

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: P245468

Luminaire Tested: **LSR8B20D010 EC8B20835 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245468  
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 EC8B20835 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2242.0 lumens  
Efficiency: N/A  
Efficacy: 105.3 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

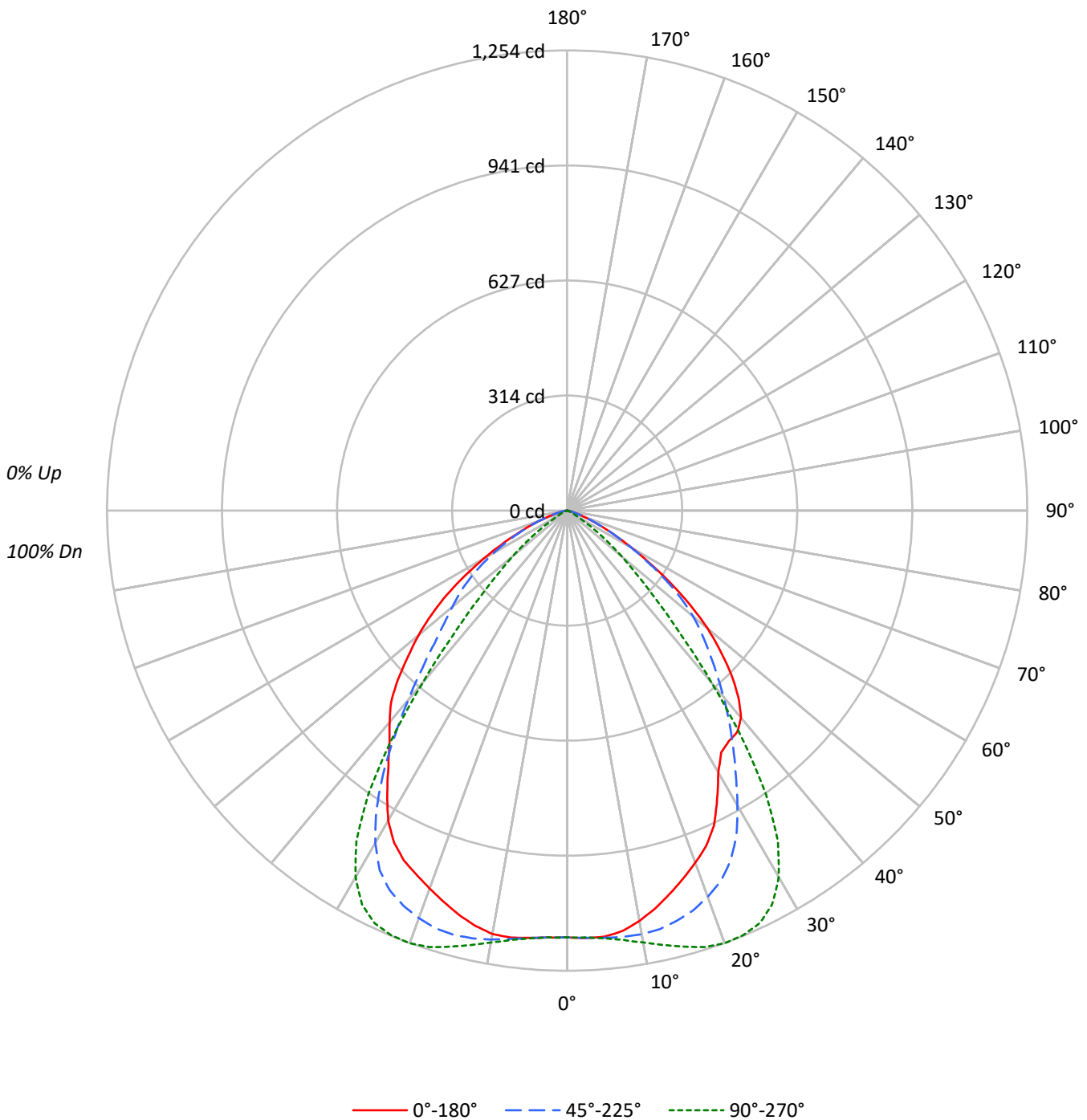
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	35866	35866	35866
5°	36077	36213	36173
10°	35549	37424	36688
15°	34510	39279	36400
20°	33508	41164	35959
25°	32221	42221	35793
30°	29322	41062	34731
35°	28888	35581	31952
40°	29671	24676	30291
45°	27622	14914	28485
50°	23958	9211	25382
55°	18386	4812	21542
60°	12526	1943	16257
65°	7793	992	11215
70°	4228	613	6843
75°	2204	298	4051
80°	994	337	2184
85°	672	212	1981



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.9	5.0
10°-20°	331.3	14.8
20°-30°	505.5	22.5
30°-40°	527.5	23.5
40°-50°	396.2	17.7
50°-60°	243.8	10.9
60°-70°	99.2	4.4
70°-80°	23.4	1.0
80°-90°	3.2	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°	948.7	42.3
0°-40°	1476.2	65.8
0°-60°	2116.2	94.4
0°-90°	2242.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2242.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1163	1163	1163	1163	1163	
5°	1166	1169	1170	1169	1169	110
15°	1081	1157	1230	1196	1140	305
25°	947	1053	1241	1143	1052	431
35°	767	789	945	874	849	485
45°	633	548	342	510	653	483
55°	342	325	90	325	401	307
65°	107	108	14	145	154	111
75°	18	18	2	33	34	22
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°	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1
2.5°	1166.2	1164.3	1166.2	1166.2	1166.8	1165.5	1166.2	1166.8	1165.5	1165.5	1165.5
5°	1165.5	1164.3	1165.5	1164.9	1166.2	1166.2	1167.4	1167.4	1168.6	1168.6	1170.5
7.5°	1155.7	1153.2	1155.7	1157.5	1158.8	1161.2	1164.3	1166.8	1169.2	1171.7	1174.8
10°	1135.3	1135.3	1137.1	1140.9	1144.6	1148.9	1154.4	1160.6	1166.8	1172.3	1177.9
12.5°	1110.0	1108.1	1111.8	1116.8	1122.3	1129.1	1137.8	1147.0	1156.9	1168.0	1176.7
15°	1081.0	1079.1	1083.4	1088.4	1095.2	1105.1	1115.5	1127.9	1142.1	1156.9	1171.1
17.5°	1051.3	1050.7	1055.0	1061.8	1067.4	1077.9	1091.5	1106.3	1122.3	1142.1	1160.6
20°	1021.1	1020.5	1024.8	1030.4	1037.8	1047.6	1061.2	1078.5	1097.6	1119.9	1141.5
22.5°	989.6	990.2	993.9	1000.1	1006.3	1016.8	1031.0	1048.3	1069.2	1093.3	1117.4
25°	947.0	943.9	948.9	955.0	965.5	974.2	987.8	1006.3	1027.9	1053.2	1081.6
27.5°	885.3	884.6	889.0	894.5	903.8	914.3	929.1	948.2	971.1	998.9	1026.6
30°	823.5	824.8	826.6	832.2	838.3	848.8	863.7	879.7	901.3	927.9	957.5
32.5°	781.6	781.6	784.0	787.7	792.1	797.6	808.1	819.8	836.5	855.0	876.6
35°	767.4	764.9	767.4	768.0	768.6	769.8	771.7	775.4	780.9	789.0	797.0
37.5°	761.2	759.3	759.3	756.9	753.8	750.1	745.1	739.6	733.4	725.4	719.2
40°	737.1	735.9	734.6	732.2	725.4	718.0	709.9	697.0	682.8	663.0	643.3
42.5°	690.8	689.6	689.0	684.0	677.8	669.2	659.9	646.4	628.5	603.1	574.7
45°	633.4	630.9	629.1	624.8	620.4	613.0	604.4	592.0	574.1	548.2	514.2
47.5°	566.7	565.5	564.9	563.0	558.7	554.4	548.8	538.9	522.9	498.2	463.0
50°	499.4	497.0	498.2	497.6	495.7	492.6	488.9	482.1	469.8	447.6	415.5
52.5°	422.3	422.3	421.7	423.5	424.1	423.5	424.1	416.7	406.2	389.5	362.4
55°	342.0	342.0	343.9	346.3	348.8	349.4	348.8	345.7	338.3	324.7	300.6
57.5°	266.7	265.5	269.2	272.9	275.3	277.8	275.9	273.5	269.2	258.0	239.5
60°	203.1	203.1	205.6	208.0	210.5	213.0	212.4	211.7	208.0	200.6	185.8
62.5°	149.4	150.0	150.0	151.9	154.3	156.8	158.7	156.8	155.0	150.0	140.1
65°	106.8	106.2	106.8	108.7	110.5	113.0	114.2	113.6	111.7	108.0	100.6
67.5°	71.6	71.0	73.5	74.1	75.3	77.8	77.2	77.8	77.2	74.1	67.9
70°	46.9	45.7	46.9	46.3	48.2	48.8	50.0	50.6	50.0	48.2	46.3
72.5°	29.0	28.4	29.0	29.6	30.3	30.9	32.1	32.1	31.5	30.3	27.8
75°	18.5	16.7	17.3	16.1	17.3	17.3	18.5	19.1	18.5	18.5	17.3
77.5°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.7	12.3	11.1	10.5
80°	5.6	5.6	6.2	6.2	6.2	6.8	6.2	6.2	6.2	6.8	4.9
82.5°	4.3	3.7	3.7	3.7	4.3	3.7	3.7	3.7	3.7	3.7	3.7
85°	1.9	2.5	1.9	1.2	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	1.2	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°	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1
2.5°	1166.2	1164.9	1164.9	1164.3	1165.5	1164.3	1164.9	1164.3	1164.3	1164.3	1164.3
5°	1170.5	1171.1	1169.9	1169.2	1171.1	1171.1	1171.1	1169.9	1169.9	1169.9	1169.9
7.5°	1176.7	1177.9	1178.5	1179.1	1180.4	1181.0	1181.0	1180.4	1179.7	1181.6	1179.1
10°	1183.4	1185.3	1189.0	1190.9	1193.9	1193.9	1195.2	1195.2	1193.9	1195.2	1194.6
12.5°	1181.0	1192.1	1198.3	1202.6	1206.9	1210.6	1211.8	1212.5	1211.8	1214.3	1211.8
15°	1185.3	1194.6	1204.4	1211.8	1219.9	1224.2	1225.4	1230.4	1231.6	1232.2	1228.5
17.5°	1178.5	1195.2	1205.7	1216.8	1228.5	1236.5	1243.9	1247.0	1247.7	1248.9	1243.9
20°	1163.1	1181.6	1197.6	1213.7	1227.3	1239.6	1245.8	1254.4	1252.0	1256.9	1250.1
22.5°	1142.1	1163.1	1183.4	1204.4	1218.6	1233.5	1246.4	1252.6	1255.7	1255.7	1248.3
25°	1108.8	1133.4	1155.7	1177.3	1198.9	1216.8	1231.6	1240.9	1242.7	1242.1	1233.5
27.5°	1056.9	1083.4	1109.4	1134.1	1160.6	1181.6	1198.9	1210.0	1213.1	1213.1	1203.8
30°	985.3	1013.7	1039.0	1068.6	1095.8	1119.2	1143.3	1153.2	1158.8	1158.8	1148.3
32.5°	900.1	924.2	947.6	976.6	1006.3	1032.8	1055.7	1069.2	1076.0	1075.4	1066.2
35°	807.5	819.2	837.1	858.7	885.3	910.0	932.2	945.2	956.9	956.3	947.6
37.5°	714.9	711.8	713.7	721.7	738.3	755.6	772.9	785.3	795.1	799.5	797.6
40°	624.1	608.1	592.6	587.1	588.3	594.5	603.8	613.0	624.1	629.7	632.2
42.5°	542.6	515.5	488.3	467.9	456.2	452.5	456.8	459.9	466.7	474.7	482.8
45°	477.2	440.8	405.0	373.5	353.7	342.0	339.5	342.0	345.7	353.7	364.2
47.5°	423.5	380.9	340.8	305.6	276.6	261.1	256.8	255.6	259.3	266.7	280.9
50°	376.0	333.4	288.9	248.2	217.9	200.6	194.5	192.0	196.3	201.9	214.8
52.5°	324.1	282.1	236.4	196.9	165.4	147.5	140.8	137.1	139.5	146.9	159.9
55°	267.9	229.0	187.7	146.9	116.7	100.0	92.0	89.5	92.0	100.0	113.0
57.5°	211.7	179.0	144.5	106.2	79.0	62.4	54.3	51.9	58.7	61.7	75.3
60°	165.4	138.9	109.3	77.8	54.3	41.4	33.3	31.5	34.6	40.1	51.2
62.5°	124.1	107.4	84.0	55.6	40.1	26.5	22.2	20.4	22.2	26.5	35.2
65°	90.1	77.2	58.7	40.7	27.2	19.8	14.8	13.6	15.4	18.5	25.9
67.5°	61.7	51.9	40.7	28.4	18.5	12.3	10.5	10.5	11.1	13.6	19.1
70°	40.1	34.0	25.9	18.5	12.3	9.3	8.0	6.8	8.0	9.9	13.0
72.5°	25.3	21.6	16.7	13.0	9.3	6.8	5.6	4.9	6.2	7.4	9.9
75°	15.4	11.7	8.6	6.8	4.9	4.9	4.9	2.5	3.1	4.9	6.2
77.5°	9.3	8.0	6.8	5.6	4.3	2.5	2.5	2.5	3.1	3.7	5.6
80°	4.9	4.3	3.1	3.1	2.5	1.9	2.5	1.9	1.2	3.1	3.7
82.5°	3.1	2.5	2.5	2.5	3.1	1.2	1.9	1.2	1.9	2.5	1.9
85°	1.9	1.9	1.9	1.2	3.1	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°	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1	1163.1
2.5°	1164.9	1164.3	1164.9	1164.3	1164.3	1164.3	1164.9	1164.9	1164.3	1164.3	1165.5
5°	1169.9	1169.9	1169.9	1169.2	1168.6	1168.6	1169.9	1169.9	1168.0	1169.9	1169.9
7.5°	1180.4	1178.5	1180.4	1177.9	1176.7	1177.3	1177.9	1176.7	1175.4	1176.0	1176.0
10°	1193.9	1192.1	1192.1	1190.2	1188.4	1187.1	1185.9	1182.8	1179.7	1179.1	1176.7
12.5°	1210.0	1206.9	1205.1	1201.3	1198.3	1193.9	1190.2	1185.3	1179.1	1174.8	1170.5
15°	1226.0	1221.1	1216.8	1210.6	1203.8	1196.4	1188.4	1180.4	1170.5	1161.8	1154.4
17.5°	1239.0	1232.2	1224.2	1214.3	1204.4	1193.3	1181.6	1169.9	1155.7	1144.6	1135.9
20°	1243.3	1233.5	1223.0	1210.0	1197.0	1181.6	1166.8	1151.3	1135.3	1123.6	1113.7
22.5°	1237.8	1226.0	1213.1	1199.5	1182.2	1165.5	1148.3	1130.4	1116.2	1100.1	1090.9
25°	1222.3	1208.1	1193.9	1177.9	1161.2	1142.7	1124.2	1105.7	1088.4	1079.7	1068.0
27.5°	1190.9	1175.4	1160.0	1143.3	1124.2	1105.7	1086.5	1068.6	1053.8	1042.1	1035.3
30°	1135.3	1117.4	1099.5	1081.6	1064.9	1045.8	1027.9	1013.1	998.2	989.0	982.2
32.5°	1050.1	1034.1	1016.2	998.9	983.4	967.4	952.6	939.6	929.1	922.9	918.0
35°	935.3	919.2	905.6	893.3	880.3	873.5	864.3	856.9	852.5	850.1	849.5
37.5°	790.8	781.6	777.2	774.8	772.3	770.5	771.7	774.8	777.2	781.6	786.5
40°	636.5	644.5	647.0	655.6	663.6	674.1	685.9	699.5	710.6	724.8	734.6
42.5°	495.7	510.5	527.8	546.3	566.1	585.2	608.7	630.3	650.1	668.0	683.4
45°	380.9	403.7	429.7	456.2	482.8	510.5	538.9	565.5	588.9	608.1	624.1
47.5°	296.9	322.3	355.6	388.3	420.4	453.1	484.6	512.4	532.1	550.7	564.9
50°	235.2	264.2	300.6	338.3	373.5	408.1	441.4	467.3	487.1	501.9	512.4
52.5°	182.1	216.7	253.7	293.2	330.9	368.6	399.4	423.5	439.6	452.5	460.5
55°	135.8	169.8	209.3	250.0	288.3	324.7	353.7	374.7	388.9	396.3	400.7
57.5°	98.2	129.0	168.5	209.3	243.8	278.4	301.9	321.0	329.0	333.4	335.2
60°	71.6	100.0	135.2	170.4	203.1	230.9	251.3	264.2	270.4	272.9	272.2
62.5°	52.5	77.2	107.4	137.1	163.6	186.4	202.5	211.1	214.2	215.4	213.6
65°	40.1	59.3	85.2	108.0	128.4	145.1	156.8	162.4	164.2	163.6	162.4
67.5°	29.6	44.5	63.6	80.9	95.7	108.7	114.8	119.8	121.0	119.2	117.3
70°	21.0	32.7	46.3	58.0	69.1	76.6	83.3	84.0	84.0	83.3	82.1
72.5°	14.8	22.8	31.5	39.5	46.3	51.9	54.3	56.2	55.6	54.9	53.7
75°	9.9	14.2	22.8	24.7	30.9	32.7	35.2	35.2	35.8	34.0	34.0
77.5°	6.2	9.9	13.6	16.1	18.5	21.0	22.2	22.2	22.8	22.2	22.2
80°	3.7	6.2	7.4	11.1	11.1	13.0	13.6	14.2	13.0	14.8	13.0
82.5°	2.5	3.7	5.6	5.6	6.8	8.0	8.0	8.6	8.6	8.0	8.0
85°	1.9	2.5	3.1	3.7	3.7	4.3	3.7	3.7	4.3	4.9	4.3
87.5°	0.6	1.2	0.6	1.2	1.2	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: P245468

CATALOG NUMBER: LSR8B20D010 EC8B20835 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1163.1	1163.1	1163.1	1163.1
2.5°	1164.3	1164.9	1164.3	1164.3
5°	1169.9	1169.2	1169.9	1168.6
7.5°	1174.2	1174.2	1173.6	1173.6
10°	1174.2	1171.7	1171.7	1171.7
12.5°	1164.9	1161.8	1160.0	1158.8
15°	1148.9	1143.3	1140.9	1140.2
17.5°	1127.9	1123.0	1119.9	1118.0
20°	1103.8	1098.9	1095.2	1095.8
22.5°	1082.8	1077.3	1074.8	1073.6
25°	1061.8	1055.0	1053.2	1052.0
27.5°	1027.9	1024.2	1022.3	1020.5
30°	976.0	974.2	971.1	975.4
32.5°	916.1	913.0	910.6	912.4
35°	850.1	848.2	850.1	848.8
37.5°	789.6	791.4	793.9	795.1
40°	742.1	748.8	751.3	752.5
42.5°	694.5	702.5	707.5	710.6
45°	635.9	643.9	649.4	653.2
47.5°	575.4	582.2	587.7	587.1
50°	520.4	524.1	526.6	529.1
52.5°	464.9	464.9	465.5	465.5
55°	401.9	400.7	400.0	400.7
57.5°	332.7	331.5	330.9	329.0
60°	269.8	266.1	263.6	263.6
62.5°	211.1	206.8	205.0	204.3
65°	158.7	158.0	154.3	153.7
67.5°	114.8	112.4	109.9	110.5
70°	80.9	77.2	77.2	75.9
72.5°	52.5	50.6	50.0	50.0
75°	32.7	32.7	31.5	34.0
77.5°	21.6	21.6	21.0	21.6
80°	13.0	13.0	13.0	12.3
82.5°	8.0	8.6	8.0	8.0
85°	4.3	4.9	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)