

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: P245480

Luminaire Tested: **LSR8B20D010 EC8B20850 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245480
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 EC8B20850 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2271.0 lumens
Efficiency: N/A
Efficacy: 106.6 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

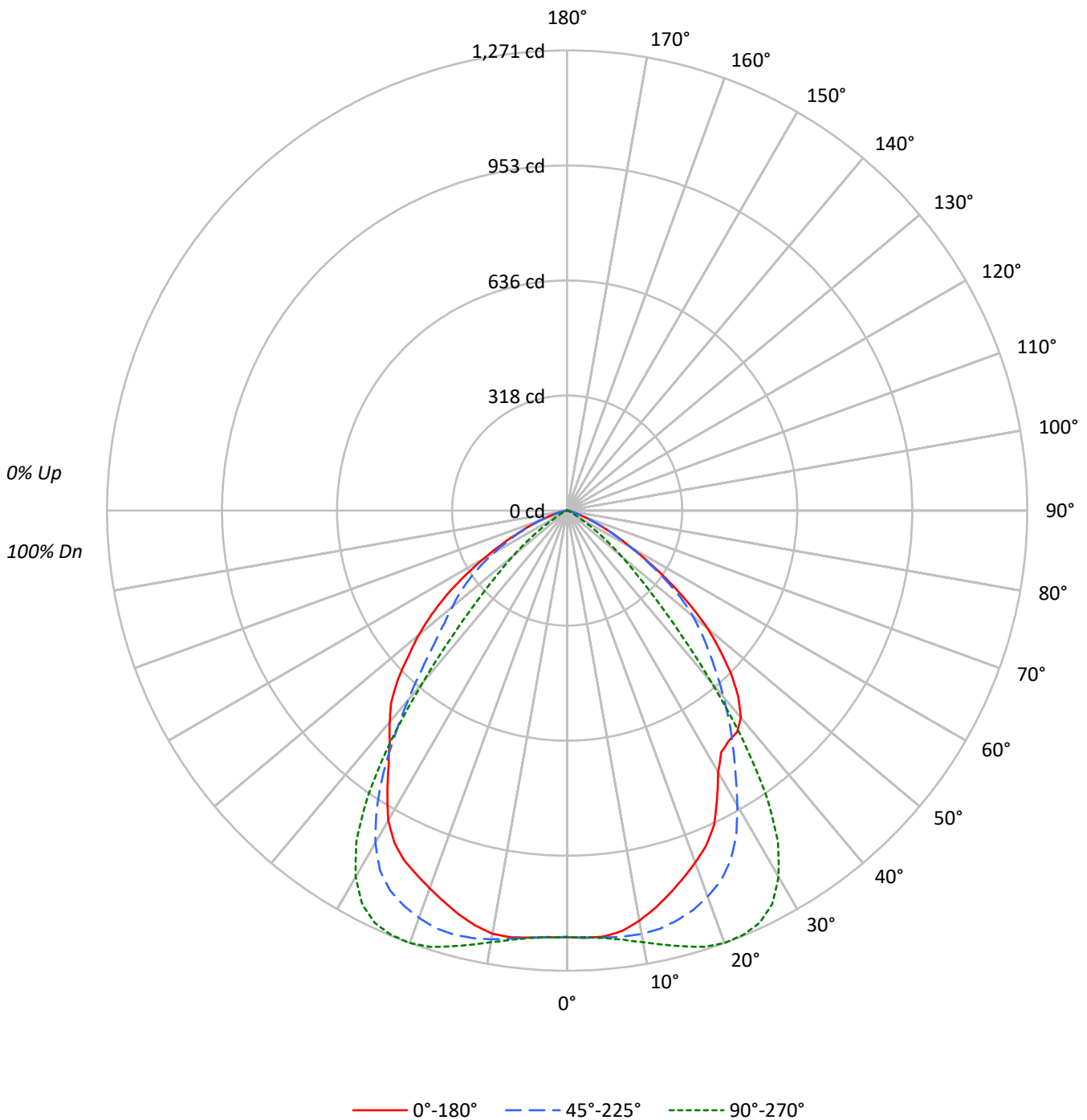
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	36328	36328	36328
5°	36544	36681	36640
10°	36009	37906	37164
15°	34957	39787	36872
20°	33941	41698	36425
25°	32639	42765	36256
30°	29703	41592	35179
35°	29261	36041	32366
40°	30054	24998	30686
45°	27980	15106	28852
50°	24269	9331	25709
55°	18623	4876	21816
60°	12686	1967	16467
65°	7895	1007	11361
70°	4283	622	6933
75°	2240	298	4098
80°	994	337	2220
85°	672	212	1981



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	5.0
10°-20°	335.6	14.8
20°-30°	512.0	22.5
30°-40°	534.3	23.5
40°-50°	401.3	17.7
50°-60°	246.9	10.9
60°-70°	100.5	4.4
70°-80°	23.7	1.0
80°-90°	3.3	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°	961.0	42.3
0°-40°	1495.3	65.8
0°-60°	2143.6	94.4
0°-90°	2271.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2271.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1178	1178	1178	1178	1178	
5°	1181	1184	1185	1184	1184	112
15°	1095	1172	1246	1212	1155	308
25°	959	1067	1257	1158	1066	436
35°	777	799	957	885	860	491
45°	642	555	346	517	662	490
55°	346	329	91	329	406	311
65°	108	109	14	147	156	113
75°	19	19	2	33	34	23
85°	2	2	1	4	6	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°	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1
2.5°	1181.3	1179.4	1181.3	1181.3	1181.9	1180.6	1181.3	1181.9	1180.6	1180.6	1180.6
5°	1180.6	1179.4	1180.6	1180.0	1181.3	1181.3	1182.5	1182.5	1183.7	1183.7	1185.6
7.5°	1170.6	1168.1	1170.6	1172.5	1173.7	1176.2	1179.4	1181.9	1184.4	1186.9	1190.0
10°	1150.0	1150.0	1151.9	1155.6	1159.4	1163.7	1169.4	1175.6	1181.9	1187.5	1193.1
12.5°	1124.3	1122.5	1126.2	1131.2	1136.8	1143.7	1152.5	1161.9	1171.9	1183.1	1191.9
15°	1095.0	1093.1	1097.4	1102.5	1109.3	1119.3	1130.0	1142.5	1156.9	1171.9	1186.3
17.5°	1064.9	1064.3	1068.7	1075.6	1081.2	1091.8	1105.6	1120.6	1136.8	1156.9	1175.6
20°	1034.3	1033.7	1038.1	1043.7	1051.2	1061.2	1074.9	1092.4	1111.8	1134.4	1156.2
22.5°	1002.4	1003.0	1006.8	1013.0	1019.3	1029.9	1044.3	1061.8	1083.1	1107.5	1131.8
25°	959.3	956.1	961.1	967.4	978.0	986.8	1000.5	1019.3	1041.2	1066.8	1095.6
27.5°	896.7	896.1	900.5	906.1	915.5	926.1	941.1	960.5	983.6	1011.8	1039.9
30°	834.2	835.4	837.3	843.0	849.2	859.8	874.8	891.1	913.0	939.9	969.9
32.5°	791.7	791.7	794.2	797.9	802.3	807.9	818.6	830.4	847.3	866.1	888.0
35°	777.3	774.8	777.3	777.9	778.5	779.8	781.7	785.4	791.0	799.2	807.3
37.5°	771.0	769.2	769.2	766.7	763.5	759.8	754.8	749.1	742.9	734.8	728.5
40°	746.6	745.4	744.1	741.6	734.8	727.3	719.1	706.0	691.6	671.6	651.6
42.5°	699.8	698.5	697.9	692.9	686.6	677.9	668.5	654.7	636.6	610.9	582.2
45°	641.6	639.1	637.2	632.8	628.4	621.0	612.2	599.7	581.6	555.3	520.9
47.5°	574.1	572.8	572.2	570.3	565.9	561.5	555.9	545.9	529.7	504.6	469.0
50°	505.9	503.4	504.6	504.0	502.1	499.0	495.3	488.4	475.9	453.4	420.8
52.5°	427.7	427.7	427.1	429.0	429.6	429.0	429.6	422.1	411.5	394.6	367.1
55°	346.4	346.4	348.3	350.8	353.3	353.9	353.3	350.2	342.7	328.9	304.5
57.5°	270.1	268.9	272.6	276.4	278.9	281.4	279.5	277.0	272.6	261.4	242.6
60°	205.7	205.7	208.2	210.7	213.2	215.7	215.1	214.5	210.7	203.2	188.2
62.5°	151.3	152.0	152.0	153.8	156.3	158.8	160.7	158.8	157.0	152.0	141.9
65°	108.2	107.5	108.2	110.1	111.9	114.4	115.7	115.1	113.2	109.4	101.9
67.5°	72.5	71.9	74.4	75.0	76.3	78.8	78.2	78.8	78.2	75.0	68.8
70°	47.5	46.3	47.5	46.9	48.8	49.4	50.6	51.3	50.6	48.8	46.9
72.5°	29.4	28.8	29.4	30.0	30.6	31.3	32.5	32.5	31.9	30.6	28.1
75°	18.8	16.9	17.5	16.3	17.5	17.5	18.8	19.4	18.8	18.8	17.5
77.5°	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.9	12.5	11.3	10.6
80°	5.6	5.6	6.3	6.3	6.3	6.9	6.3	6.3	6.3	6.9	5.0
82.5°	4.4	3.7	3.7	3.7	4.4	3.7	3.7	3.7	3.7	3.7	3.7
85°	1.9	2.5	1.9	1.3	1.9	1.9	2.5	1.9	1.9	1.9	2.5
87.5°	0.6	0.6	0.0	0.0	0.0	0.6	0.0	0.6	0.6	1.3	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°	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1
2.5°	1181.3	1180.0	1180.0	1179.4	1180.6	1179.4	1180.0	1179.4	1179.4	1180.6	1179.4
5°	1185.6	1186.3	1185.0	1184.4	1186.3	1186.3	1186.3	1185.0	1185.0	1185.6	1185.0
7.5°	1191.9	1193.1	1193.8	1194.4	1195.6	1196.3	1196.3	1195.6	1195.0	1196.9	1194.4
10°	1198.8	1200.6	1204.4	1206.3	1209.4	1209.4	1210.6	1210.6	1209.4	1210.6	1210.0
12.5°	1196.3	1207.5	1213.8	1218.1	1222.5	1226.3	1227.5	1228.1	1227.5	1230.0	1227.5
15°	1200.6	1210.0	1220.0	1227.5	1235.6	1240.0	1241.3	1246.3	1247.5	1248.2	1244.4
17.5°	1193.8	1210.6	1221.3	1232.5	1244.4	1252.5	1260.0	1263.2	1263.8	1265.0	1260.0
20°	1178.1	1196.9	1213.1	1229.4	1243.2	1255.7	1261.9	1270.7	1268.2	1273.2	1266.3
22.5°	1156.9	1178.1	1198.8	1220.0	1234.4	1249.4	1262.5	1268.8	1271.9	1271.9	1264.4
25°	1123.1	1148.1	1170.6	1192.5	1214.4	1232.5	1247.5	1256.9	1258.8	1258.2	1249.4
27.5°	1070.6	1097.4	1123.7	1148.7	1175.6	1196.9	1214.4	1225.6	1228.8	1228.8	1219.4
30°	998.0	1026.8	1052.4	1082.4	1110.0	1133.7	1158.1	1168.1	1173.7	1173.7	1163.1
32.5°	911.7	936.1	959.9	989.3	1019.3	1046.2	1069.3	1083.1	1090.0	1089.3	1079.9
35°	817.9	829.8	848.0	869.8	896.7	921.7	944.2	957.4	969.3	968.6	959.9
37.5°	724.1	721.0	722.9	731.0	747.9	765.4	782.9	795.4	805.4	809.8	807.9
40°	632.2	615.9	600.3	594.7	595.9	602.2	611.6	621.0	632.2	637.8	640.3
42.5°	549.7	522.2	494.6	474.0	462.1	458.4	462.7	465.9	472.7	480.9	489.0
45°	483.4	446.5	410.2	378.3	358.3	346.4	343.9	346.4	350.2	358.3	368.9
47.5°	429.0	385.8	345.2	309.5	280.1	264.5	260.1	258.9	262.6	270.1	284.5
50°	380.8	337.7	292.7	251.4	220.7	203.2	197.0	194.5	198.8	204.5	217.6
52.5°	328.3	285.8	239.5	199.5	167.6	149.5	142.6	138.8	141.3	148.8	162.0
55°	271.4	232.0	190.1	148.8	118.2	101.3	93.2	90.7	93.2	101.3	114.4
57.5°	214.5	181.3	146.3	107.5	80.0	63.2	55.0	52.5	59.4	62.5	76.3
60°	167.6	140.7	110.7	78.8	55.0	41.9	33.8	31.9	35.0	40.6	51.9
62.5°	125.7	108.8	85.0	56.3	40.6	26.9	22.5	20.6	22.5	26.9	35.7
65°	91.3	78.2	59.4	41.3	27.5	20.0	15.0	13.8	15.6	18.8	26.3
67.5°	62.5	52.5	41.3	28.8	18.8	12.5	10.6	10.6	11.3	13.8	19.4
70°	40.6	34.4	26.3	18.8	12.5	9.4	8.1	6.9	8.1	10.0	13.1
72.5°	25.6	21.9	16.9	13.1	9.4	6.9	5.6	5.0	6.3	7.5	10.0
75°	15.6	11.9	8.8	6.9	5.0	5.0	5.0	2.5	3.1	5.0	6.3
77.5°	9.4	8.1	6.9	5.6	4.4	2.5	2.5	2.5	3.1	3.7	5.6
80°	5.0	4.4	3.1	3.1	2.5	1.9	2.5	1.9	1.3	3.1	3.7
82.5°	3.1	2.5	2.5	2.5	3.1	1.3	1.9	1.3	1.9	2.5	1.9
85°	1.9	1.9	1.9	1.3	3.1	1.3	1.3	0.6	0.6	1.3	1.3
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°	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1	1178.1
2.5°	1180.0	1179.4	1180.0	1179.4	1179.4	1179.4	1180.0	1180.0	1179.4	1179.4	1180.6
5°	1185.0	1185.0	1185.0	1184.4	1183.7	1183.7	1185.0	1185.0	1183.1	1185.0	1185.0
7.5°	1195.6	1193.8	1195.6	1193.1	1191.9	1192.5	1193.1	1191.9	1190.6	1191.3	1191.3
10°	1209.4	1207.5	1207.5	1205.6	1203.8	1202.5	1201.3	1198.1	1195.0	1194.4	1191.9
12.5°	1225.6	1222.5	1220.7	1216.9	1213.8	1209.4	1205.6	1200.6	1194.4	1190.0	1185.6
15°	1241.9	1236.9	1232.5	1226.3	1219.4	1211.9	1203.8	1195.6	1185.6	1176.9	1169.4
17.5°	1255.0	1248.2	1240.0	1230.0	1220.0	1208.8	1196.9	1185.0	1170.6	1159.4	1150.6
20°	1259.4	1249.4	1238.8	1225.6	1212.5	1196.9	1181.9	1166.2	1150.0	1138.1	1128.1
22.5°	1253.8	1241.9	1228.8	1215.0	1197.5	1180.6	1163.1	1145.0	1130.6	1114.3	1105.0
25°	1238.2	1223.8	1209.4	1193.1	1176.2	1157.5	1138.7	1120.0	1102.5	1093.7	1081.8
27.5°	1206.3	1190.6	1175.0	1158.1	1138.7	1120.0	1100.6	1082.4	1067.4	1055.6	1048.7
30°	1150.0	1131.8	1113.7	1095.6	1078.7	1059.3	1041.2	1026.2	1011.2	1001.8	994.9
32.5°	1063.7	1047.4	1029.3	1011.8	996.2	979.9	964.9	951.8	941.1	934.9	929.9
35°	947.4	931.1	917.4	904.9	891.7	884.8	875.5	868.0	863.6	861.1	860.5
37.5°	801.0	791.7	787.3	784.8	782.3	780.4	781.7	784.8	787.3	791.7	796.7
40°	644.7	652.8	655.3	664.1	672.2	682.9	694.7	708.5	719.7	734.1	744.1
42.5°	502.1	517.2	534.7	553.4	573.4	592.8	616.6	638.5	658.5	676.6	692.2
45°	385.8	409.0	435.2	462.1	489.0	517.2	545.9	572.8	596.6	615.9	632.2
47.5°	300.8	326.4	360.2	393.3	425.9	459.0	490.9	519.0	539.0	557.8	572.2
50°	238.2	267.6	304.5	342.7	378.3	413.3	447.1	473.4	493.4	508.4	519.0
52.5°	184.5	219.5	257.0	297.0	335.2	373.3	404.6	429.0	445.2	458.4	466.5
55°	137.6	172.0	212.0	253.3	292.0	328.9	358.3	379.6	394.0	401.5	405.8
57.5°	99.4	130.7	170.7	212.0	247.0	282.0	305.8	325.2	333.3	337.7	339.6
60°	72.5	101.3	136.9	172.6	205.7	233.9	254.5	267.6	273.9	276.4	275.8
62.5°	53.2	78.2	108.8	138.8	165.7	188.8	205.1	213.9	217.0	218.2	216.4
65°	40.6	60.0	86.3	109.4	130.1	146.9	158.8	164.5	166.3	165.7	164.5
67.5°	30.0	45.0	64.4	81.9	96.9	110.1	116.3	121.3	122.6	120.7	118.8
70°	21.3	33.1	46.9	58.8	70.0	77.5	84.4	85.0	85.0	84.4	83.2
72.5°	15.0	23.1	31.9	40.0	46.9	52.5	55.0	56.9	56.3	55.6	54.4
75°	10.0	14.4	23.1	25.0	31.3	33.1	35.7	35.7	36.3	34.4	34.4
77.5°	6.3	10.0	13.8	16.3	18.8	21.3	22.5	22.5	23.1	22.5	22.5
80°	3.7	6.3	7.5	11.3	11.3	13.1	13.8	14.4	13.1	15.0	13.1
82.5°	2.5	3.7	5.6	5.6	6.9	8.1	8.1	8.8	8.8	8.1	8.1
85°	1.9	2.5	3.1	3.7	3.7	4.4	3.7	3.7	4.4	5.0	4.4
87.5°	0.6	1.3	0.6	1.3	1.3	2.5	1.9	1.9	1.9	2.5	2.5
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: P245480

CATALOG NUMBER: LSR8B20D010 EC8B20850 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1178.1	1178.1	1178.1	1178.1
2.5°	1179.4	1180.0	1179.4	1179.4
5°	1185.0	1184.4	1185.0	1183.7
7.5°	1189.4	1189.4	1188.7	1188.7
10°	1189.4	1186.9	1186.9	1186.9
12.5°	1180.0	1176.9	1175.0	1173.7
15°	1163.7	1158.1	1155.6	1155.0
17.5°	1142.5	1137.5	1134.4	1132.5
20°	1118.1	1113.1	1109.3	1110.0
22.5°	1096.8	1091.2	1088.7	1087.4
25°	1075.6	1068.7	1066.8	1065.6
27.5°	1041.2	1037.4	1035.5	1033.7
30°	988.6	986.8	983.6	988.0
32.5°	928.0	924.9	922.4	924.2
35°	861.1	859.2	861.1	859.8
37.5°	799.8	801.7	804.2	805.4
40°	751.7	758.5	761.0	762.3
42.5°	703.5	711.6	716.6	719.7
45°	644.1	652.2	657.8	661.6
47.5°	582.8	589.7	595.3	594.7
50°	527.2	530.9	533.4	535.9
52.5°	470.9	470.9	471.5	471.5
55°	407.1	405.8	405.2	405.8
57.5°	337.0	335.8	335.2	333.3
60°	273.3	269.5	267.0	267.0
62.5°	213.9	209.5	207.6	207.0
65°	160.7	160.1	156.3	155.7
67.5°	116.3	113.8	111.3	111.9
70°	81.9	78.2	78.2	76.9
72.5°	53.2	51.3	50.6	50.6
75°	33.1	33.1	31.9	34.4
77.5°	21.9	21.9	21.3	21.9
80°	13.1	13.1	13.1	12.5
82.5°	8.1	8.8	8.1	8.1
85°	4.4	5.0	3.7	5.6
87.5°	2.5	3.1	2.5	3.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)