

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: P249184

Luminaire Tested: **LSR8B90D010 EC8B90930 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249184
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: LSR8B90D010 EC8B90930 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7894.1 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

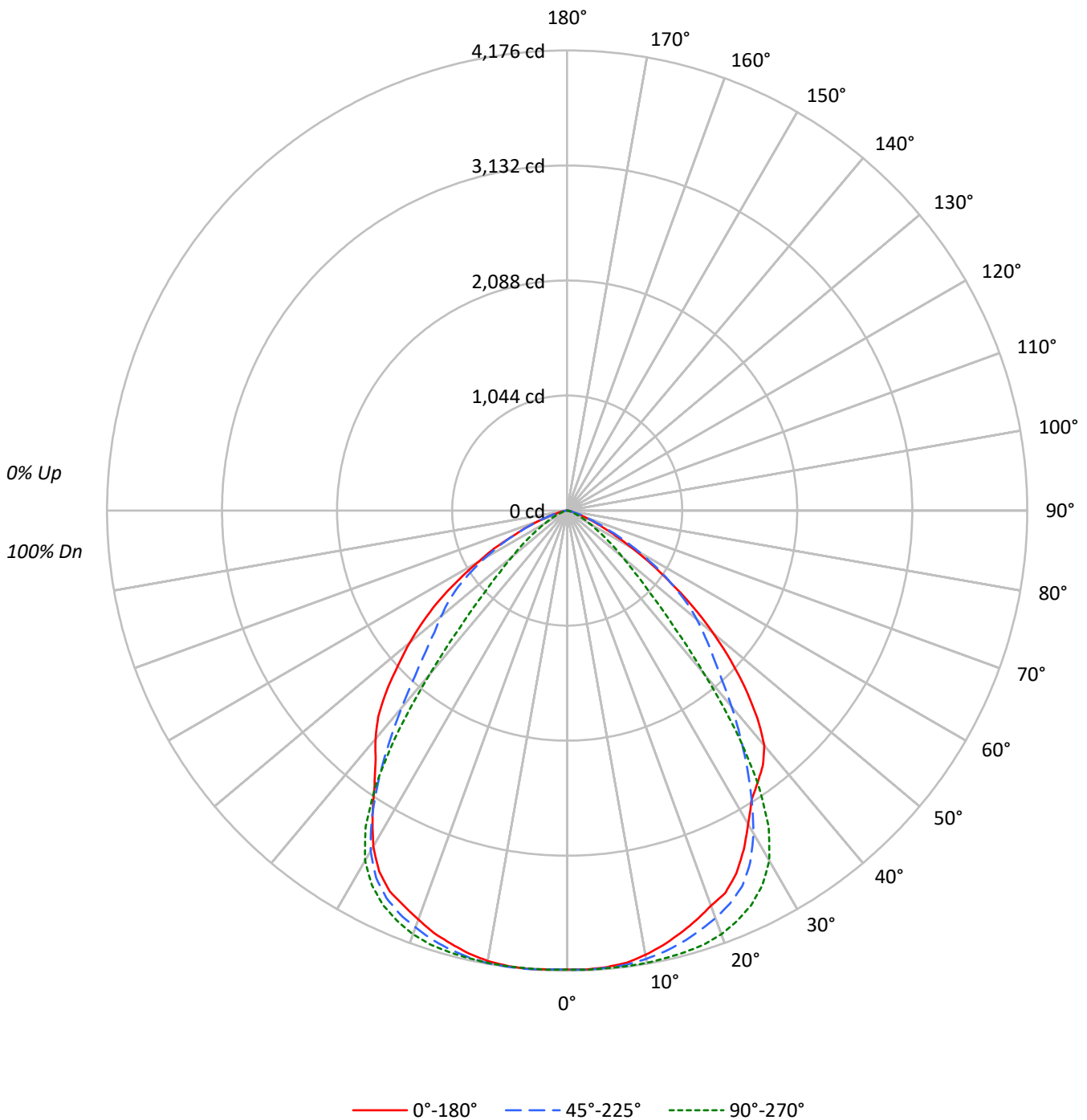
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	397.5	5.0
10°-20°	1154.4	14.6
20°-30°	1752.1	22.2
30°-40°	1840.3	23.3
40°-50°	1379.7	17.5
50°-60°	885.3	11.2
60°-70°	378.7	4.8
70°-80°	89.5	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°	3304.0	41.9
0°-40°	5144.3	65.2
0°-60°	7409.3	93.9
0°-90°	7894.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7894.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4165	4165	4165	4165	4165	
5°	4158	4165	4170	4176	4174	395
15°	3971	4053	4147	4120	4069	1120
25°	3633	3760	3950	3879	3812	1660
35°	3014	2846	3016	2980	3047	1891
45°	2289	1871	1075	1818	2321	1753
55°	1158	1158	400	1207	1411	1050
65°	349	411	128	530	539	372
75°	54	63	18	107	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°	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1
2.5°	4167.3	4171.8	4169.6	4169.6	4167.3	4169.6	4169.6	4174.0	4174.0	4169.6	4167.3
5°	4158.3	4162.8	4162.8	4158.3	4158.3	4169.6	4162.8	4167.3	4167.3	4165.1	4165.1
7.5°	4138.3	4138.3	4147.1	4140.5	4140.5	4147.1	4144.9	4149.4	4153.9	4156.1	4156.1
10°	4093.6	4098.0	4100.3	4100.3	4102.5	4109.1	4113.6	4122.6	4127.1	4131.6	4133.8
12.5°	4037.6	4044.3	4046.6	4044.3	4051.1	4060.0	4071.2	4082.3	4089.1	4098.0	4104.8
15°	3970.6	3970.6	3975.1	3981.8	3986.3	3999.6	4010.8	4024.2	4042.1	4053.3	4064.5
17.5°	3896.8	3901.3	3907.9	3907.9	3916.9	3939.3	3946.0	3966.1	3986.3	3997.4	4019.8
20°	3816.3	3820.8	3827.5	3832.0	3843.1	3861.1	3874.4	3892.3	3914.6	3934.8	3957.1
22.5°	3753.7	3744.8	3749.2	3753.7	3764.9	3780.6	3796.2	3818.6	3840.9	3861.1	3883.4
25°	3632.9	3635.2	3641.9	3646.4	3659.8	3673.2	3691.1	3717.9	3738.1	3760.4	3784.9
27.5°	3469.8	3472.1	3483.2	3483.2	3494.4	3516.7	3527.9	3550.2	3577.1	3599.4	3628.6
30°	3284.2	3288.7	3288.7	3297.6	3304.3	3315.6	3326.7	3349.1	3362.4	3382.6	3422.9
32.5°	3114.4	3118.7	3116.5	3114.4	3107.6	3105.4	3103.2	3107.6	3112.1	3118.7	3134.4
35°	3013.7	3002.5	2993.6	2977.9	2960.1	2937.7	2917.5	2890.7	2866.2	2846.0	2823.7
37.5°	2917.5	2915.3	2901.9	2879.5	2843.8	2803.5	2756.7	2698.5	2640.3	2577.7	2517.4
40°	2783.4	2776.7	2765.5	2734.2	2694.0	2644.8	2582.2	2510.7	2416.8	2320.6	2222.3
42.5°	2555.3	2557.6	2544.2	2519.6	2481.7	2434.6	2369.8	2291.5	2191.0	2076.9	1949.5
45°	2289.3	2289.3	2284.8	2264.8	2238.0	2199.9	2150.8	2085.8	1987.5	1871.3	1734.9
47.5°	2012.1	2014.3	2007.6	2003.2	1992.0	1967.5	1931.6	1882.5	1813.1	1701.3	1564.9
50°	1730.5	1730.5	1741.6	1739.3	1739.3	1730.5	1714.8	1685.6	1625.3	1535.9	1408.5
52.5°	1448.7	1453.2	1459.9	1468.8	1480.1	1497.9	1480.1	1466.6	1428.6	1359.3	1249.8
55°	1158.1	1162.6	1173.7	1189.4	1202.8	1220.7	1225.1	1225.1	1205.0	1158.1	1075.4
57.5°	909.9	903.2	912.2	925.6	943.4	961.4	974.7	990.4	988.2	956.9	889.8
60°	684.1	686.4	693.0	706.5	719.9	735.5	753.4	766.9	773.6	757.9	715.4
62.5°	498.6	498.6	507.5	520.9	527.7	550.0	561.2	567.9	574.5	572.3	545.5
65°	348.7	353.2	357.7	364.4	371.2	384.5	391.2	404.7	409.2	411.4	391.2
67.5°	245.9	239.2	243.7	248.2	254.9	263.9	277.2	277.2	283.9	283.9	270.5
70°	156.5	156.5	158.7	165.5	169.9	172.2	176.7	181.0	187.8	185.5	185.5
72.5°	105.0	102.8	105.0	107.3	109.5	116.2	116.2	118.5	123.0	125.2	116.2
75°	53.7	55.9	60.3	58.2	64.8	60.3	62.6	69.3	67.0	62.6	62.6
77.5°	44.7	44.7	44.7	42.5	47.0	47.0	44.7	49.2	47.0	47.0	44.7
80°	31.3	33.5	31.3	29.0	31.3	29.0	29.0	29.0	29.0	29.0	26.8
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	13.5	15.7	15.7	13.5	13.5	13.5	13.5	13.5	11.2	11.2
87.5°	11.2	6.7	6.7	6.7	9.0	9.0	9.0	6.7	9.0	9.0	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°	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1
2.5°	4171.8	4169.6	4174.0	4171.8	4171.8	4169.6	4171.8	4169.6	4174.0	4165.1	4167.3
5°	4171.8	4167.3	4169.6	4171.8	4174.0	4169.6	4169.6	4169.6	4174.0	4169.6	4171.8
7.5°	4162.8	4160.6	4167.3	4171.8	4169.6	4167.3	4171.8	4169.6	4174.0	4171.8	4176.3
10°	4144.9	4147.1	4151.6	4158.3	4160.6	4162.8	4167.3	4167.3	4174.0	4165.1	4169.6
12.5°	4118.1	4127.1	4138.3	4142.7	4151.6	4151.6	4156.1	4158.3	4162.8	4160.6	4167.3
15°	4084.6	4095.8	4109.1	4120.3	4131.6	4138.3	4144.9	4147.1	4153.9	4147.1	4149.4
17.5°	4044.3	4057.8	4077.9	4091.3	4109.1	4115.9	4124.8	4129.3	4136.0	4131.6	4133.8
20°	3988.4	4004.1	4026.4	4046.6	4057.8	4073.4	4084.6	4091.3	4095.8	4091.3	4093.6
22.5°	3910.2	3932.6	3961.6	3977.3	3999.6	4013.1	4015.3	4030.9	4042.1	4030.9	4035.4
25°	3818.6	3840.9	3863.3	3896.8	3916.9	3932.6	3948.3	3950.5	3961.6	3959.4	3957.1
27.5°	3666.5	3695.6	3733.6	3760.4	3787.2	3811.8	3829.8	3834.2	3845.4	3840.9	3843.1
30°	3458.6	3489.9	3525.7	3568.1	3606.1	3630.7	3653.1	3668.7	3679.9	3673.2	3670.9
32.5°	3163.5	3194.8	3232.9	3275.2	3320.1	3355.7	3382.6	3402.7	3416.1	3411.7	3400.4
35°	2825.9	2834.9	2859.4	2893.0	2931.0	2969.0	2993.6	3015.9	3031.5	3036.0	3036.0
37.5°	2479.4	2450.3	2432.5	2432.5	2454.8	2470.5	2492.8	2506.2	2530.8	2539.7	2546.5
40°	2144.0	2076.9	2014.3	1967.5	1936.1	1933.8	1933.8	1940.6	1963.0	1992.0	2018.8
42.5°	1844.5	1737.1	1641.0	1553.8	1491.3	1455.4	1439.8	1442.1	1459.9	1486.8	1531.4
45°	1605.3	1471.1	1350.4	1245.3	1160.3	1104.4	1077.6	1075.4	1088.7	1120.1	1169.3
47.5°	1419.6	1276.6	1140.2	1019.4	927.9	867.4	836.2	827.2	836.2	865.2	923.4
50°	1265.4	1117.9	977.0	851.7	753.4	690.9	661.7	650.6	661.7	686.4	744.5
52.5°	1122.3	970.2	838.4	717.7	612.6	558.9	527.7	520.9	527.7	556.7	603.7
55°	956.9	827.2	697.5	576.8	485.2	431.5	406.9	400.2	406.9	433.7	482.9
57.5°	793.7	681.9	567.9	458.3	380.1	333.0	310.7	301.8	317.5	335.3	393.5
60°	641.7	552.2	456.0	360.0	295.2	252.7	234.7	232.5	237.0	259.4	299.5
62.5°	503.1	429.2	353.2	275.0	221.3	203.5	181.0	178.9	183.3	196.7	228.0
65°	362.2	315.2	257.2	201.2	158.7	134.2	125.2	127.5	131.9	140.9	169.9
67.5°	252.7	219.0	178.9	140.9	109.5	98.3	89.5	87.2	89.5	105.0	120.7
70°	169.9	149.8	120.7	107.3	76.0	60.3	62.6	55.9	64.8	64.8	78.2
72.5°	111.8	98.3	80.5	62.6	53.7	42.5	42.5	40.2	44.7	47.0	58.2
75°	58.2	44.7	44.7	31.3	22.4	11.2	20.2	17.9	15.7	17.9	22.4
77.5°	40.2	33.5	31.3	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	13.5	11.2	13.5	13.5	13.5	13.5	15.7
82.5°	15.7	13.5	13.5	11.2	11.2	9.0	9.0	9.0	9.0	9.0	13.5
85°	13.5	9.0	9.0	6.7	9.0	15.7	6.7	9.0	9.0	9.0	6.7
87.5°	4.5	6.7	6.7	6.7	4.5	2.2	4.5	6.7	6.7	11.2	9.0
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°	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1	4165.1
2.5°	4171.8	4174.0	4174.0	4171.8	4171.8	4167.3	4176.3	4169.6	4171.8	4180.8	4174.0
5°	4176.3	4178.5	4178.5	4176.3	4176.3	4176.3	4178.5	4178.5	4176.3	4174.0	4178.5
7.5°	4185.3	4183.0	4183.0	4178.5	4178.5	4174.0	4178.5	4171.8	4176.3	4171.8	4178.5
10°	4174.0	4176.3	4174.0	4171.8	4171.8	4169.6	4169.6	4162.8	4165.1	4158.3	4162.8
12.5°	4167.3	4165.1	4165.1	4160.6	4156.1	4151.6	4149.4	4142.7	4142.7	4127.1	4133.8
15°	4149.4	4151.6	4144.9	4136.0	4131.6	4120.3	4115.9	4106.9	4098.0	4086.8	4089.1
17.5°	4133.8	4127.1	4118.1	4109.1	4091.3	4082.3	4073.4	4060.0	4055.6	4042.1	4037.6
20°	4086.8	4082.3	4071.2	4055.6	4044.3	4024.2	4015.3	4001.9	3990.6	3977.3	3970.6
22.5°	4026.4	4021.9	4008.6	3992.9	3975.1	3966.1	3957.1	3932.6	3921.4	3907.9	3905.7
25°	3950.5	3943.8	3930.3	3912.4	3903.4	3878.9	3869.9	3852.1	3847.6	3834.2	3832.0
27.5°	3834.2	3825.3	3809.6	3787.2	3771.6	3755.9	3747.1	3733.6	3729.1	3715.7	3713.5
30°	3659.8	3648.6	3617.4	3608.4	3581.6	3565.9	3565.9	3548.0	3550.2	3541.4	3541.4
32.5°	3384.9	3366.9	3342.4	3324.4	3306.5	3297.6	3297.6	3290.9	3295.4	3295.4	3299.9
35°	3020.4	2995.9	2982.4	2971.2	2971.2	2980.2	3007.0	3013.7	3027.1	3038.2	3047.2
37.5°	2553.1	2550.9	2566.5	2580.0	2613.5	2651.5	2698.5	2738.7	2776.7	2803.5	2830.4
40°	2047.8	2103.8	2148.5	2211.1	2262.5	2336.3	2421.2	2490.5	2555.3	2602.4	2651.5
42.5°	1598.5	1670.1	1764.0	1855.6	1947.3	2047.8	2159.7	2255.8	2340.8	2405.6	2457.0
45°	1245.3	1343.6	1457.6	1573.9	1692.4	1817.6	1933.8	2032.3	2121.7	2188.8	2240.2
47.5°	1003.9	1111.1	1240.8	1368.3	1502.4	1634.3	1764.0	1849.0	1922.6	1976.3	2023.3
50°	829.4	943.4	1079.9	1225.1	1359.3	1491.3	1603.0	1685.6	1746.1	1793.0	1822.1
52.5°	693.0	813.7	959.1	1104.4	1238.6	1359.3	1459.9	1522.5	1571.6	1605.3	1632.1
55°	572.3	688.6	824.9	961.4	1093.2	1207.2	1289.9	1336.9	1374.9	1395.1	1410.7
57.5°	467.2	574.5	699.7	824.9	938.9	1032.9	1097.7	1144.7	1162.6	1178.2	1175.9
60°	366.7	467.2	581.2	688.6	786.9	862.9	909.9	936.7	950.2	956.9	952.4
62.5°	288.4	380.1	467.2	561.2	632.7	697.5	742.3	742.3	748.9	751.2	757.9
65°	214.6	283.9	360.0	429.2	487.4	529.9	554.4	561.2	570.1	567.9	563.4
67.5°	158.7	210.2	266.0	317.5	357.7	384.5	402.4	418.1	415.9	411.4	409.2
70°	109.5	143.2	192.3	223.5	252.7	279.5	283.9	286.2	288.4	290.7	286.2
72.5°	76.0	100.6	127.5	154.2	172.2	183.3	194.5	196.7	196.7	196.7	194.5
75°	38.0	51.5	76.0	87.2	102.8	107.3	116.2	116.2	123.0	114.0	111.8
77.5°	33.5	40.2	53.7	62.6	69.3	76.0	78.2	85.0	82.7	78.2	80.5
80°	20.2	24.7	33.5	38.0	47.0	49.2	51.5	53.7	51.5	53.7	53.7
82.5°	15.7	17.9	22.4	22.4	29.0	29.0	31.3	31.3	33.5	33.5	33.5
85°	9.0	15.7	13.5	26.8	17.9	17.9	22.4	26.8	22.4	22.4	26.8
87.5°	9.0	9.0	6.7	9.0	9.0	9.0	11.2	13.5	13.5	15.7	13.5
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: P249184

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4165.1	4165.1	4165.1	4165.1
2.5°	4171.8	4176.3	4169.6	4167.3
5°	4178.5	4178.5	4174.0	4174.0
7.5°	4178.5	4178.5	4171.8	4167.3
10°	4160.6	4160.6	4153.9	4149.4
12.5°	4127.1	4127.1	4124.8	4118.1
15°	4084.6	4084.6	4075.6	4069.0
17.5°	4026.4	4030.9	4019.8	4019.8
20°	3963.9	3961.6	3952.8	3948.3
22.5°	3899.1	3894.6	3892.3	3878.9
25°	3829.8	3825.3	3818.6	3811.8
27.5°	3711.3	3709.1	3702.3	3693.4
30°	3530.1	3527.9	3518.9	3518.9
32.5°	3295.4	3293.2	3284.2	3286.4
35°	3051.7	3060.7	3056.2	3047.2
37.5°	2848.2	2855.0	2859.4	2855.0
40°	2678.3	2698.5	2700.7	2705.2
42.5°	2497.3	2524.0	2533.0	2537.5
45°	2280.3	2305.0	2325.1	2320.6
47.5°	2059.1	2076.9	2094.8	2081.4
50°	1846.7	1857.8	1864.6	1864.6
52.5°	1645.5	1645.5	1643.3	1645.5
55°	1415.2	1415.2	1406.3	1410.7
57.5°	1173.7	1178.2	1171.4	1160.3
60°	950.2	938.9	934.5	927.9
62.5°	740.1	740.1	724.4	744.5
65°	554.4	547.7	541.0	538.8
67.5°	402.4	400.2	393.5	391.2
70°	283.9	275.0	272.7	268.3
72.5°	190.0	190.0	185.5	185.5
75°	116.2	105.0	102.8	105.0
77.5°	80.5	78.2	78.2	76.0
80°	53.7	51.5	55.9	49.2
82.5°	33.5	35.8	33.5	35.8
85°	22.4	26.8	24.7	24.7
87.5°	13.5	13.5	13.5	13.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)