

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: P245456

Luminaire Tested: **LSR8B20D010 EC8B20827 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245456
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 EC8B20827 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2103.0 lumens
Efficiency: N/A
Efficacy: 98.7 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

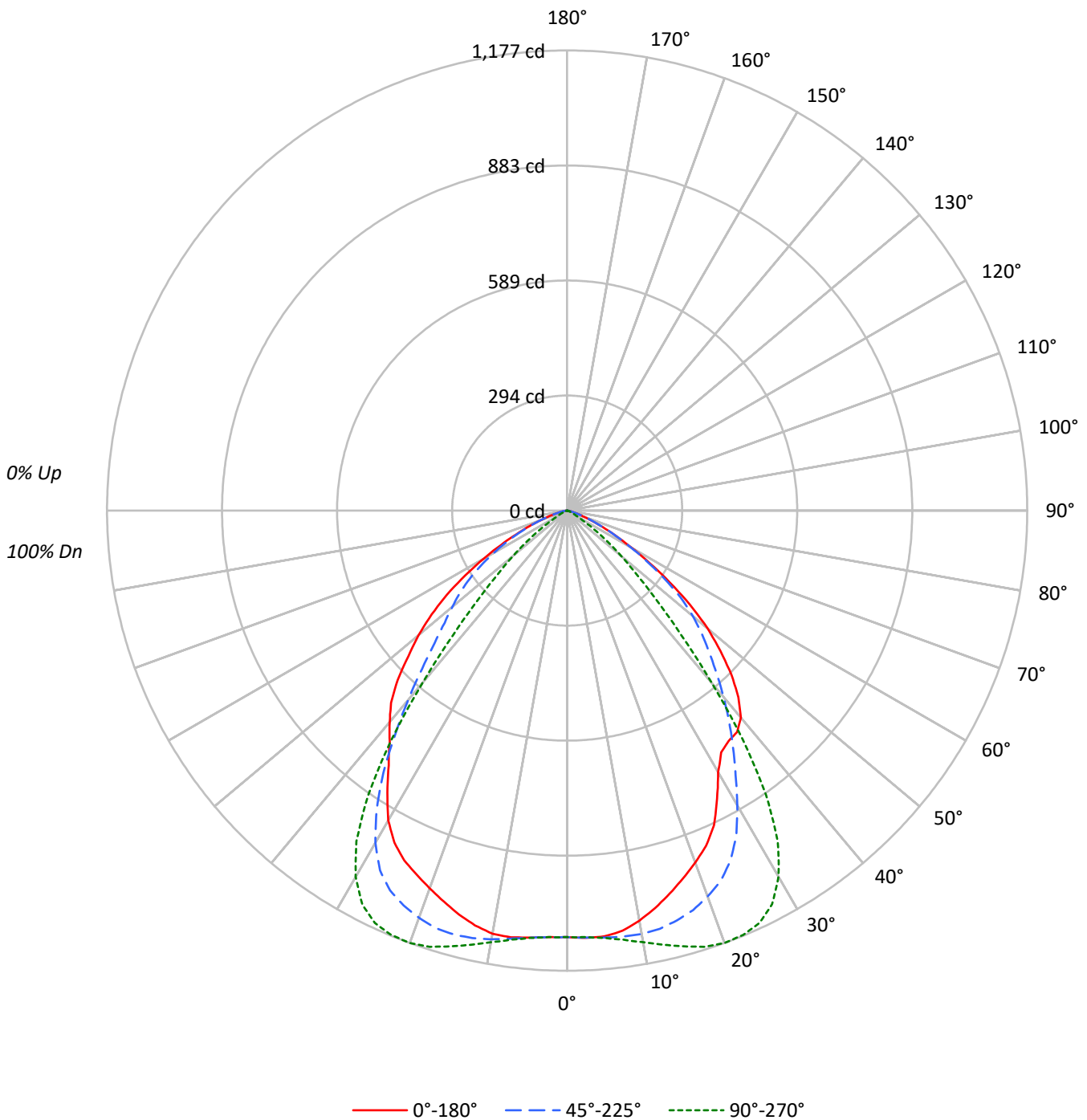
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	33642	33642	33642
5°	33842	33966	33932
10°	33344	35104	34415
15°	32371	36844	34143
20°	31431	38614	33731
25°	30224	39601	33572
30°	27506	38516	32577
35°	27096	33375	29972
40°	27832	23146	28415
45°	25908	13990	26719
50°	22475	8640	23809
55°	17247	4516	20204
60°	11749	1819	15252
65°	7311	927	10522
70°	3967	577	6419
75°	2073	274	3801
80°	923	302	2060
85°	601	212	1840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	5.0
10°-20°	310.8	14.8
20°-30°	474.2	22.5
30°-40°	494.8	23.5
40°-50°	371.7	17.7
50°-60°	228.7	10.9
60°-70°	93.1	4.4
70°-80°	21.9	1.0
80°-90°	3.0	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°	889.9	42.3
0°-40°	1384.7	65.8
0°-60°	1985.0	94.4
0°-90°	2103.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2103.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1091	1091	1091	1091	1091	
5°	1093	1096	1097	1096	1096	103
15°	1014	1085	1154	1122	1070	286
25°	888	988	1164	1072	987	404
35°	720	740	887	819	796	454
45°	594	514	321	479	613	453
55°	321	305	84	305	376	288
65°	100	101	13	136	144	104
75°	17	17	2	31	32	21
85°	2	2	1	4	5	2
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°	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0
2.5°	1093.9	1092.1	1093.9	1093.9	1094.4	1093.3	1093.9	1094.4	1093.3	1093.3	1093.3
5°	1093.3	1092.1	1093.3	1092.7	1093.9	1093.9	1095.0	1095.0	1096.2	1096.2	1097.9
7.5°	1084.0	1081.7	1084.0	1085.8	1086.9	1089.2	1092.1	1094.4	1096.8	1099.1	1102.0
10°	1064.9	1064.9	1066.6	1070.1	1073.6	1077.6	1082.9	1088.7	1094.4	1099.6	1104.9
12.5°	1041.2	1039.4	1042.9	1047.5	1052.7	1059.1	1067.2	1075.9	1085.2	1095.6	1103.7
15°	1014.0	1012.2	1016.3	1020.9	1027.3	1036.5	1046.4	1058.0	1071.3	1085.2	1098.5
17.5°	986.2	985.6	989.6	996.0	1001.2	1011.0	1023.8	1037.7	1052.7	1071.3	1088.7
20°	957.8	957.2	961.3	966.5	973.4	982.7	995.4	1011.6	1029.6	1050.4	1070.7
22.5°	928.2	928.8	932.3	938.1	943.9	953.7	967.0	983.3	1002.9	1025.5	1048.1
25°	888.3	885.4	890.0	895.8	905.7	913.8	926.5	943.9	964.2	987.9	1014.5
27.5°	830.4	829.8	833.9	839.1	847.8	857.6	871.5	889.5	910.9	936.9	963.0
30°	772.5	773.6	775.4	780.6	786.4	796.2	810.1	825.2	845.4	870.3	898.1
32.5°	733.1	733.1	735.4	738.9	742.9	748.2	758.0	769.0	784.6	802.0	822.3
35°	719.8	717.5	719.8	720.4	720.9	722.1	723.8	727.3	732.5	740.1	747.6
37.5°	714.0	712.3	712.3	709.9	707.0	703.6	698.9	693.7	687.9	680.4	674.6
40°	691.4	690.3	689.1	686.8	680.4	673.5	665.9	653.8	640.4	621.9	603.4
42.5°	648.0	646.8	646.2	641.6	635.8	627.7	619.0	606.3	589.5	565.7	539.1
45°	594.1	591.8	590.1	586.0	582.0	575.0	566.9	555.3	538.5	514.2	482.4
47.5°	531.6	530.4	529.8	528.1	524.1	520.0	514.8	505.5	490.5	467.3	434.3
50°	468.5	466.2	467.3	466.7	465.0	462.1	458.6	452.3	440.7	419.8	389.7
52.5°	396.1	396.1	395.5	397.2	397.8	397.2	397.8	390.9	381.0	365.4	339.9
55°	320.8	320.8	322.5	324.9	327.2	327.8	327.2	324.3	317.3	304.6	282.0
57.5°	250.2	249.0	252.5	255.9	258.3	260.6	258.8	256.5	252.5	242.0	224.7
60°	190.5	190.5	192.8	195.1	197.5	199.8	199.2	198.6	195.1	188.2	174.3
62.5°	140.1	140.7	140.7	142.5	144.8	147.1	148.8	147.1	145.3	140.7	131.4
65°	100.2	99.6	100.2	101.9	103.7	106.0	107.1	106.6	104.8	101.3	94.4
67.5°	67.2	66.6	68.9	69.5	70.6	73.0	72.4	73.0	72.4	69.5	63.7
70°	44.0	42.8	44.0	43.4	45.2	45.8	46.9	47.5	46.9	45.2	43.4
72.5°	27.2	26.6	27.2	27.8	28.4	28.9	30.1	30.1	29.5	28.4	26.1
75°	17.4	15.6	16.2	15.1	16.2	16.2	17.4	18.0	17.4	17.4	16.2
77.5°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	11.0	11.6	10.4	9.8
80°	5.2	5.2	5.8	5.8	5.8	6.4	5.8	5.8	5.8	6.4	4.6
82.5°	4.1	3.5	3.5	3.5	4.1	3.5	3.5	3.5	3.5	3.5	3.5
85°	1.7	2.3	1.7	1.2	1.7	1.7	2.3	1.7	1.7	1.7	2.3
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°	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0
2.5°	1093.9	1092.7	1092.7	1092.1	1093.3	1092.1	1092.7	1092.1	1092.1	1093.3	1092.1
5°	1097.9	1098.5	1097.3	1096.8	1098.5	1098.5	1098.5	1097.3	1097.3	1097.9	1097.3
7.5°	1103.7	1104.9	1105.4	1106.0	1107.2	1107.8	1107.8	1107.2	1106.6	1108.3	1106.0
10°	1110.1	1111.8	1115.3	1117.0	1119.9	1119.9	1121.1	1121.1	1119.9	1121.1	1120.5
12.5°	1107.8	1118.2	1124.0	1128.0	1132.1	1135.6	1136.7	1137.3	1136.7	1139.0	1136.7
15°	1111.8	1120.5	1129.8	1136.7	1144.2	1148.3	1149.5	1154.1	1155.2	1155.8	1152.4
17.5°	1105.4	1121.1	1130.9	1141.3	1152.4	1159.9	1166.8	1169.7	1170.3	1171.5	1166.8
20°	1091.0	1108.3	1123.4	1138.5	1151.2	1162.8	1168.6	1176.7	1174.4	1179.0	1172.6
22.5°	1071.3	1091.0	1110.1	1129.8	1143.1	1157.0	1169.1	1174.9	1177.8	1177.8	1170.9
25°	1040.0	1063.2	1084.0	1104.3	1124.6	1141.3	1155.2	1163.9	1165.7	1165.1	1157.0
27.5°	991.4	1016.3	1040.6	1063.8	1088.7	1108.3	1124.6	1135.0	1137.9	1137.9	1129.2
30°	924.2	950.8	974.6	1002.4	1027.9	1049.9	1072.4	1081.7	1086.9	1086.9	1077.1
32.5°	844.3	866.9	888.9	916.1	943.9	968.8	990.2	1002.9	1009.3	1008.7	1000.1
35°	757.4	768.4	785.2	805.5	830.4	853.5	874.4	886.6	897.6	897.0	888.9
37.5°	670.6	667.7	669.4	676.9	692.6	708.8	725.0	736.6	745.8	749.9	748.2
40°	585.4	570.4	555.9	550.7	551.9	557.6	566.3	575.0	585.4	590.7	593.0
42.5°	509.0	483.5	458.0	438.9	427.9	424.5	428.5	431.4	437.8	445.3	452.8
45°	447.6	413.5	379.9	350.3	331.8	320.8	318.5	320.8	324.3	331.8	341.7
47.5°	397.2	357.3	319.7	286.6	259.4	245.0	240.9	239.7	243.2	250.2	263.5
50°	352.6	312.7	271.0	232.8	204.4	188.2	182.4	180.1	184.1	189.4	201.5
52.5°	304.0	264.6	221.8	184.7	155.2	138.4	132.0	128.6	130.9	137.8	150.0
55°	251.3	214.8	176.0	137.8	109.4	93.8	86.3	84.0	86.3	93.8	106.0
57.5°	198.6	167.9	135.5	99.6	74.1	58.5	51.0	48.6	55.0	57.9	70.6
60°	155.2	130.3	102.5	73.0	51.0	38.8	31.3	29.5	32.4	37.6	48.1
62.5°	116.4	100.8	78.8	52.1	37.6	24.9	20.8	19.1	20.8	24.9	33.0
65°	84.5	72.4	55.0	38.2	25.5	18.5	13.9	12.7	14.5	17.4	24.3
67.5°	57.9	48.6	38.2	26.6	17.4	11.6	9.8	9.8	10.4	12.7	18.0
70°	37.6	31.9	24.3	17.4	11.6	8.7	7.5	6.4	7.5	9.3	12.2
72.5°	23.7	20.3	15.6	12.2	8.7	6.4	5.2	4.6	5.8	6.9	9.3
75°	14.5	11.0	8.1	6.4	4.6	4.6	4.6	2.3	2.9	4.6	5.8
77.5°	8.7	7.5	6.4	5.2	4.1	2.3	2.3	2.3	2.9	3.5	5.2
80°	4.6	4.1	2.9	2.9	2.3	1.7	2.3	1.7	1.2	2.9	3.5
82.5°	2.9	2.3	2.3	2.3	2.9	1.2	1.7	1.2	1.7	2.3	1.7
85°	1.7	1.7	1.7	1.2	2.9	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°	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0	1091.0
2.5°	1092.7	1092.1	1092.7	1092.1	1092.1	1092.1	1092.7	1092.7	1092.1	1092.1	1093.3
5°	1097.3	1097.3	1097.3	1096.8	1096.2	1096.2	1097.3	1097.3	1095.6	1097.3	1097.3
7.5°	1107.2	1105.4	1107.2	1104.9	1103.7	1104.3	1104.9	1103.7	1102.6	1103.1	1103.1
10°	1119.9	1118.2	1118.2	1116.5	1114.7	1113.5	1112.4	1109.5	1106.6	1106.0	1103.7
12.5°	1135.0	1132.1	1130.4	1126.9	1124.0	1119.9	1116.5	1111.8	1106.0	1102.0	1097.9
15°	1150.0	1145.4	1141.3	1135.6	1129.2	1122.2	1114.7	1107.2	1097.9	1089.8	1082.9
17.5°	1162.2	1155.8	1148.3	1139.0	1129.8	1119.3	1108.3	1097.3	1084.0	1073.6	1065.5
20°	1166.2	1157.0	1147.1	1135.0	1122.8	1108.3	1094.4	1080.0	1064.9	1053.9	1044.6
22.5°	1161.0	1150.0	1137.9	1125.1	1108.9	1093.3	1077.1	1060.3	1047.0	1031.9	1023.2
25°	1146.6	1133.2	1119.9	1104.9	1089.2	1071.9	1054.5	1037.1	1020.9	1012.8	1001.8
27.5°	1117.0	1102.6	1088.1	1072.4	1054.5	1037.1	1019.2	1002.4	988.5	977.5	971.1
30°	1064.9	1048.1	1031.3	1014.5	998.9	980.9	964.2	950.3	936.4	927.7	921.3
32.5°	985.0	969.9	953.2	936.9	922.5	907.4	893.5	881.3	871.5	865.7	861.1
35°	877.3	862.2	849.5	837.9	825.7	819.4	810.7	803.7	799.7	797.4	796.8
37.5°	741.8	733.1	729.0	726.7	724.4	722.7	723.8	726.7	729.0	733.1	737.7
40°	597.0	604.5	606.9	615.0	622.5	632.3	643.4	656.1	666.5	679.8	689.1
42.5°	465.0	478.9	495.1	512.5	531.0	549.0	571.0	591.2	609.8	626.5	641.0
45°	357.3	378.7	403.0	427.9	452.8	478.9	505.5	530.4	552.4	570.4	585.4
47.5°	278.5	302.3	333.5	364.2	394.3	425.0	454.6	480.6	499.2	516.5	529.8
50°	220.6	247.8	282.0	317.3	350.3	382.8	414.0	438.4	456.9	470.8	480.6
52.5°	170.8	203.3	238.0	275.1	310.4	345.7	374.7	397.2	412.3	424.5	432.0
55°	127.4	159.2	196.3	234.5	270.4	304.6	331.8	351.5	364.8	371.8	375.8
57.5°	92.1	121.0	158.1	196.3	228.7	261.2	283.2	301.1	308.6	312.7	314.4
60°	67.2	93.8	126.8	159.8	190.5	216.6	235.7	247.8	253.6	255.9	255.4
62.5°	49.2	72.4	100.8	128.6	153.4	174.9	189.9	198.0	200.9	202.1	200.4
65°	37.6	55.6	79.9	101.3	120.4	136.1	147.1	152.3	154.0	153.4	152.3
67.5°	27.8	41.7	59.7	75.9	89.8	101.9	107.7	112.3	113.5	111.8	110.0
70°	19.7	30.7	43.4	54.4	64.9	71.8	78.2	78.8	78.8	78.2	77.0
72.5°	13.9	21.4	29.5	37.1	43.4	48.6	51.0	52.7	52.1	51.5	50.4
75°	9.3	13.3	21.4	23.2	28.9	30.7	33.0	33.0	33.6	31.9	31.9
77.5°	5.8	9.3	12.7	15.1	17.4	19.7	20.8	20.8	21.4	20.8	20.8
80°	3.5	5.8	6.9	10.4	10.4	12.2	12.7	13.3	12.2	13.9	12.2
82.5°	2.3	3.5	5.2	5.2	6.4	7.5	7.5	8.1	8.1	7.5	7.5
85°	1.7	2.3	2.9	3.5	3.5	4.1	3.5	3.5	4.1	4.6	4.1
87.5°	0.6	1.2	0.6	1.2	1.2	2.3	1.7	1.7	1.7	2.3	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



TEST NUMBER: P245456

CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1091.0	1091.0	1091.0	1091.0
2.5°	1092.1	1092.7	1092.1	1092.1
5°	1097.3	1096.8	1097.3	1096.2
7.5°	1101.4	1101.4	1100.8	1100.8
10°	1101.4	1099.1	1099.1	1099.1
12.5°	1092.7	1089.8	1088.1	1086.9
15°	1077.6	1072.4	1070.1	1069.5
17.5°	1058.0	1053.3	1050.4	1048.7
20°	1035.4	1030.7	1027.3	1027.9
22.5°	1015.7	1010.5	1008.2	1007.0
25°	996.0	989.6	987.9	986.7
27.5°	964.2	960.7	958.9	957.2
30°	915.5	913.8	910.9	914.9
32.5°	859.3	856.4	854.1	855.9
35°	797.4	795.6	797.4	796.2
37.5°	740.6	742.4	744.7	745.8
40°	696.0	702.4	704.7	705.9
42.5°	651.5	659.0	663.6	666.5
45°	596.4	604.0	609.2	612.7
47.5°	539.7	546.1	551.3	550.7
50°	488.2	491.6	493.9	496.3
52.5°	436.0	436.0	436.6	436.6
55°	377.0	375.8	375.2	375.8
57.5°	312.1	311.0	310.4	308.6
60°	253.1	249.6	247.3	247.3
62.5°	198.0	194.0	192.3	191.7
65°	148.8	148.2	144.8	144.2
67.5°	107.7	105.4	103.1	103.7
70°	75.9	72.4	72.4	71.2
72.5°	49.2	47.5	46.9	46.9
75°	30.7	30.7	29.5	31.9
77.5°	20.3	20.3	19.7	20.3
80°	12.2	12.2	12.2	11.6
82.5°	7.5	8.1	7.5	7.5
85°	4.1	4.6	3.5	5.2
87.5°	2.3	2.9	2.3	2.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)