

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: P249201

Luminaire Tested: **LSR8B80D010 EC8B80830 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249201
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 EC8B80830 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8120.0 lumens
Efficiency: N/A
Efficacy: 109.1 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

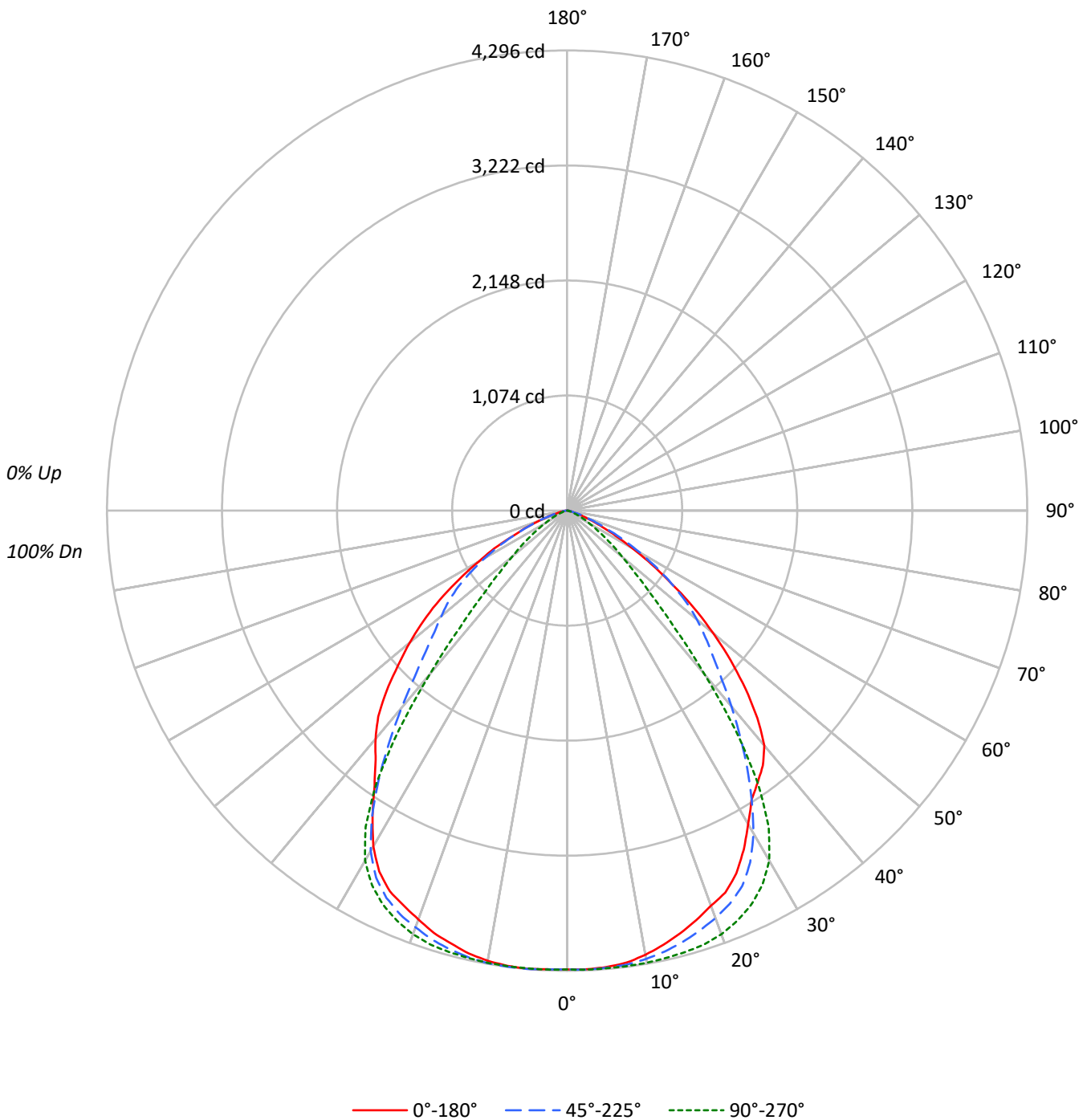
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	132112	132112	132112
5°	132403	132759	132901
10°	131845	134222	133646
15°	130384	136185	133615
20°	128820	138100	133270
25°	127145	138257	133405
30°	120287	134369	128886
35°	116697	116780	117996
40°	115251	80351	112011
45°	102695	48236	104095
50°	85392	32103	92007
55°	64041	22134	78013
60°	43399	14746	58860
65°	26180	9566	40437
70°	14516	5184	24875
75°	6577	2192	12879
80°	5718	2451	8986
85°	6510	3255	8951



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	408.9	5.0
10°-20°	1187.4	14.6
20°-30°	1802.3	22.2
30°-40°	1892.9	23.3
40°-50°	1419.2	17.5
50°-60°	910.6	11.2
60°-70°	389.5	4.8
70°-80°	92.0	1.1
80°-90°	17.1	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°	3398.6	41.9
0°-40°	5291.5	65.2
0°-60°	7621.3	93.9
0°-90°	8120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8120.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4284	4284	4284	4284	4284	
5°	4277	4284	4289	4296	4294	406
15°	4084	4169	4266	4238	4185	1152
25°	3737	3868	4064	3990	3921	1707
35°	3100	2928	3102	3065	3134	1946
45°	2355	1925	1106	1870	2387	1803
55°	1191	1191	412	1242	1451	1081
65°	359	423	131	545	554	383
75°	55	64	18	110	108	80
85°	18	12	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°	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3
2.5°	4286.6	4291.2	4288.9	4288.9	4286.6	4288.9	4288.9	4293.5	4293.5	4288.9	4286.6
5°	4277.4	4282.0	4282.0	4277.4	4277.4	4288.9	4282.0	4286.6	4286.6	4284.3	4284.3
7.5°	4256.7	4256.7	4265.9	4259.0	4259.0	4265.9	4263.6	4268.2	4272.8	4275.1	4275.1
10°	4210.7	4215.3	4217.6	4217.6	4219.9	4226.8	4231.4	4240.6	4245.2	4249.8	4252.1
12.5°	4153.2	4160.1	4162.4	4160.1	4167.0	4176.2	4187.7	4199.2	4206.1	4215.3	4222.2
15°	4084.2	4084.2	4088.8	4095.7	4100.3	4114.1	4125.6	4139.4	4157.8	4169.3	4180.8
17.5°	4008.3	4012.9	4019.8	4019.8	4029.0	4052.0	4058.9	4079.6	4100.3	4111.8	4134.8
20°	3925.6	3930.1	3937.0	3941.6	3953.1	3971.5	3985.3	4003.7	4026.7	4047.4	4070.4
22.5°	3861.1	3852.0	3856.5	3861.1	3872.7	3888.8	3904.8	3927.8	3950.8	3971.5	3994.5
25°	3736.9	3739.2	3746.2	3750.7	3764.6	3778.4	3796.8	3824.3	3845.0	3868.0	3893.3
27.5°	3569.1	3571.4	3582.9	3582.9	3594.4	3617.4	3628.9	3651.9	3679.5	3702.4	3732.4
30°	3378.2	3382.8	3382.8	3392.0	3398.9	3410.4	3421.9	3444.9	3458.7	3479.4	3520.8
32.5°	3203.5	3208.0	3205.7	3203.5	3196.5	3194.2	3191.9	3196.5	3201.1	3208.0	3224.1
35°	3100.0	3088.4	3079.3	3063.2	3044.8	3021.8	3001.1	2973.5	2948.2	2927.5	2904.5
37.5°	3001.1	2998.7	2985.0	2961.9	2925.1	2883.8	2835.5	2775.7	2715.9	2651.5	2589.4
40°	2863.1	2856.2	2844.7	2812.5	2771.1	2720.5	2656.1	2582.5	2485.9	2387.0	2285.9
42.5°	2628.5	2630.8	2617.0	2591.7	2552.6	2504.3	2437.6	2357.2	2253.7	2136.4	2005.3
45°	2354.9	2354.9	2350.2	2329.5	2302.0	2262.9	2212.3	2145.6	2044.4	1924.8	1784.5
47.5°	2069.7	2072.0	2065.1	2060.5	2049.0	2023.7	1986.9	1936.3	1865.0	1750.0	1609.7
50°	1780.0	1780.0	1791.4	1789.1	1789.1	1780.0	1763.9	1733.9	1671.9	1579.9	1448.8
52.5°	1490.2	1494.8	1501.7	1510.9	1522.4	1540.8	1522.4	1508.6	1469.5	1398.2	1285.5
55°	1191.2	1195.8	1207.3	1223.4	1237.2	1255.6	1260.2	1260.2	1239.5	1191.2	1106.1
57.5°	936.0	929.1	938.3	952.1	970.5	988.9	1002.7	1018.8	1016.4	984.3	915.3
60°	703.7	706.0	712.9	726.7	740.5	756.6	775.0	788.8	795.7	779.6	735.9
62.5°	512.8	512.8	522.0	535.8	542.7	565.7	577.2	584.1	591.0	588.7	561.1
65°	358.8	363.3	367.9	374.9	381.7	395.5	402.4	416.2	420.8	423.1	402.4
67.5°	253.0	246.1	250.7	255.2	262.2	271.4	285.2	285.2	292.0	292.0	278.3
70°	161.0	161.0	163.3	170.2	174.8	177.1	181.7	186.3	193.2	190.9	190.9
72.5°	108.1	105.8	108.1	110.4	112.7	119.6	119.6	121.9	126.5	128.8	119.6
75°	55.2	57.5	62.1	59.8	66.7	62.1	64.4	71.3	69.0	64.4	64.4
77.5°	46.0	46.0	46.0	43.7	48.3	48.3	46.0	50.6	48.3	48.3	46.0
80°	32.2	34.5	32.2	29.9	32.2	29.9	29.9	29.9	29.9	29.9	27.6
82.5°	25.3	20.7	23.0	20.7	23.0	23.0	20.7	18.4	18.4	20.7	18.4
85°	18.4	13.8	16.1	16.1	13.8	13.8	13.8	13.8	13.8	11.5	11.5
87.5°	11.5	6.9	6.9	6.9	9.2	9.2	9.2	6.9	9.2	9.2	4.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3
2.5°	4291.2	4288.9	4293.5	4291.2	4291.2	4288.9	4291.2	4288.9	4293.5	4284.3	4286.6
5°	4291.2	4286.6	4288.9	4291.2	4293.5	4288.9	4288.9	4288.9	4293.5	4288.9	4291.2
7.5°	4282.0	4279.7	4286.6	4291.2	4288.9	4286.6	4291.2	4288.9	4293.5	4291.2	4295.8
10°	4263.6	4265.9	4270.5	4277.4	4279.7	4282.0	4286.6	4286.6	4293.5	4284.3	4288.9
12.5°	4236.0	4245.2	4256.7	4261.3	4270.5	4270.5	4275.1	4277.4	4282.0	4279.7	4286.6
15°	4201.5	4213.0	4226.8	4238.3	4249.8	4256.7	4263.6	4265.9	4272.8	4265.9	4268.2
17.5°	4160.1	4173.9	4194.6	4208.4	4226.8	4233.7	4242.9	4247.5	4254.4	4249.8	4252.1
20°	4102.6	4118.7	4141.7	4162.4	4173.9	4190.0	4201.5	4208.4	4213.0	4208.4	4210.7
22.5°	4022.1	4045.1	4075.0	4091.1	4114.1	4127.9	4130.2	4146.3	4157.8	4146.3	4150.9
25°	3927.8	3950.8	3973.8	4008.3	4029.0	4045.1	4061.2	4063.5	4075.0	4072.7	4070.4
27.5°	3771.4	3801.4	3840.4	3868.0	3895.6	3920.9	3939.3	3943.9	3955.4	3950.8	3953.1
30°	3557.6	3589.8	3626.6	3670.3	3709.4	3734.6	3757.6	3773.7	3785.2	3778.4	3776.0
32.5°	3254.0	3286.2	3325.3	3369.0	3415.0	3451.8	3479.4	3500.1	3513.9	3509.3	3497.8
35°	2906.8	2916.0	2941.3	2975.8	3014.8	3053.9	3079.3	3102.2	3118.3	3122.9	3122.9
37.5°	2550.3	2520.5	2502.1	2502.1	2525.0	2541.1	2564.1	2577.9	2603.2	2612.4	2619.3
40°	2205.4	2136.4	2072.0	2023.7	1991.5	1989.2	1989.2	1996.1	2019.1	2049.0	2076.6
42.5°	1897.2	1786.8	1688.0	1598.3	1533.9	1497.1	1481.0	1483.3	1501.7	1529.3	1575.3
45°	1651.2	1513.2	1389.0	1280.9	1193.5	1136.0	1108.4	1106.1	1119.9	1152.1	1202.8
47.5°	1460.3	1313.1	1172.8	1048.6	954.4	892.3	860.1	850.9	860.1	890.0	949.8
50°	1301.6	1149.9	1005.0	876.2	775.0	710.6	680.7	669.2	680.7	706.0	765.8
52.5°	1154.4	998.0	862.4	738.2	630.1	574.9	542.7	535.8	542.7	572.6	620.9
55°	984.3	850.9	717.5	593.3	499.0	443.8	418.5	411.7	418.5	446.2	496.7
57.5°	816.4	701.4	584.1	471.4	391.0	342.6	319.7	310.4	326.5	344.9	404.7
60°	660.0	568.0	469.1	370.3	303.6	259.9	241.5	239.1	243.8	266.8	308.1
62.5°	517.4	441.5	363.3	282.9	227.7	209.3	186.3	184.0	188.6	202.3	234.6
65°	372.6	324.3	264.5	207.0	163.3	138.0	128.8	131.1	135.7	144.9	174.8
67.5°	259.9	225.4	184.0	144.9	112.7	101.2	92.0	89.7	92.0	108.1	124.2
70°	174.8	154.1	124.2	110.4	78.2	62.1	64.4	57.5	66.7	66.7	80.5
72.5°	115.0	101.2	82.8	64.4	55.2	43.7	43.7	41.4	46.0	48.3	59.8
75°	59.8	46.0	46.0	32.2	23.0	11.5	20.7	18.4	16.1	18.4	23.0
77.5°	41.4	34.5	32.2	25.3	23.0	18.4	18.4	18.4	18.4	20.7	23.0
80°	25.3	25.3	18.4	16.1	13.8	11.5	13.8	13.8	13.8	13.8	16.1
82.5°	16.1	13.8	13.8	11.5	11.5	9.2	9.2	9.2	9.2	9.2	13.8
85°	13.8	9.2	9.2	6.9	9.2	16.1	6.9	9.2	9.2	9.2	6.9
87.5°	4.6	6.9	6.9	6.9	4.6	2.3	4.6	6.9	6.9	11.5	9.2
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°	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3	4284.3
2.5°	4291.2	4293.5	4293.5	4291.2	4291.2	4286.6	4295.8	4288.9	4291.2	4300.4	4293.5
5°	4295.8	4298.1	4298.1	4295.8	4295.8	4295.8	4298.1	4298.1	4295.8	4293.5	4298.1
7.5°	4305.0	4302.7	4302.7	4298.1	4298.1	4293.5	4298.1	4291.2	4295.8	4291.2	4298.1
10°	4293.5	4295.8	4293.5	4291.2	4291.2	4288.9	4288.9	4282.0	4284.3	4277.4	4282.0
12.5°	4286.6	4284.3	4284.3	4279.7	4275.1	4270.5	4268.2	4261.3	4261.3	4245.2	4252.1
15°	4268.2	4270.5	4263.6	4254.4	4249.8	4238.3	4233.7	4224.5	4215.3	4203.8	4206.1
17.5°	4252.1	4245.2	4236.0	4226.8	4208.4	4199.2	4190.0	4176.2	4171.6	4157.8	4153.2
20°	4203.8	4199.2	4187.7	4171.6	4160.1	4139.4	4130.2	4116.4	4104.9	4091.1	4084.2
22.5°	4141.7	4137.1	4123.3	4107.2	4088.8	4079.6	4070.4	4045.1	4033.6	4019.8	4017.5
25°	4063.5	4056.6	4042.8	4024.4	4015.2	3989.9	3980.7	3962.3	3957.7	3943.9	3941.6
27.5°	3943.9	3934.7	3918.6	3895.6	3879.5	3863.4	3854.3	3840.4	3835.9	3822.0	3819.8
30°	3764.6	3753.0	3720.8	3711.7	3684.0	3668.0	3668.0	3649.6	3651.9	3642.7	3642.7
32.5°	3481.7	3463.3	3438.0	3419.6	3401.2	3392.0	3392.0	3385.1	3389.7	3389.7	3394.3
35°	3106.8	3081.6	3067.7	3056.3	3056.3	3065.4	3093.1	3100.0	3113.8	3125.2	3134.5
37.5°	2626.2	2623.9	2640.0	2653.8	2688.3	2727.4	2775.7	2817.1	2856.2	2883.8	2911.4
40°	2106.5	2164.0	2210.0	2274.4	2327.2	2403.1	2490.5	2561.8	2628.5	2676.8	2727.4
42.5°	1644.2	1717.8	1814.5	1908.7	2003.0	2106.5	2221.5	2320.4	2407.8	2474.4	2527.3
45°	1280.9	1382.1	1499.4	1619.0	1740.9	1869.7	1989.2	2090.4	2182.4	2251.4	2304.3
47.5°	1032.5	1142.9	1276.3	1407.4	1545.4	1681.0	1814.5	1901.8	1977.7	2032.9	2081.2
50°	853.2	970.5	1110.8	1260.2	1398.2	1533.9	1648.9	1733.9	1796.1	1844.3	1874.2
52.5°	712.9	837.1	986.6	1136.0	1274.0	1398.2	1501.7	1566.1	1616.7	1651.2	1678.7
55°	588.7	708.3	848.6	988.9	1124.5	1241.8	1326.9	1375.2	1414.3	1435.0	1451.1
57.5°	480.6	591.0	719.8	848.6	965.9	1062.5	1129.2	1177.4	1195.8	1211.9	1209.6
60°	377.2	480.6	597.9	708.3	809.5	887.6	936.0	963.6	977.3	984.3	979.6
62.5°	296.7	391.0	480.6	577.2	650.8	717.5	763.5	763.5	770.4	772.7	779.6
65°	220.7	292.0	370.3	441.5	501.3	545.0	570.3	577.2	586.4	584.1	579.5
67.5°	163.3	216.2	273.6	326.5	367.9	395.5	413.9	430.1	427.8	423.1	420.8
70°	112.7	147.2	197.8	230.0	259.9	287.5	292.0	294.3	296.7	299.0	294.3
72.5°	78.2	103.5	131.1	158.7	177.1	188.6	200.1	202.3	202.3	202.3	200.1
75°	39.1	52.9	78.2	89.7	105.8	110.4	119.6	119.6	126.5	117.3	115.0
77.5°	34.5	41.4	55.2	64.4	71.3	78.2	80.5	87.4	85.1	80.5	82.8
80°	20.7	25.3	34.5	39.1	48.3	50.6	52.9	55.2	52.9	55.2	55.2
82.5°	16.1	18.4	23.0	23.0	29.9	29.9	32.2	32.2	34.5	34.5	34.5
85°	9.2	16.1	13.8	27.6	18.4	18.4	23.0	27.6	23.0	23.0	27.6
87.5°	9.2	9.2	6.9	9.2	9.2	9.2	11.5	13.8	13.8	16.1	13.8
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: P249201

CATALOG NUMBER: LSR8B80D010 EC8B80830 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4284.3	4284.3	4284.3	4284.3
2.5°	4291.2	4295.8	4288.9	4286.6
5°	4298.1	4298.1	4293.5	4293.5
7.5°	4298.1	4298.1	4291.2	4286.6
10°	4279.7	4279.7	4272.8	4268.2
12.5°	4245.2	4245.2	4242.9	4236.0
15°	4201.5	4201.5	4192.3	4185.4
17.5°	4141.7	4146.3	4134.8	4134.8
20°	4077.3	4075.0	4065.8	4061.2
22.5°	4010.6	4006.0	4003.7	3989.9
25°	3939.3	3934.7	3927.8	3920.9
27.5°	3817.5	3815.2	3808.2	3799.1
30°	3631.2	3628.9	3619.7	3619.7
32.5°	3389.7	3387.4	3378.2	3380.5
35°	3139.0	3148.3	3143.6	3134.5
37.5°	2929.8	2936.7	2941.3	2936.7
40°	2755.0	2775.7	2778.0	2782.6
42.5°	2568.7	2596.3	2605.5	2610.1
45°	2345.6	2371.0	2391.7	2387.0
47.5°	2118.0	2136.4	2154.8	2141.0
50°	1899.5	1911.0	1917.9	1917.9
52.5°	1692.6	1692.6	1690.3	1692.6
55°	1455.7	1455.7	1446.5	1451.1
57.5°	1207.3	1211.9	1205.0	1193.5
60°	977.3	965.9	961.2	954.4
62.5°	761.2	761.2	745.1	765.8
65°	570.3	563.4	556.5	554.2
67.5°	413.9	411.7	404.7	402.4
70°	292.0	282.9	280.6	275.9
72.5°	195.5	195.5	190.9	190.9
75°	119.6	108.1	105.8	108.1
77.5°	82.8	80.5	80.5	78.2
80°	55.2	52.9	57.5	50.6
82.5°	34.5	36.8	34.5	36.8
85°	23.0	27.6	25.3	25.3
87.5°	13.8	13.8	13.8	13.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)