

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: P249228

Luminaire Tested: **LSR8B80D010 EC8B80850 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249228
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 EC8B80850 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8553.0 lumens
Efficiency: N/A
Efficacy: 115.0 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

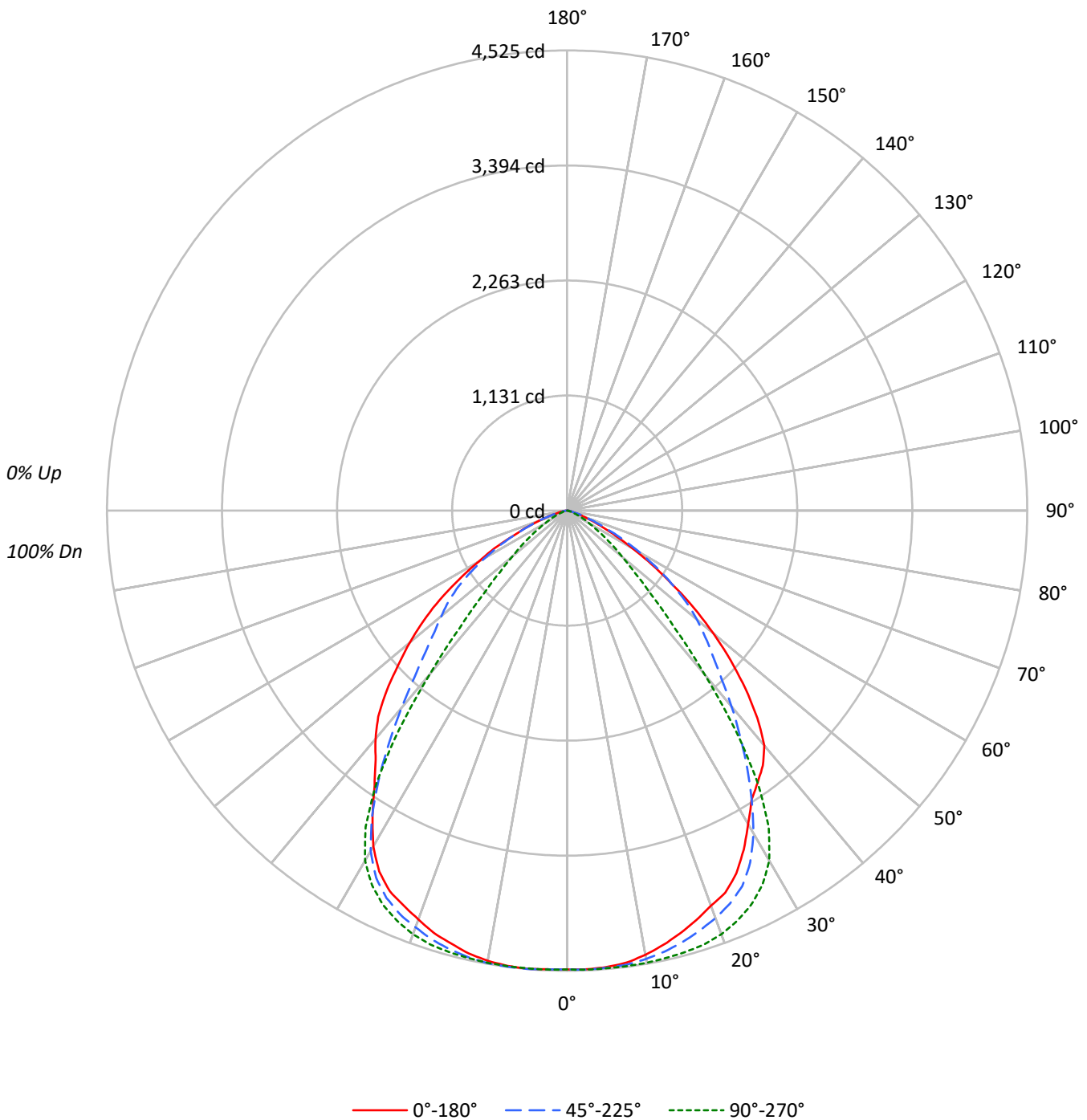
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	139155	139155	139155
5°	139461	139838	139987
10°	138875	141380	140773
15°	137337	143448	140741
20°	135688	145464	140377
25°	133926	145630	140520
30°	126703	141537	135758
35°	122920	123010	124286
40°	121398	84634	117984
45°	108168	50809	109646
50°	89944	33816	96915
55°	67455	23311	82169
60°	45712	15535	61999
65°	27573	10076	42590
70°	15291	5464	26209
75°	6922	2311	13570
80°	6020	2575	9465
85°	6864	3432	9447



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	430.7	5.0
10°-20°	1250.7	14.6
20°-30°	1898.4	22.2
30°-40°	1993.9	23.3
40°-50°	1494.9	17.5
50°-60°	959.1	11.2
60°-70°	410.3	4.8
70°-80°	96.9	1.1
80°-90°	18.0	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°	3579.8	41.9
0°-40°	5573.7	65.2
0°-60°	8027.7	93.9
0°-90°	8553.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8553.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4513	4513	4513	4513	4513	
5°	4505	4513	4518	4525	4522	428
15°	4302	4392	4493	4464	4409	1213
25°	3936	4074	4280	4203	4130	1798
35°	3265	3084	3268	3229	3302	2049
45°	2480	2027	1165	1969	2514	1900
55°	1255	1255	434	1308	1528	1138
65°	378	446	138	574	584	403
75°	58	68	19	116	114	85
85°	19	12	10	19	27	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°	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7
2.5°	4515.2	4520.0	4517.6	4517.6	4515.2	4517.6	4517.6	4522.4	4522.4	4517.6	4515.2
5°	4505.4	4510.3	4510.3	4505.4	4505.4	4517.6	4510.3	4515.2	4515.2	4512.7	4512.7
7.5°	4483.7	4483.7	4493.4	4486.1	4486.1	4493.4	4490.9	4495.8	4500.6	4503.1	4503.1
10°	4435.2	4440.1	4442.5	4442.5	4444.9	4452.2	4457.0	4466.7	4471.5	4476.4	4478.8
12.5°	4374.7	4381.9	4384.4	4381.9	4389.2	4398.9	4411.0	4423.1	4430.4	4440.1	4447.4
15°	4302.0	4302.0	4306.8	4314.1	4319.0	4333.5	4345.6	4360.1	4379.5	4391.6	4403.7
17.5°	4222.1	4226.9	4234.2	4234.2	4243.9	4268.1	4275.4	4297.2	4319.0	4331.1	4355.3
20°	4134.9	4139.7	4147.0	4151.8	4163.9	4183.3	4197.8	4217.2	4241.5	4263.3	4287.4
22.5°	4067.0	4057.4	4062.2	4067.0	4079.2	4096.1	4113.1	4137.3	4161.5	4183.3	4207.6
25°	3936.2	3938.6	3945.9	3950.7	3965.3	3979.8	3999.2	4028.3	4050.1	4074.3	4100.9
27.5°	3759.4	3761.8	3773.9	3773.9	3786.0	3810.3	3822.4	3846.6	3875.7	3899.9	3931.4
30°	3558.4	3563.2	3563.2	3572.9	3580.1	3592.3	3604.4	3628.6	3643.1	3664.9	3708.6
32.5°	3374.3	3379.1	3376.7	3374.3	3367.0	3364.6	3362.1	3367.0	3371.8	3379.1	3396.0
35°	3265.3	3253.1	3243.5	3226.5	3207.1	3182.9	3161.1	3132.0	3105.4	3083.6	3059.4
37.5°	3161.1	3158.7	3144.1	3119.9	3081.1	3037.6	2986.7	2923.7	2860.7	2792.9	2727.5
40°	3015.8	3008.5	2996.4	2962.5	2918.9	2865.6	2797.8	2720.2	2618.5	2514.3	2407.8
42.5°	2768.7	2771.1	2756.6	2729.9	2688.8	2637.9	2567.6	2482.9	2373.9	2250.3	2112.3
45°	2480.4	2480.4	2475.6	2453.8	2424.7	2383.5	2330.2	2260.0	2153.4	2027.4	1879.7
47.5°	2180.1	2182.5	2175.2	2170.4	2158.2	2131.6	2092.9	2039.6	1964.5	1843.3	1695.6
50°	1874.9	1874.9	1887.0	1884.5	1884.5	1874.9	1857.9	1826.4	1761.0	1664.1	1526.1
52.5°	1569.6	1574.5	1581.8	1591.4	1603.5	1622.9	1603.5	1589.0	1547.8	1472.7	1354.1
55°	1254.7	1259.6	1271.7	1288.6	1303.2	1322.6	1327.4	1327.4	1305.6	1254.7	1165.1
57.5°	985.9	978.6	988.3	1002.8	1022.2	1041.6	1056.1	1073.1	1070.6	1036.7	964.1
60°	741.2	743.7	750.9	765.5	780.0	796.9	816.3	830.8	838.1	821.2	775.1
62.5°	540.2	540.2	549.8	564.4	571.7	595.9	608.0	615.3	622.5	620.1	591.0
65°	377.9	382.7	387.6	394.9	402.1	416.6	423.9	438.4	443.3	445.7	423.9
67.5°	266.5	259.2	264.0	268.8	276.1	285.9	300.4	300.4	307.6	307.6	293.1
70°	169.6	169.6	172.0	179.2	184.1	186.5	191.4	196.2	203.5	201.0	201.0
72.5°	113.9	111.4	113.9	116.3	118.7	125.9	125.9	128.4	133.2	135.7	125.9
75°	58.1	60.6	65.4	63.0	70.2	65.4	67.8	75.1	72.7	67.8	67.8
77.5°	48.4	48.4	48.4	46.1	50.9	50.9	48.4	53.3	50.9	50.9	48.4
80°	33.9	36.3	33.9	31.5	33.9	31.5	31.5	31.5	31.5	31.5	29.0
82.5°	26.7	21.8	24.2	21.8	24.2	24.2	21.8	19.4	19.4	21.8	19.4
85°	19.4	14.5	17.0	17.0	14.5	14.5	14.5	14.5	14.5	12.1	12.1
87.5°	12.1	7.3	7.3	7.3	9.7	9.7	9.7	7.3	9.7	9.7	4.9
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7
2.5°	4520.0	4517.6	4522.4	4520.0	4520.0	4517.6	4520.0	4517.6	4522.4	4512.7	4515.2
5°	4520.0	4515.2	4517.6	4520.0	4522.4	4517.6	4517.6	4517.6	4522.4	4517.6	4520.0
7.5°	4510.3	4507.9	4515.2	4520.0	4517.6	4515.2	4520.0	4517.6	4522.4	4520.0	4524.8
10°	4490.9	4493.4	4498.2	4505.4	4507.9	4510.3	4515.2	4515.2	4522.4	4512.7	4517.6
12.5°	4461.9	4471.5	4483.7	4488.5	4498.2	4498.2	4503.1	4505.4	4510.3	4507.9	4515.2
15°	4425.5	4437.6	4452.2	4464.3	4476.4	4483.7	4490.9	4493.4	4500.6	4493.4	4495.8
17.5°	4381.9	4396.4	4418.3	4432.8	4452.2	4459.4	4469.1	4474.0	4481.3	4476.4	4478.8
20°	4321.4	4338.4	4362.5	4384.4	4396.4	4413.4	4425.5	4432.8	4437.6	4432.8	4435.2
22.5°	4236.6	4260.8	4292.3	4309.3	4333.5	4348.0	4350.5	4367.4	4379.5	4367.4	4372.3
25°	4137.3	4161.5	4185.7	4222.1	4243.9	4260.8	4277.8	4280.2	4292.3	4289.9	4287.4
27.5°	3972.5	4004.1	4045.2	4074.3	4103.4	4130.0	4149.4	4154.2	4166.4	4161.5	4163.9
30°	3747.3	3781.2	3820.0	3866.0	3907.2	3933.8	3958.0	3975.0	3987.1	3979.8	3977.4
32.5°	3427.6	3461.5	3502.7	3548.7	3597.1	3635.8	3664.9	3686.7	3701.3	3696.4	3684.3
35°	3061.8	3071.5	3098.1	3134.5	3175.6	3216.8	3243.5	3267.7	3284.6	3289.5	3289.5
37.5°	2686.3	2654.9	2635.5	2635.5	2659.7	2676.6	2700.9	2715.4	2742.0	2751.7	2759.0
40°	2323.0	2250.3	2182.5	2131.6	2097.7	2095.3	2095.3	2102.5	2126.8	2158.2	2187.3
42.5°	1998.4	1882.1	1778.0	1683.5	1615.7	1576.9	1560.0	1562.4	1581.8	1610.8	1659.3
45°	1739.2	1593.9	1463.1	1349.2	1257.2	1196.6	1167.6	1165.1	1179.6	1213.5	1266.9
47.5°	1538.2	1383.1	1235.4	1104.5	1005.3	939.8	905.9	896.3	905.9	937.4	1000.4
50°	1371.0	1211.2	1058.6	922.9	816.3	748.5	717.0	704.9	717.0	743.7	806.6
52.5°	1216.0	1051.3	908.4	777.6	663.7	605.6	571.7	564.4	571.7	603.1	654.0
55°	1036.7	896.3	755.7	624.9	525.7	467.5	440.8	433.6	440.8	469.9	523.2
57.5°	859.9	738.8	615.3	496.6	411.8	360.9	336.7	327.0	343.9	363.3	426.3
60°	695.2	598.3	494.1	390.0	319.8	273.7	254.3	251.9	256.8	281.0	324.6
62.5°	545.0	465.1	382.7	297.9	239.8	220.4	196.2	193.8	198.6	213.1	247.1
65°	392.4	341.6	278.6	218.0	172.0	145.3	135.7	138.1	142.9	152.6	184.1
67.5°	273.7	237.4	193.8	152.6	118.7	106.6	96.9	94.5	96.9	113.9	130.8
70°	184.1	162.3	130.8	116.3	82.4	65.4	67.8	60.6	70.2	70.2	84.8
72.5°	121.1	106.6	87.2	67.8	58.1	46.1	46.1	43.6	48.4	50.9	63.0
75°	63.0	48.4	48.4	33.9	24.2	12.1	21.8	19.4	17.0	19.4	24.2
77.5°	43.6	36.3	33.9	26.7	24.2	19.4	19.4	19.4	19.4	21.8	24.2
80°	26.7	26.7	19.4	17.0	14.5	12.1	14.5	14.5	14.5	14.5	17.0
82.5°	17.0	14.5	14.5	12.1	12.1	9.7	9.7	9.7	9.7	9.7	14.5
85°	14.5	9.7	9.7	7.3	9.7	17.0	7.3	9.7	9.7	9.7	7.3
87.5°	4.9	7.3	7.3	7.3	4.9	2.4	4.9	7.3	7.3	12.1	9.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7	4512.7
2.5°	4520.0	4522.4	4522.4	4520.0	4520.0	4515.2	4524.8	4517.6	4520.0	4529.7	4522.4
5°	4524.8	4527.3	4527.3	4524.8	4524.8	4524.8	4527.3	4527.3	4524.8	4522.4	4527.3
7.5°	4534.5	4532.1	4532.1	4527.3	4527.3	4522.4	4527.3	4520.0	4524.8	4520.0	4527.3
10°	4522.4	4524.8	4522.4	4520.0	4520.0	4517.6	4517.6	4510.3	4512.7	4505.4	4510.3
12.5°	4515.2	4512.7	4512.7	4507.9	4503.1	4498.2	4495.8	4488.5	4488.5	4471.5	4478.8
15°	4495.8	4498.2	4490.9	4481.3	4476.4	4464.3	4459.4	4449.7	4440.1	4428.0	4430.4
17.5°	4478.8	4471.5	4461.9	4452.2	4432.8	4423.1	4413.4	4398.9	4394.0	4379.5	4374.7
20°	4428.0	4423.1	4411.0	4394.0	4381.9	4360.1	4350.5	4335.9	4323.8	4309.3	4302.0
22.5°	4362.5	4357.7	4343.2	4326.2	4306.8	4297.2	4287.4	4260.8	4248.7	4234.2	4231.7
25°	4280.2	4272.9	4258.4	4239.0	4229.3	4202.7	4193.0	4173.6	4168.8	4154.2	4151.8
27.5°	4154.2	4144.5	4127.6	4103.4	4086.4	4069.5	4059.8	4045.2	4040.4	4025.8	4023.5
30°	3965.3	3953.2	3919.3	3909.6	3880.5	3863.6	3863.6	3844.2	3846.6	3836.9	3836.9
32.5°	3667.4	3648.0	3621.3	3601.9	3582.6	3572.9	3572.9	3565.6	3570.5	3570.5	3575.3
35°	3272.5	3245.9	3231.3	3219.2	3219.2	3228.9	3258.0	3265.3	3279.8	3291.9	3301.6
37.5°	2766.2	2763.9	2780.8	2795.3	2831.7	2872.9	2923.7	2967.3	3008.5	3037.6	3066.6
40°	2218.8	2279.4	2327.8	2395.7	2451.3	2531.3	2623.3	2698.4	2768.7	2819.6	2872.9
42.5°	1731.9	1809.4	1911.2	2010.5	2109.8	2218.8	2340.0	2444.1	2536.1	2606.4	2662.1
45°	1349.2	1455.8	1579.4	1705.3	1833.7	1969.4	2095.3	2201.9	2298.8	2371.4	2427.2
47.5°	1087.6	1203.9	1344.4	1482.5	1627.8	1770.7	1911.2	2003.3	2083.2	2141.3	2192.2
50°	898.6	1022.2	1170.0	1327.4	1472.7	1615.7	1736.8	1826.4	1891.8	1942.7	1974.2
52.5°	750.9	881.7	1039.2	1196.6	1341.9	1472.7	1581.8	1649.6	1702.9	1739.2	1768.3
55°	620.1	746.1	893.8	1041.6	1184.5	1308.0	1397.6	1448.5	1489.7	1511.5	1528.4
57.5°	506.3	622.5	758.2	893.8	1017.4	1119.1	1189.4	1240.2	1259.6	1276.5	1274.1
60°	397.3	506.3	629.8	746.1	852.7	935.0	985.9	1014.9	1029.5	1036.7	1031.9
62.5°	312.5	411.8	506.3	608.0	685.5	755.7	804.2	804.2	811.5	813.9	821.2
65°	232.5	307.6	390.0	465.1	528.0	574.1	600.8	608.0	617.7	615.3	610.4
67.5°	172.0	227.7	288.2	343.9	387.6	416.6	436.0	453.0	450.6	445.7	443.3
70°	118.7	155.0	208.3	242.2	273.7	302.8	307.6	310.0	312.5	314.9	310.0
72.5°	82.4	109.0	138.1	167.1	186.5	198.6	210.8	213.1	213.1	213.1	210.8
75°	41.2	55.7	82.4	94.5	111.4	116.3	125.9	125.9	133.2	123.5	121.1
77.5°	36.3	43.6	58.1	67.8	75.1	82.4	84.8	92.0	89.6	84.8	87.2
80°	21.8	26.7	36.3	41.2	50.9	53.3	55.7	58.1	55.7	58.1	58.1
82.5°	17.0	19.4	24.2	24.2	31.5	31.5	33.9	33.9	36.3	36.3	36.3
85°	9.7	17.0	14.5	29.0	19.4	19.4	24.2	29.0	24.2	24.2	29.0
87.5°	9.7	9.7	7.3	9.7	9.7	9.7	12.1	14.5	14.5	17.0	14.5
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: P249228

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4512.7	4512.7	4512.7	4512.7
2.5°	4520.0	4524.8	4517.6	4515.2
5°	4527.3	4527.3	4522.4	4522.4
7.5°	4527.3	4527.3	4520.0	4515.2
10°	4507.9	4507.9	4500.6	4495.8
12.5°	4471.5	4471.5	4469.1	4461.9
15°	4425.5	4425.5	4415.8	4408.6
17.5°	4362.5	4367.4	4355.3	4355.3
20°	4294.7	4292.3	4282.6	4277.8
22.5°	4224.5	4219.6	4217.2	4202.7
25°	4149.4	4144.5	4137.3	4130.0
27.5°	4021.0	4018.6	4011.3	4001.6
30°	3824.8	3822.4	3812.7	3812.7
32.5°	3570.5	3568.0	3558.4	3560.8
35°	3306.4	3316.1	3311.3	3301.6
37.5°	3086.0	3093.3	3098.1	3093.3
40°	2901.9	2923.7	2926.1	2931.0
42.5°	2705.7	2734.8	2744.5	2749.3
45°	2470.7	2497.4	2519.2	2514.3
47.5°	2230.9	2250.3	2269.7	2255.2
50°	2000.8	2012.9	2020.2	2020.2
52.5°	1782.8	1782.8	1780.4	1782.8
55°	1533.3	1533.3	1523.6	1528.4
57.5°	1271.7	1276.5	1269.3	1257.2
60°	1029.5	1017.4	1012.5	1005.3
62.5°	801.8	801.8	784.8	806.6
65°	600.8	593.5	586.2	583.7
67.5°	436.0	433.6	426.3	423.9
70°	307.6	297.9	295.5	290.7
72.5°	205.9	205.9	201.0	201.0
75°	125.9	113.9	111.4	113.9
77.5°	87.2	84.8	84.8	82.4
80°	58.1	55.7	60.6	53.3
82.5°	36.3	38.8	36.3	38.8
85°	24.2	29.0	26.7	26.7
87.5°	14.5	14.5	14.5	14.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)