	3482.7	3489.7	3501.6	3513.3	3537.0	3551.1	3572.4	3614.9
32.5°	3289.1	3293.7	3291.4	3289.1	3282.0	3279.6	3277.2	3282.0	3286.7	3293.7	3310.3
35°	3182.8	3171.0	3161.6	3145.0	3126.1	3102.5	3081.3	3052.9	3026.9	3005.7	2982.1
37.5°	3081.3	3078.9	3064.7	3041.1	3003.3	2960.9	2911.3	2849.9	2788.5	2722.4	2658.6
40°	2939.6	2932.5	2920.7	2887.7	2845.1	2793.2	2727.1	2651.5	2552.3	2450.8	2347.0
42.5°	2698.7	2701.1	2687.0	2661.0	2620.9	2571.2	2502.8	2420.2	2313.9	2193.5	2058.9
45°	2417.8	2417.8	2413.1	2391.8	2363.5	2323.3	2271.4	2202.9	2099.1	1976.2	1832.2
47.5°	2125.0	2127.4	2120.3	2115.6	2103.7	2077.8	2040.0	1988.1	1914.9	1796.8	1652.8
50°	1827.5	1827.5	1839.3	1836.9	1836.9	1827.5	1811.0	1780.3	1716.5	1622.1	1487.5
52.5°	1530.0	1534.7	1541.8	1551.3	1563.0	1581.9	1563.0	1548.9	1508.7	1435.5	1319.9
55°	1223.1	1227.8	1239.6	1256.1	1270.3	1289.2	1293.9	1293.9	1272.6	1223.1	1135.7
57.5°	961.0	953.9	963.4	977.5	996.4	1015.3	1029.5	1046.0	1043.6	1010.6	939.7
60°	722.5	724.9	731.9	746.1	760.3	776.8	795.7	809.9	817.0	800.4	755.6
62.5°	526.5	526.5	536.0	550.1	557.2	580.8	592.6	599.7	606.8	604.4	576.1
65°	368.4	373.0	377.8	384.9	391.9	406.1	413.2	427.3	432.1	434.5	413.2
67.5°	259.7	252.6	257.4	262.1	269.2	278.6	292.8	292.8	299.8	299.8	285.7
70°	165.3	165.3	167.7	174.7	179.4	181.8	186.5	191.2	198.3	196.0	196.0
72.5°	111.0	108.6	111.0	113.3	115.7	122.8	122.8	125.1	129.9	132.2	122.8
75°	56.7	59.0	63.7	61.4	68.5	63.7	66.1	73.2	70.8	66.1	66.1
77.5°	47.2	47.2	47.2	44.9	49.6	49.6	47.2	51.9	49.6	49.6	47.2
80°	33.0	35.4	33.0	30.7	33.0	30.7	30.7	30.7	30.7	30.7	28.3
82.5°	26.0	21.3	23.6	21.3	23.6	23.6	21.3	18.9	18.9	21.3	18.9
85°	18.9	14.2	16.5	16.5	14.2	14.2	14.2	14.2	14.2	11.8	11.8
87.5°	11.8	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°	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8
2.5°	4405.9	4403.5	4408.2	4405.9	4405.9	4403.5	4405.9	4403.5	4408.2	4398.8	4401.1
5°	4405.9	4401.1	4403.5	4405.9	4408.2	4403.5	4403.5	4403.5	4408.2	4403.5	4405.9
7.5°	4396.4	4394.0	4401.1	4405.9	4403.5	4401.1	4405.9	4403.5	4408.2	4405.9	4410.6
10°	4377.5	4379.9	4384.6	4391.7	4394.0	4396.4	4401.1	4401.1	4408.2	4398.8	4403.5
12.5°	4349.2	4358.6	4370.5	4375.1	4384.6	4384.6	4389.3	4391.7	4396.4	4394.0	4401.1
15°	4313.8	4325.6	4339.7	4351.6	4363.4	4370.5	4377.5	4379.9	4387.0	4379.9	4382.2
17.5°	4271.3	4285.4	4306.7	4320.8	4339.7	4346.8	4356.2	4361.0	4368.1	4363.4	4365.7
20°	4212.2	4228.8	4252.4	4273.6	4285.4	4301.9	4313.8	4320.8	4325.6	4320.8	4323.2
22.5°	4129.6	4153.2	4183.9	4200.4	4224.1	4238.2	4240.6	4257.1	4268.9	4257.1	4261.8
25°	4032.8	4056.4	4080.0	4115.4	4136.7	4153.2	4169.8	4172.1	4183.9	4181.5	4179.2
27.5°	3872.2	3903.0	3943.1	3971.4	3999.7	4025.7	4044.6	4049.3	4061.1	4056.4	4058.8
30°	3652.6	3685.7	3723.5	3768.3	3808.5	3834.4	3858.1	3874.6	3886.4	3879.3	3877.0
32.5°	3341.0	3374.0	3414.2	3459.0	3506.3	3544.0	3572.4	3593.6	3607.8	3603.1	3591.3
35°	2984.5	2993.9	3019.9	3055.3	3095.4	3135.6	3161.6	3185.1	3201.7	3206.4	3206.4
37.5°	2618.5	2587.8	2568.9	2568.9	2592.5	2609.0	2632.6	2646.8	2672.8	2682.2	2689.3
40°	2264.3	2193.5	2127.4	2077.8	2044.8	2042.4	2042.4	2049.4	2073.1	2103.7	2132.1
42.5°	1947.9	1834.6	1733.1	1641.0	1574.9	1537.1	1520.6	1522.9	1541.8	1570.1	1617.4
45°	1695.3	1553.6	1426.1	1315.1	1225.4	1166.4	1138.1	1135.7	1149.9	1182.9	1234.9
47.5°	1499.3	1348.2	1204.2	1076.7	979.9	916.1	883.1	873.6	883.1	913.7	975.1
50°	1336.4	1180.6	1031.8	899.6	795.7	729.6	698.9	687.1	698.9	724.9	786.2
52.5°	1185.3	1024.7	885.4	757.9	646.9	590.3	557.2	550.1	557.2	587.9	637.5
55°	1010.6	873.6	736.7	609.2	512.4	455.7	429.7	422.7	429.7	458.1	510.0
57.5°	838.2	720.1	599.7	484.0	401.4	351.8	328.2	318.7	335.3	354.1	415.6
60°	677.6	583.2	481.7	380.1	311.7	266.8	247.9	245.5	250.3	273.9	316.4
62.5°	531.3	453.3	373.0	290.4	233.7	214.9	191.2	188.9	193.6	207.8	240.9
65°	382.5	332.9	271.5	212.5	167.7	141.7	132.2	134.6	139.3	148.8	179.4
67.5°	266.8	231.4	188.9	148.8	115.7	103.9	94.5	92.1	94.5	111.0	127.5
70°	179.4	158.2	127.5	113.3	80.3	63.7	66.1	59.0	68.5	68.5	82.6
72.5°	118.0	103.9	85.0	66.1	56.7	44.9	44.9	42.5	47.2	49.6	61.4
75°	61.4	47.2	47.2	33.0	23.6	11.8	21.3	18.9	16.5	18.9	23.6
77.5°	42.5	35.4	33.0	26.0	23.6	18.9	18.9	18.9	18.9	21.3	23.6
80°	26.0	26.0	18.9	16.5	14.2	11.8	14.2	14.2	14.2	14.2	16.5
82.5°	16.5	14.2	14.2	11.8	11.8	9.4	9.4	9.4	9.4	9.4	14.2
85°	14.2	9.4	9.4	7.1	9.4	16.5	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	11.8	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°	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8	4398.8
2.5°	4405.9	4408.2	4408.2	4405.9	4405.9	4401.1	4410.6	4403.5	4405.9	4415.3	4408.2
5°	4410.6	4412.9	4412.9	4410.6	4410.6	4410.6	4412.9	4412.9	4410.6	4408.2	4412.9
7.5°	4420.0	4417.7	4417.7	4412.9	4412.9	4408.2	4412.9	4405.9	4410.6	4405.9	4412.9
10°	4408.2	4410.6	4408.2	4405.9	4405.9	4403.5	4403.5	4396.4	4398.8	4391.7	4396.4
12.5°	4401.1	4398.8	4398.8	4394.0	4389.3	4384.6	4382.2	4375.1	4375.1	4358.6	4365.7
15°	4382.2	4384.6	4377.5	4368.1	4363.4	4351.6	4346.8	4337.4	4327.9	4316.1	4318.5
17.5°	4365.7	4358.6	4349.2	4339.7	4320.8	4311.4	4301.9	4287.8	4283.0	4268.9	4264.2
20°	4316.1	4311.4	4299.6	4283.0	4271.3	4250.0	4240.6	4226.4	4214.6	4200.4	4193.3
22.5°	4252.4	4247.6	4233.5	4217.0	4198.1	4188.6	4179.2	4153.2	4141.4	4127.2	4124.9
25°	4172.1	4165.0	4150.9	4132.0	4122.5	4096.6	4087.1	4068.2	4063.5	4049.3	4047.0
27.5°	4049.3	4039.9	4023.4	3999.7	3983.2	3966.7	3957.3	3943.1	3938.4	3924.2	3921.8
30°	3865.2	3853.3	3820.3	3810.9	3782.5	3766.0	3766.0	3747.1	3749.5	3740.0	3740.0
32.5°	3574.8	3555.9	3529.9	3511.0	3492.1	3482.7	3482.7	3475.6	3480.3	3480.3	3485.0
35°	3189.9	3163.9	3149.7	3137.9	3137.9	3147.3	3175.7	3182.8	3197.0	3208.8	3218.2
37.5°	2696.4	2694.1	2710.6	2724.7	2760.2	2800.3	2849.9	2892.4	2932.5	2960.9	2989.2
40°	2162.8	2221.8	2269.0	2335.2	2389.4	2467.4	2557.1	2630.3	2698.7	2748.4	2800.3
42.5°	1688.2	1763.7	1862.9	1959.7	2056.5	2162.8	2280.9	2382.4	2472.1	2540.6	2594.9
45°	1315.1	1419.0	1539.5	1662.2	1787.4	1919.6	2042.4	2146.3	2240.7	2311.5	2365.9
47.5°	1060.1	1173.5	1310.4	1445.0	1586.7	1726.0	1862.9	1952.7	2030.5	2087.2	2136.8
50°	876.0	996.4	1140.4	1293.9	1435.5	1574.9	1692.9	1780.3	1844.1	1893.6	1924.3
52.5°	731.9	859.4	1012.9	1166.4	1308.0	1435.5	1541.8	1607.9	1659.9	1695.3	1723.6
55°	604.4	727.2	871.3	1015.3	1154.6	1275.0	1362.3	1412.0	1452.1	1473.3	1489.8
57.5°	493.5	606.8	739.0	871.3	991.7	1090.9	1159.3	1208.9	1227.8	1244.3	1241.9
60°	387.2	493.5	613.9	727.2	831.1	911.4	961.0	989.3	1003.5	1010.6	1005.8
62.5°	304.6	401.4	493.5	592.6	668.2	736.7	783.9	783.9	791.0	793.3	800.4
65°	226.6	299.8	380.1	453.3	514.7	559.6	585.6	592.6	602.1	599.7	595.0
67.5°	167.7	222.0	281.0	335.3	377.8	406.1	425.0	441.6	439.2	434.5	432.1
70°	115.7	151.1	203.1	236.1	266.8	295.2	299.8	302.2	304.6	306.9	302.2
72.5°	80.3	106.2	134.6	162.9	181.8	193.6	205.4	207.8	207.8	207.8	205.4
75°	40.2	54.3	80.3	92.1	108.6	113.3	122.8	122.8	129.9	120.4	118.0
77.5°	35.4	42.5	56.7	66.1	73.2	80.3	82.6	89.7	87.4	82.6	85.0
80°	21.3	26.0	35.4	40.2	49.6	51.9	54.3	56.7	54.3	56.7	56.7
82.5°	16.5	18.9	23.6	23.6	30.7	30.7	33.0	33.0	35.4	35.4	35.4
85°	9.4	16.5	14.2	28.3	18.9	18.9	23.6	28.3	23.6	23.6	28.3
87.5°	9.4	9.4	7.1	9.4	9.4	9.4	11.8	14.2	14.2	16.5	14.2
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: P249543

CATALOG NUMBER: LSR8B80D010 EC8B80840 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4398.8	4398.8	4398.8	4398.8
2.5°	4405.9	4410.6	4403.5	4401.1
5°	4412.9	4412.9	4408.2	4408.2
7.5°	4412.9	4412.9	4405.9	4401.1
10°	4394.0	4394.0	4387.0	4382.2
12.5°	4358.6	4358.6	4356.2	4349.2
15°	4313.8	4313.8	4304.3	4297.3
17.5°	4252.4	4257.1	4245.3	4245.3
20°	4186.3	4183.9	4174.5	4169.8
22.5°	4117.8	4113.1	4110.7	4096.6
25°	4044.6	4039.9	4032.8	4025.7
27.5°	3919.5	3917.1	3910.0	3900.6
30°	3728.2	3725.8	3716.4	3716.4
32.5°	3480.3	3477.9	3468.5	3470.9
35°	3222.9	3232.4	3227.7	3218.2
37.5°	3008.1	3015.2	3019.9	3015.2
40°	2828.6	2849.9	2852.2	2857.0
42.5°	2637.4	2665.7	2675.2	2679.9
45°	2408.3	2434.3	2455.6	2450.8
47.5°	2174.6	2193.5	2212.4	2198.2
50°	1950.3	1962.1	1969.2	1969.2
52.5°	1737.8	1737.8	1735.4	1737.8
55°	1494.6	1494.6	1485.2	1489.8
57.5°	1239.6	1244.3	1237.2	1225.4
60°	1003.5	991.7	986.9	979.9
62.5°	781.5	781.5	765.0	786.2
65°	585.6	578.5	571.4	569.0
67.5°	425.0	422.7	415.6	413.2
70°	299.8	290.4	288.1	283.3
72.5°	200.7	200.7	196.0	196.0
75°	122.8	111.0	108.6	111.0
77.5°	85.0	82.6	82.6	80.3
80°	56.7	54.3	59.0	51.9
82.5°	35.4	37.8	35.4	37.8
85°	23.6	28.3	26.0	26.0
87.5°	14.2	14.2	14.2	14.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)