

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: P246086

Luminaire Tested: **LSR8B20D010 EC8B20950 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246086
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: LSR8B20D010 EC8B20950 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2005.0 lumens
Efficiency: N/A
Efficacy: 94.1 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

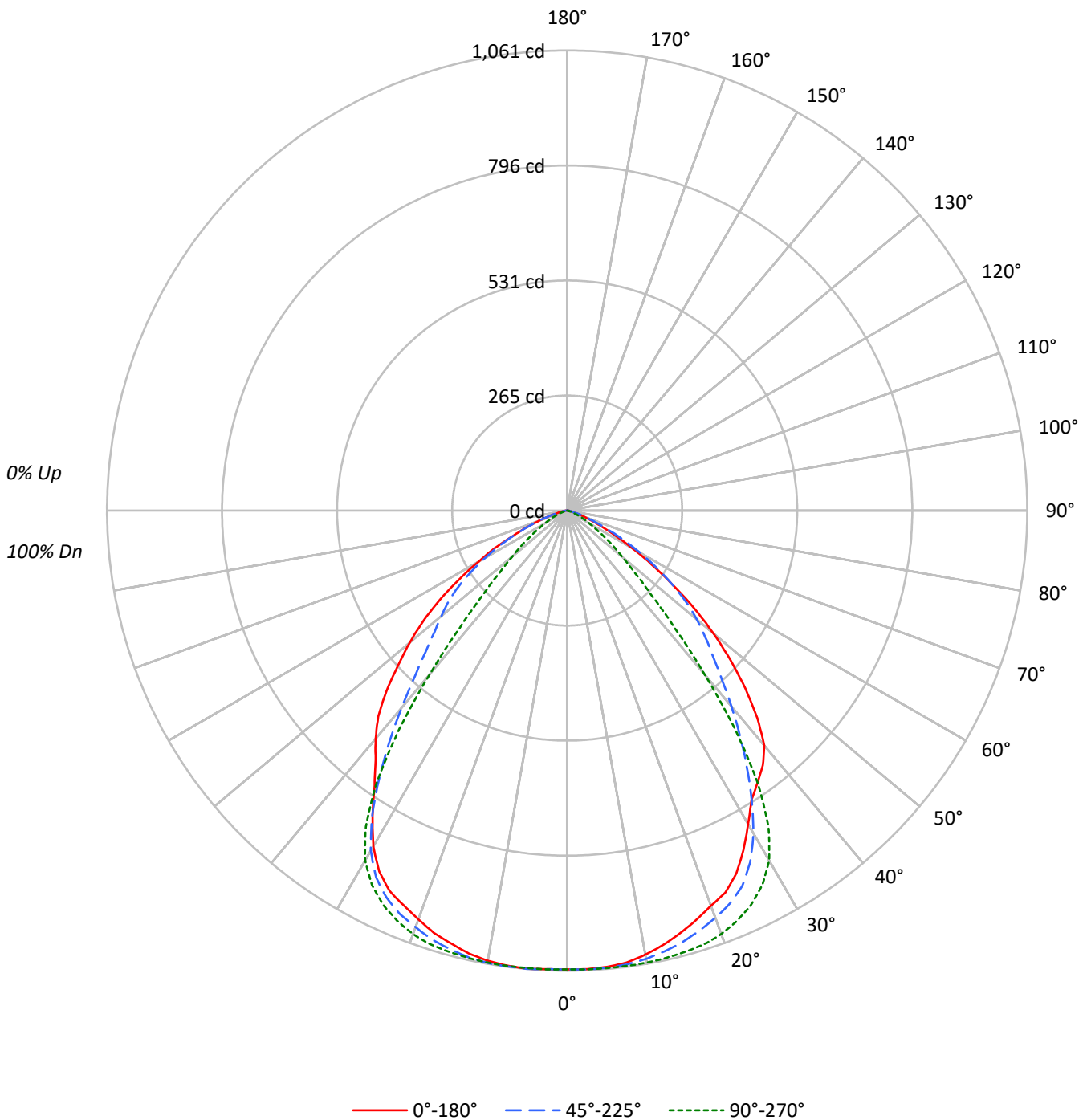
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	32622	32622	32622
5°	32694	32780	32818
10°	32555	33141	33000
15°	32195	33626	32994
20°	31808	34098	32907
25°	31394	34140	32942
30°	29703	33178	31825
35°	28813	28835	29137
40°	28460	19841	27658
45°	25359	11910	25703
50°	21084	7925	22720
55°	15811	5462	19263
60°	10719	3639	14536
65°	6465	2364	9982
70°	3588	1280	6140
75°	1620	536	3181
80°	1403	604	2220
85°	1592	814	2229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	5.0
10°-20°	293.2	14.6
20°-30°	445.0	22.2
30°-40°	467.4	23.3
40°-50°	350.4	17.5
50°-60°	224.8	11.2
60°-70°	96.2	4.8
70°-80°	22.7	1.1
80°-90°	4.2	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°	839.2	41.9
0°-40°	1306.6	65.2
0°-60°	1881.9	93.9
0°-90°	2005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2005.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1058	1058	1058	1058	1058	
5°	1056	1058	1059	1061	1060	100
15°	1008	1030	1053	1046	1034	284
25°	923	955	1003	985	968	422
35°	765	723	766	757	774	480
45°	582	475	273	462	589	445
55°	294	294	102	307	358	267
65°	89	104	32	135	137	95
75°	14	16	4	27	27	20
85°	4	3	2	4	6	5
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°	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9
2.5°	1058.4	1059.6	1059.0	1059.0	1058.4	1059.0	1059.0	1060.2	1060.2	1059.0	1058.4
5°	1056.2	1057.3	1057.3	1056.2	1056.2	1059.0	1057.3	1058.4	1058.4	1057.9	1057.9
7.5°	1051.1	1051.1	1053.3	1051.6	1051.6	1053.3	1052.8	1053.9	1055.0	1055.6	1055.6
10°	1039.7	1040.8	1041.4	1041.4	1042.0	1043.7	1044.8	1047.1	1048.2	1049.4	1049.9
12.5°	1025.5	1027.2	1027.8	1027.2	1028.9	1031.2	1034.0	1036.9	1038.6	1040.8	1042.6
15°	1008.5	1008.5	1009.6	1011.3	1012.5	1015.9	1018.7	1022.1	1026.6	1029.5	1032.3
17.5°	989.7	990.9	992.6	992.6	994.9	1000.5	1002.2	1007.3	1012.5	1015.3	1021.0
20°	969.3	970.4	972.1	973.3	976.1	980.7	984.1	988.6	994.3	999.4	1005.1
22.5°	953.4	951.1	952.3	953.4	956.2	960.2	964.2	969.9	975.5	980.7	986.3
25°	922.7	923.3	925.0	926.1	929.6	933.0	937.5	944.3	949.4	955.1	961.3
27.5°	881.3	881.9	884.7	884.7	887.5	893.2	896.0	901.7	908.5	914.2	921.6
30°	834.2	835.3	835.3	837.6	839.3	842.1	844.9	850.6	854.0	859.1	869.4
32.5°	791.0	792.1	791.6	791.0	789.3	788.7	788.2	789.3	790.4	792.1	796.1
35°	765.4	762.6	760.3	756.4	751.8	746.1	741.0	734.2	728.0	722.9	717.2
37.5°	741.0	740.5	737.1	731.4	722.3	712.1	700.1	685.4	670.6	654.7	639.4
40°	707.0	705.2	702.4	694.5	684.2	671.7	655.9	637.7	613.8	589.4	564.4
42.5°	649.0	649.6	646.2	639.9	630.3	618.4	601.9	582.0	556.5	527.5	495.2
45°	581.5	581.5	580.3	575.2	568.4	558.7	546.3	529.8	504.8	475.3	440.6
47.5°	511.1	511.6	509.9	508.8	505.9	499.7	490.6	478.1	460.5	432.1	397.5
50°	439.5	439.5	442.3	441.8	441.8	439.5	435.5	428.1	412.8	390.1	357.7
52.5°	368.0	369.1	370.8	373.1	375.9	380.4	375.9	372.5	362.8	345.2	317.4
55°	294.1	295.3	298.1	302.1	305.5	310.0	311.2	311.2	306.1	294.1	273.1
57.5°	231.1	229.4	231.7	235.1	239.6	244.2	247.6	251.6	251.0	243.0	226.0
60°	173.8	174.3	176.0	179.4	182.8	186.8	191.4	194.8	196.5	192.5	181.7
62.5°	126.6	126.6	128.9	132.3	134.0	139.7	142.5	144.2	145.9	145.4	138.6
65°	88.6	89.7	90.9	92.6	94.3	97.7	99.4	102.8	103.9	104.5	99.4
67.5°	62.5	60.8	61.9	63.0	64.7	67.0	70.4	70.4	72.1	72.1	68.7
70°	39.8	39.8	40.3	42.0	43.2	43.7	44.9	46.0	47.7	47.1	47.1
72.5°	26.7	26.1	26.7	27.3	27.8	29.5	29.5	30.1	31.2	31.8	29.5
75°	13.6	14.2	15.3	14.8	16.5	15.3	15.9	17.6	17.0	15.9	15.9
77.5°	11.4	11.4	11.4	10.8	11.9	11.9	11.4	12.5	11.9	11.9	11.4
80°	7.9	8.5	7.9	7.4	7.9	7.4	7.4	7.4	7.4	7.4	6.8
82.5°	6.3	5.1	5.7	5.1	5.7	5.7	5.1	4.5	4.5	5.1	4.5
85°	4.5	3.4	4.0	4.0	3.4	3.4	3.4	3.4	3.4	2.8	2.8
87.5°	2.8	1.7	1.7	1.7	2.3	2.3	2.3	1.7	2.3	2.3	1.1
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°	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9
2.5°	1059.6	1059.0	1060.2	1059.6	1059.6	1059.0	1059.6	1059.0	1060.2	1057.9	1058.4
5°	1059.6	1058.4	1059.0	1059.6	1060.2	1059.0	1059.0	1059.0	1060.2	1059.0	1059.6
7.5°	1057.3	1056.7	1058.4	1059.6	1059.0	1058.4	1059.6	1059.0	1060.2	1059.6	1060.7
10°	1052.8	1053.3	1054.5	1056.2	1056.7	1057.3	1058.4	1058.4	1060.2	1057.9	1059.0
12.5°	1046.0	1048.2	1051.1	1052.2	1054.5	1054.5	1055.6	1056.2	1057.3	1056.7	1058.4
15°	1037.4	1040.3	1043.7	1046.5	1049.4	1051.1	1052.8	1053.3	1055.0	1053.3	1053.9
17.5°	1027.2	1030.6	1035.7	1039.1	1043.7	1045.4	1047.7	1048.8	1050.5	1049.4	1049.9
20°	1013.0	1017.0	1022.7	1027.8	1030.6	1034.6	1037.4	1039.1	1040.3	1039.1	1039.7
22.5°	993.1	998.8	1006.2	1010.2	1015.9	1019.3	1019.8	1023.8	1026.6	1023.8	1024.9
25°	969.9	975.5	981.2	989.7	994.9	998.8	1002.8	1003.4	1006.2	1005.6	1005.1
27.5°	931.2	938.6	948.3	955.1	961.9	968.2	972.7	973.8	976.7	975.5	976.1
30°	878.4	886.4	895.5	906.3	915.9	922.2	927.8	931.8	934.7	933.0	932.4
32.5°	803.5	811.4	821.1	831.9	843.2	852.3	859.1	864.3	867.7	866.5	863.7
35°	717.8	720.0	726.3	734.8	744.4	754.1	760.3	766.0	770.0	771.1	771.1
37.5°	629.7	622.4	617.8	617.8	623.5	627.5	633.1	636.5	642.8	645.1	646.8
40°	544.5	527.5	511.6	499.7	491.8	491.2	491.2	492.9	498.6	505.9	512.8
42.5°	468.5	441.2	416.8	394.6	378.8	369.7	365.7	366.3	370.8	377.6	389.0
45°	407.7	373.6	343.0	316.3	294.7	280.5	273.7	273.1	276.5	284.5	297.0
47.5°	360.6	324.2	289.6	258.9	235.7	220.3	212.4	210.1	212.4	219.7	234.5
50°	321.4	283.9	248.1	216.3	191.4	175.5	168.1	165.2	168.1	174.3	189.1
52.5°	285.1	246.4	212.9	182.3	155.6	142.0	134.0	132.3	134.0	141.4	153.3
55°	243.0	210.1	177.2	146.5	123.2	109.6	103.3	101.6	103.3	110.2	122.7
57.5°	201.6	173.2	144.2	116.4	96.5	84.6	78.9	76.7	80.6	85.2	99.9
60°	163.0	140.3	115.8	91.4	75.0	64.2	59.6	59.0	60.2	65.9	76.1
62.5°	127.8	109.0	89.7	69.8	56.2	51.7	46.0	45.4	46.6	50.0	57.9
65°	92.0	80.1	65.3	51.1	40.3	34.1	31.8	32.4	33.5	35.8	43.2
67.5°	64.2	55.6	45.4	35.8	27.8	25.0	22.7	22.1	22.7	26.7	30.7
70°	43.2	38.0	30.7	27.3	19.3	15.3	15.9	14.2	16.5	16.5	19.9
72.5°	28.4	25.0	20.4	15.9	13.6	10.8	10.8	10.2	11.4	11.9	14.8
75°	14.8	11.4	11.4	7.9	5.7	2.8	5.1	4.5	4.0	4.5	5.7
77.5°	10.2	8.5	7.9	6.3	5.7	4.5	4.5	4.5	4.5	5.1	5.7
80°	6.3	6.3	4.5	4.0	3.4	2.8	3.4	3.4	3.4	3.4	4.0
82.5°	4.0	3.4	3.4	2.8	2.8	2.3	2.3	2.3	2.3	2.3	3.4
85°	3.4	2.3	2.3	1.7	2.3	4.0	1.7	2.3	2.3	2.3	1.7
87.5°	1.1	1.7	1.7	1.7	1.1	0.6	1.1	1.7	1.7	2.8	2.3
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°	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9
2.5°	1059.6	1060.2	1060.2	1059.6	1059.6	1058.4	1060.7	1059.0	1059.6	1061.9	1060.2
5°	1060.7	1061.3	1061.3	1060.7	1060.7	1060.7	1061.3	1061.3	1060.7	1060.2	1061.3
7.5°	1063.0	1062.4	1062.4	1061.3	1061.3	1060.2	1061.3	1059.6	1060.7	1059.6	1061.3
10°	1060.2	1060.7	1060.2	1059.6	1059.6	1059.0	1059.0	1057.3	1057.9	1056.2	1057.3
12.5°	1058.4	1057.9	1057.9	1056.7	1055.6	1054.5	1053.9	1052.2	1052.2	1048.2	1049.9
15°	1053.9	1054.5	1052.8	1050.5	1049.4	1046.5	1045.4	1043.1	1040.8	1038.0	1038.6
17.5°	1049.9	1048.2	1046.0	1043.7	1039.1	1036.9	1034.6	1031.2	1030.0	1026.6	1025.5
20°	1038.0	1036.9	1034.0	1030.0	1027.2	1022.1	1019.8	1016.4	1013.6	1010.2	1008.5
22.5°	1022.7	1021.5	1018.1	1014.2	1009.6	1007.3	1005.1	998.8	996.0	992.6	992.0
25°	1003.4	1001.7	998.3	993.7	991.4	985.2	982.9	978.4	977.3	973.8	973.3
27.5°	973.8	971.6	967.6	961.9	957.9	954.0	951.7	948.3	947.2	943.7	943.2
30°	929.6	926.7	918.8	916.5	909.7	905.7	905.7	901.2	901.7	899.5	899.5
32.5°	859.7	855.2	848.9	844.4	839.8	837.6	837.6	835.9	837.0	837.0	838.1
35°	767.1	760.9	757.5	754.7	754.7	756.9	763.7	765.4	768.9	771.7	774.0
37.5°	648.5	647.9	651.9	655.3	663.8	673.5	685.4	695.6	705.2	712.1	718.9
40°	520.1	534.3	545.7	561.6	574.6	593.4	615.0	632.6	649.0	661.0	673.5
42.5°	406.0	424.2	448.0	471.3	494.6	520.1	548.5	572.9	594.5	611.0	624.1
45°	316.3	341.3	370.2	399.8	429.9	461.7	491.2	516.2	538.9	555.9	569.0
47.5°	255.0	282.2	315.1	347.5	381.6	415.1	448.0	469.6	488.3	502.0	513.9
50°	210.7	239.6	274.3	311.2	345.2	378.8	407.1	428.1	443.5	455.4	462.8
52.5°	176.0	206.7	243.6	280.5	314.6	345.2	370.8	386.7	399.2	407.7	414.5
55°	145.4	174.9	209.5	244.2	277.7	306.6	327.6	339.6	349.2	354.3	358.3
57.5°	118.7	145.9	177.7	209.5	238.5	262.3	278.8	290.7	295.3	299.2	298.7
60°	93.1	118.7	147.6	174.9	199.9	219.2	231.1	237.9	241.3	243.0	241.9
62.5°	73.2	96.5	118.7	142.5	160.7	177.2	188.5	188.5	190.2	190.8	192.5
65°	54.5	72.1	91.4	109.0	123.8	134.6	140.8	142.5	144.8	144.2	143.1
67.5°	40.3	53.4	67.6	80.6	90.9	97.7	102.2	106.2	105.6	104.5	103.9
70°	27.8	36.3	48.8	56.8	64.2	71.0	72.1	72.7	73.2	73.8	72.7
72.5°	19.3	25.6	32.4	39.2	43.7	46.6	49.4	50.0	50.0	50.0	49.4
75°	9.7	13.1	19.3	22.1	26.1	27.3	29.5	29.5	31.2	29.0	28.4
77.5°	8.5	10.2	13.6	15.9	17.6	19.3	19.9	21.6	21.0	19.9	20.4
80°	5.1	6.3	8.5	9.7	11.9	12.5	13.1	13.6	13.1	13.6	13.6
82.5°	4.0	4.5	5.7	5.7	7.4	7.4	7.9	7.9	8.5	8.5	8.5
85°	2.3	4.0	3.4	6.8	4.5	4.5	5.7	6.8	5.7	5.7	6.8
87.5°	2.3	2.3	1.7	2.3	2.3	2.3	2.8	3.4	3.4	4.0	3.4
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: P246086

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1057.9	1057.9	1057.9	1057.9
2.5°	1059.6	1060.7	1059.0	1058.4
5°	1061.3	1061.3	1060.2	1060.2
7.5°	1061.3	1061.3	1059.6	1058.4
10°	1056.7	1056.7	1055.0	1053.9
12.5°	1048.2	1048.2	1047.7	1046.0
15°	1037.4	1037.4	1035.2	1033.5
17.5°	1022.7	1023.8	1021.0	1021.0
20°	1006.8	1006.2	1003.9	1002.8
22.5°	990.3	989.2	988.6	985.2
25°	972.7	971.6	969.9	968.2
27.5°	942.6	942.0	940.3	938.1
30°	896.6	896.0	893.8	893.8
32.5°	837.0	836.4	834.2	834.7
35°	775.1	777.4	776.2	774.0
37.5°	723.4	725.1	726.3	725.1
40°	680.3	685.4	685.9	687.1
42.5°	634.3	641.1	643.4	644.5
45°	579.2	585.4	590.6	589.4
47.5°	523.0	527.5	532.1	528.7
50°	469.0	471.9	473.6	473.6
52.5°	417.9	417.9	417.4	417.9
55°	359.4	359.4	357.2	358.3
57.5°	298.1	299.2	297.5	294.7
60°	241.3	238.5	237.4	235.7
62.5°	188.0	188.0	184.0	189.1
65°	140.8	139.1	137.4	136.8
67.5°	102.2	101.6	99.9	99.4
70°	72.1	69.8	69.3	68.1
72.5°	48.3	48.3	47.1	47.1
75°	29.5	26.7	26.1	26.7
77.5°	20.4	19.9	19.9	19.3
80°	13.6	13.1	14.2	12.5
82.5°	8.5	9.1	8.5	9.1
85°	5.7	6.8	6.3	6.3
87.5°	3.4	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)