

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: P245462

Luminaire Tested: **LSR8B20D010 EC8B20830 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245462
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B20D010 EC8B20830 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2156.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

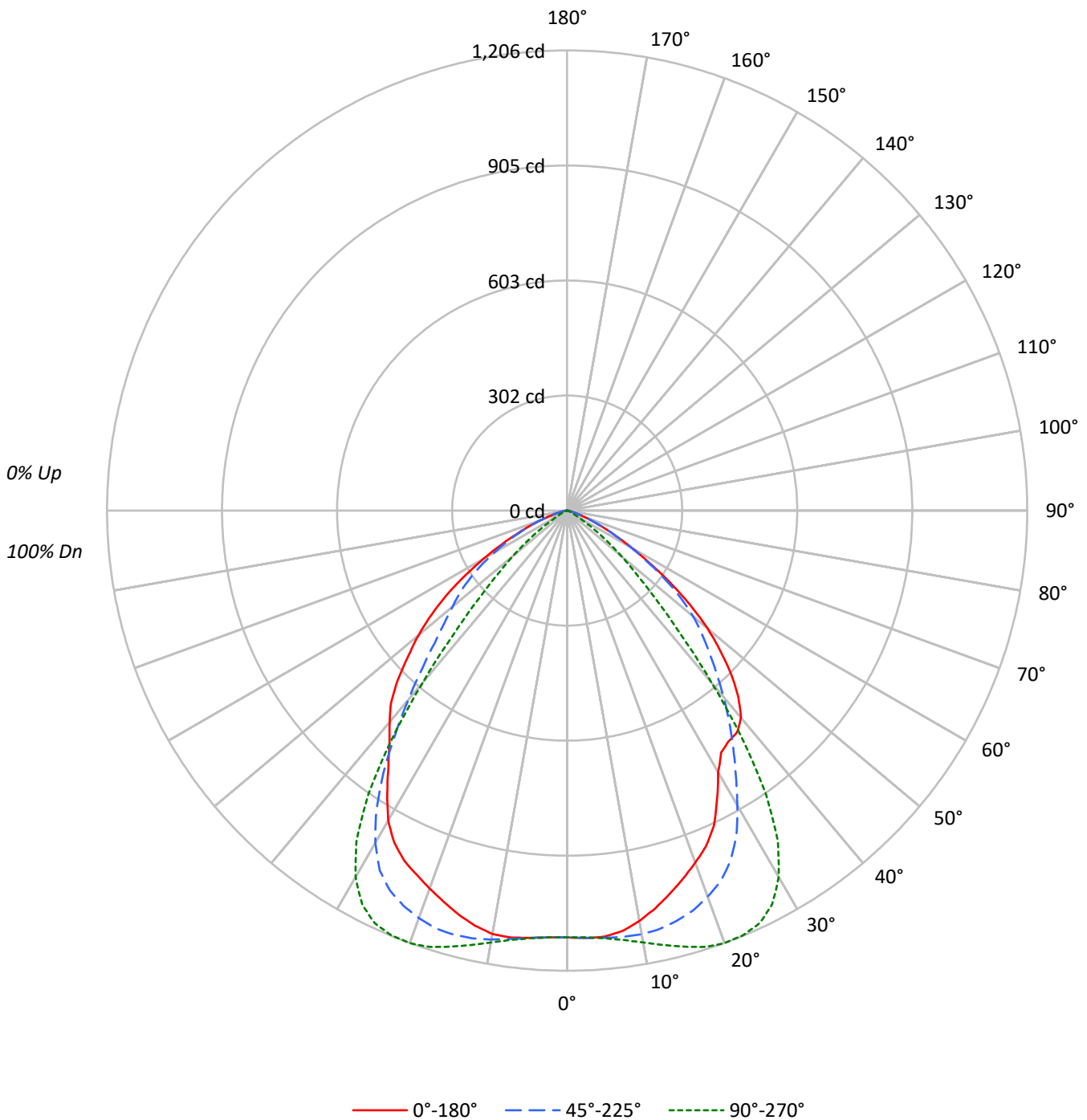
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	34490	34490	34490
5°	34693	34823	34786
10°	34183	35987	35282
15°	33185	37773	35005
20°	32221	39585	34581
25°	30986	40601	34419
30°	28197	39488	33399
35°	27778	34215	30729
40°	28532	23730	29132
45°	26562	14343	27391
50°	23041	8856	24409
55°	17682	4629	20714
60°	12045	1869	15634
65°	7493	956	10784
70°	4066	586	6582
75°	2121	286	3896
80°	941	320	2113
85°	637	212	1875



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.6	5.0
10°-20°	318.6	14.8
20°-30°	486.1	22.5
30°-40°	507.3	23.5
40°-50°	381.0	17.7
50°-60°	234.4	10.9
60°-70°	95.4	4.4
70°-80°	22.5	1.0
80°-90°	3.1	0.1
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°	912.3	42.3
0°-40°	1419.6	65.8
0°-60°	2035.0	94.4
0°-90°	2156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2156.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1118	1118	1118	1118	1118	
5°	1121	1124	1125	1124	1124	106
15°	1040	1112	1183	1150	1096	293
25°	911	1013	1193	1099	1012	414
35°	738	759	909	840	816	466
45°	609	527	329	491	628	465
55°	329	312	86	312	385	296
65°	103	104	13	140	148	107
75°	18	18	2	32	33	21
85°	2	2	1	4	5	3
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°	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5
2.5°	1121.4	1119.6	1121.4	1121.4	1122.0	1120.8	1121.4	1122.0	1120.8	1120.8	1120.8
5°	1120.8	1119.6	1120.8	1120.2	1121.4	1121.4	1122.6	1122.6	1123.8	1123.8	1125.6
7.5°	1111.3	1109.0	1111.3	1113.1	1114.3	1116.7	1119.6	1122.0	1124.4	1126.8	1129.7
10°	1091.7	1091.7	1093.5	1097.1	1100.6	1104.8	1110.1	1116.1	1122.0	1127.4	1132.7
12.5°	1067.4	1065.6	1069.2	1073.9	1079.3	1085.8	1094.1	1103.0	1112.5	1123.2	1131.5
15°	1039.5	1037.7	1041.9	1046.6	1053.2	1062.7	1072.8	1084.6	1098.3	1112.5	1126.2
17.5°	1011.0	1010.4	1014.6	1021.1	1026.4	1036.5	1049.6	1063.8	1079.3	1098.3	1116.1
20°	981.9	981.3	985.5	990.8	997.9	1007.4	1020.5	1037.1	1055.5	1076.9	1097.7
22.5°	951.6	952.2	955.8	961.7	967.7	977.8	991.4	1008.0	1028.2	1051.4	1074.5
25°	910.7	907.7	912.5	918.4	928.5	936.8	949.9	967.7	988.4	1012.8	1040.1
27.5°	851.3	850.7	854.9	860.2	869.1	879.2	893.5	911.9	933.8	960.5	987.3
30°	791.9	793.1	794.9	800.3	806.2	816.3	830.5	846.0	866.8	892.3	920.8
32.5°	751.6	751.6	754.0	757.5	761.7	767.0	777.1	788.4	804.4	822.2	843.0
35°	737.9	735.6	737.9	738.5	739.1	740.3	742.1	745.6	751.0	758.7	766.4
37.5°	732.0	730.2	730.2	727.8	724.9	721.3	716.6	711.2	705.3	697.6	691.6
40°	708.8	707.6	706.5	704.1	697.6	690.4	682.7	670.2	656.6	637.6	618.6
42.5°	664.3	663.1	662.5	657.8	651.8	643.5	634.6	621.6	604.4	580.0	552.7
45°	609.1	606.7	604.9	600.8	596.6	589.5	581.2	569.3	552.1	527.2	494.5
47.5°	545.0	543.8	543.2	541.4	537.3	533.1	527.8	518.3	502.8	479.1	445.3
50°	480.3	477.9	479.1	478.5	476.7	473.7	470.2	463.7	451.8	430.4	399.5
52.5°	406.1	406.1	405.5	407.3	407.8	407.3	407.8	400.7	390.6	374.6	348.5
55°	328.9	328.9	330.7	333.1	335.4	336.0	335.4	332.5	325.3	312.3	289.1
57.5°	256.5	255.3	258.8	262.4	264.8	267.1	265.4	263.0	258.8	248.1	230.3
60°	195.3	195.3	197.7	200.1	202.4	204.8	204.2	203.6	200.1	192.9	178.7
62.5°	143.7	144.3	144.3	146.0	148.4	150.8	152.6	150.8	149.0	144.3	134.8
65°	102.7	102.1	102.7	104.5	106.3	108.6	109.8	109.2	107.4	103.9	96.8
67.5°	68.9	68.3	70.6	71.2	72.4	74.8	74.2	74.8	74.2	71.2	65.3
70°	45.1	43.9	45.1	44.5	46.3	46.9	48.1	48.7	48.1	46.3	44.5
72.5°	27.9	27.3	27.9	28.5	29.1	29.7	30.9	30.9	30.3	29.1	26.7
75°	17.8	16.0	16.6	15.4	16.6	16.6	17.8	18.4	17.8	17.8	16.6
77.5°	10.7	10.7	10.7	10.7	10.7	10.7	10.7	11.3	11.9	10.7	10.1
80°	5.3	5.3	5.9	5.9	5.9	6.5	5.9	5.9	5.9	6.5	4.7
82.5°	4.2	3.6	3.6	3.6	4.2	3.6	3.6	3.6	3.6	3.6	3.6
85°	1.8	2.4	1.8	1.2	1.8	1.8	2.4	1.8	1.8	1.8	2.4
87.5°	0.6	0.6	0.0	0.0	0.0	0.6	0.0	0.6	0.6	1.2	0.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5
2.5°	1121.4	1120.2	1120.2	1119.6	1120.8	1119.6	1120.2	1119.6	1119.6	1120.8	1119.6
5°	1125.6	1126.2	1125.0	1124.4	1126.2	1126.2	1126.2	1125.0	1125.0	1125.6	1125.0
7.5°	1131.5	1132.7	1133.3	1133.9	1135.1	1135.7	1135.7	1135.1	1134.5	1136.3	1133.9
10°	1138.1	1139.8	1143.4	1145.2	1148.1	1148.1	1149.3	1149.3	1148.1	1149.3	1148.7
12.5°	1135.7	1146.4	1152.3	1156.5	1160.6	1164.2	1165.4	1166.0	1165.4	1167.7	1165.4
15°	1139.8	1148.7	1158.2	1165.4	1173.1	1177.2	1178.4	1183.2	1184.4	1185.0	1181.4
17.5°	1133.3	1149.3	1159.4	1170.1	1181.4	1189.1	1196.2	1199.2	1199.8	1201.0	1196.2
20°	1118.5	1136.3	1151.7	1167.1	1180.2	1192.1	1198.0	1206.3	1204.0	1208.7	1202.2
22.5°	1098.3	1118.5	1138.1	1158.2	1171.9	1186.1	1198.6	1204.5	1207.5	1207.5	1200.4
25°	1066.2	1090.0	1111.3	1132.1	1152.9	1170.1	1184.4	1193.3	1195.1	1194.5	1186.1
27.5°	1016.4	1041.9	1066.8	1090.6	1116.1	1136.3	1152.9	1163.6	1166.6	1166.6	1157.6
30°	947.5	974.8	999.1	1027.6	1053.8	1076.3	1099.5	1109.0	1114.3	1114.3	1104.2
32.5°	865.6	888.7	911.3	939.2	967.7	993.2	1015.2	1028.2	1034.8	1034.2	1025.3
35°	776.5	787.8	805.0	825.8	851.3	875.1	896.4	908.9	920.2	919.6	911.3
37.5°	687.5	684.5	686.3	694.0	710.0	726.6	743.3	755.1	764.6	768.8	767.0
40°	600.2	584.8	569.9	564.6	565.8	571.7	580.6	589.5	600.2	605.5	607.9
42.5°	521.8	495.7	469.6	450.0	438.7	435.2	439.3	442.3	448.8	456.5	464.2
45°	458.9	423.9	389.4	359.2	340.2	328.9	326.5	328.9	332.5	340.2	350.3
47.5°	407.3	366.3	327.7	293.9	266.0	251.1	247.0	245.8	249.3	256.5	270.1
50°	361.5	320.6	277.8	238.6	209.6	192.9	187.0	184.6	188.8	194.1	206.6
52.5°	311.7	271.3	227.4	189.4	159.1	141.9	135.4	131.8	134.2	141.3	153.8
55°	257.6	220.2	180.5	141.3	112.2	96.2	88.4	86.1	88.4	96.2	108.6
57.5°	203.6	172.2	138.9	102.1	76.0	60.0	52.2	49.9	56.4	59.4	72.4
60°	159.1	133.6	105.1	74.8	52.2	39.8	32.1	30.3	33.2	38.6	49.3
62.5°	119.3	103.3	80.7	53.4	38.6	25.5	21.4	19.6	21.4	25.5	33.8
65°	86.7	74.2	56.4	39.2	26.1	19.0	14.2	13.1	14.8	17.8	24.9
67.5°	59.4	49.9	39.2	27.3	17.8	11.9	10.1	10.1	10.7	13.1	18.4
70°	38.6	32.7	24.9	17.8	11.9	8.9	7.7	6.5	7.7	9.5	12.5
72.5°	24.3	20.8	16.0	12.5	8.9	6.5	5.3	4.7	5.9	7.1	9.5
75°	14.8	11.3	8.3	6.5	4.7	4.7	4.7	2.4	3.0	4.7	5.9
77.5°	8.9	7.7	6.5	5.3	4.2	2.4	2.4	2.4	3.0	3.6	5.3
80°	4.7	4.2	3.0	3.0	2.4	1.8	2.4	1.8	1.2	3.0	3.6
82.5°	3.0	2.4	2.4	2.4	3.0	1.2	1.8	1.2	1.8	2.4	1.8
85°	1.8	1.8	1.8	1.2	3.0	1.2	1.2	0.6	0.6	1.2	1.2
87.5°	0.0	0.6	0.6	0.0	0.6	0.0	0.6	0.6	0.6	0.6	0.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5	1118.5
2.5°	1120.2	1119.6	1120.2	1119.6	1119.6	1119.6	1120.2	1120.2	1119.6	1119.6	1120.8
5°	1125.0	1125.0	1125.0	1124.4	1123.8	1123.8	1125.0	1125.0	1123.2	1125.0	1125.0
7.5°	1135.1	1133.3	1135.1	1132.7	1131.5	1132.1	1132.7	1131.5	1130.3	1130.9	1130.9
10°	1148.1	1146.4	1146.4	1144.6	1142.8	1141.6	1140.4	1137.5	1134.5	1133.9	1131.5
12.5°	1163.6	1160.6	1158.8	1155.3	1152.3	1148.1	1144.6	1139.8	1133.9	1129.7	1125.6
15°	1179.0	1174.3	1170.1	1164.2	1157.6	1150.5	1142.8	1135.1	1125.6	1117.3	1110.1
17.5°	1191.5	1185.0	1177.2	1167.7	1158.2	1147.6	1136.3	1125.0	1111.3	1100.6	1092.3
20°	1195.6	1186.1	1176.1	1163.6	1151.1	1136.3	1122.0	1107.2	1091.7	1080.5	1071.0
22.5°	1190.3	1179.0	1166.6	1153.5	1136.9	1120.8	1104.2	1087.0	1073.3	1057.9	1049.0
25°	1175.5	1161.8	1148.1	1132.7	1116.7	1098.9	1081.1	1063.3	1046.6	1038.3	1027.0
27.5°	1145.2	1130.3	1115.5	1099.5	1081.1	1063.3	1044.9	1027.6	1013.4	1002.1	995.6
30°	1091.7	1074.5	1057.3	1040.1	1024.1	1005.7	988.4	974.2	959.9	951.0	944.5
32.5°	1009.8	994.4	977.2	960.5	945.7	930.3	916.0	903.6	893.5	887.5	882.8
35°	899.4	884.0	870.9	859.0	846.6	840.0	831.1	824.0	819.8	817.5	816.9
37.5°	760.5	751.6	747.4	745.1	742.7	740.9	742.1	745.1	747.4	751.6	756.3
40°	612.1	619.8	622.2	630.5	638.2	648.3	659.6	672.6	683.3	697.0	706.5
42.5°	476.7	491.0	507.6	525.4	544.4	562.8	585.4	606.1	625.1	642.3	657.2
45°	366.3	388.3	413.2	438.7	464.2	491.0	518.3	543.8	566.4	584.8	600.2
47.5°	285.6	309.9	342.0	373.4	404.3	435.8	466.0	492.7	511.7	529.5	543.2
50°	226.2	254.1	289.1	325.3	359.2	392.4	424.5	449.4	468.4	482.7	492.7
52.5°	175.1	208.4	244.0	282.0	318.2	354.4	384.1	407.3	422.7	435.2	442.9
55°	130.6	163.3	201.3	240.4	277.2	312.3	340.2	360.4	374.0	381.1	385.3
57.5°	94.4	124.1	162.1	201.3	234.5	267.7	290.3	308.7	316.4	320.6	322.4
60°	68.9	96.2	130.0	163.9	195.3	222.0	241.6	254.1	260.0	262.4	261.8
62.5°	50.5	74.2	103.3	131.8	157.3	179.3	194.7	203.0	206.0	207.2	205.4
65°	38.6	57.0	81.9	103.9	123.5	139.5	150.8	156.1	157.9	157.3	156.1
67.5°	28.5	42.7	61.2	77.8	92.0	104.5	110.4	115.2	116.4	114.6	112.8
70°	20.2	31.5	44.5	55.8	66.5	73.6	80.1	80.7	80.7	80.1	79.0
72.5°	14.2	22.0	30.3	38.0	44.5	49.9	52.2	54.0	53.4	52.8	51.7
75°	9.5	13.7	22.0	23.7	29.7	31.5	33.8	33.8	34.4	32.7	32.7
77.5°	5.9	9.5	13.1	15.4	17.8	20.2	21.4	21.4	22.0	21.4	21.4
80°	3.6	5.9	7.1	10.7	10.7	12.5	13.1	13.7	12.5	14.2	12.5
82.5°	2.4	3.6	5.3	5.3	6.5	7.7	7.7	8.3	8.3	7.7	7.7
85°	1.8	2.4	3.0	3.6	3.6	4.2	3.6	3.6	4.2	4.7	4.2
87.5°	0.6	1.2	0.6	1.2	1.2	2.4	1.8	1.8	1.8	2.4	2.4
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: P245462

CATALOG NUMBER: LSR8B20D010 EC8B20830 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1118.5	1118.5	1118.5	1118.5
2.5°	1119.6	1120.2	1119.6	1119.6
5°	1125.0	1124.4	1125.0	1123.8
7.5°	1129.1	1129.1	1128.6	1128.6
10°	1129.1	1126.8	1126.8	1126.8
12.5°	1120.2	1117.3	1115.5	1114.3
15°	1104.8	1099.5	1097.1	1096.5
17.5°	1084.6	1079.9	1076.9	1075.1
20°	1061.5	1056.7	1053.2	1053.8
22.5°	1041.3	1035.9	1033.6	1032.4
25°	1021.1	1014.6	1012.8	1011.6
27.5°	988.4	984.9	983.1	981.3
30°	938.6	936.8	933.8	938.0
32.5°	881.0	878.0	875.7	877.4
35°	817.5	815.7	817.5	816.3
37.5°	759.3	761.1	763.5	764.6
40°	713.6	720.1	722.5	723.7
42.5°	667.9	675.6	680.3	683.3
45°	611.5	619.2	624.5	628.1
47.5°	553.3	559.8	565.2	564.6
50°	500.5	504.0	506.4	508.8
52.5°	447.0	447.0	447.6	447.6
55°	386.5	385.3	384.7	385.3
57.5°	320.0	318.8	318.2	316.4
60°	259.4	255.9	253.5	253.5
62.5°	203.0	198.9	197.1	196.5
65°	152.6	152.0	148.4	147.8
67.5°	110.4	108.0	105.7	106.3
70°	77.8	74.2	74.2	73.0
72.5°	50.5	48.7	48.1	48.1
75°	31.5	31.5	30.3	32.7
77.5°	20.8	20.8	20.2	20.8
80°	12.5	12.5	12.5	11.9
82.5°	7.7	8.3	7.7	7.7
85°	4.2	4.7	3.6	5.3
87.5°	2.4	3.0	2.4	3.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)