

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: P244616

Luminaire Tested: **LSR8B20D010 EC8B20850 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244616
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 EC8B20850 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2253.0 lumens
Efficiency: N/A
Efficacy: 105.8 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

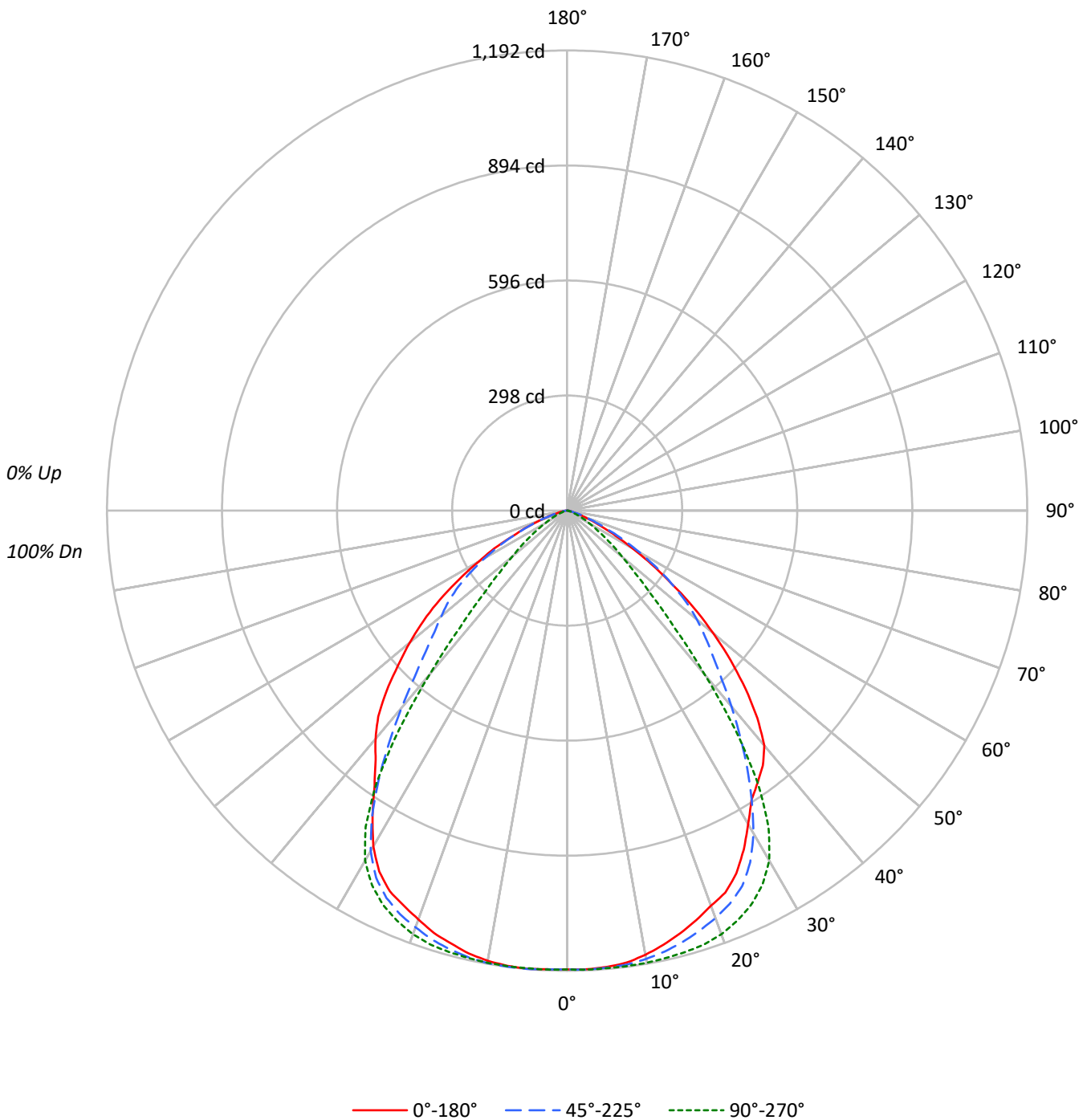
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	36655	36655	36655
5°	36736	36835	36876
10°	36582	37243	37083
15°	36176	37785	37073
20°	35742	38318	36976
25°	35280	38362	37015
30°	33374	37284	35760
35°	32378	32404	32739
40°	31978	22293	31080
45°	28494	13384	28882
50°	23694	8909	25531
55°	17768	6140	21644
60°	12045	4095	16331
65°	7260	2656	11222
70°	4030	1443	6906
75°	1823	608	3574
80°	1580	675	2486
85°	1804	885	2477



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.4	5.0
10°-20°	329.5	14.6
20°-30°	500.1	22.2
30°-40°	525.2	23.3
40°-50°	393.8	17.5
50°-60°	252.7	11.2
60°-70°	108.1	4.8
70°-80°	25.5	1.1
80°-90°	4.7	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°	943.0	41.9
0°-40°	1468.2	65.2
0°-60°	2114.6	93.9
0°-90°	2253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2253.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1189	1189	1189	1189	1189	
5°	1187	1189	1190	1192	1191	113
15°	1133	1157	1184	1176	1161	320
25°	1037	1073	1128	1107	1088	474
35°	860	812	861	850	870	540
45°	653	534	307	519	662	500
55°	330	330	114	345	403	300
65°	100	117	36	151	154	106
75°	15	18	5	31	30	22
85°	5	3	2	5	7	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°	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7
2.5°	1189.4	1190.6	1190.0	1190.0	1189.4	1190.0	1190.0	1191.3	1191.3	1190.0	1189.4
5°	1186.8	1188.1	1188.1	1186.8	1186.8	1190.0	1188.1	1189.4	1189.4	1188.7	1188.7
7.5°	1181.1	1181.1	1183.6	1181.7	1181.7	1183.6	1183.0	1184.3	1185.5	1186.2	1186.2
10°	1168.3	1169.6	1170.2	1170.2	1170.9	1172.8	1174.1	1176.6	1177.9	1179.2	1179.8
12.5°	1152.4	1154.3	1154.9	1154.3	1156.2	1158.7	1161.9	1165.1	1167.0	1169.6	1171.5
15°	1133.2	1133.2	1134.5	1136.4	1137.7	1141.5	1144.7	1148.5	1153.6	1156.8	1160.0
17.5°	1112.2	1113.4	1115.3	1115.3	1117.9	1124.3	1126.2	1131.9	1137.7	1140.9	1147.3
20°	1089.2	1090.5	1092.4	1093.7	1096.8	1102.0	1105.8	1110.9	1117.3	1123.0	1129.4
22.5°	1071.3	1068.8	1070.0	1071.3	1074.5	1079.0	1083.5	1089.8	1096.2	1102.0	1108.3
25°	1036.9	1037.5	1039.4	1040.7	1044.5	1048.4	1053.5	1061.1	1066.9	1073.2	1080.3
27.5°	990.3	990.9	994.1	994.1	997.3	1003.7	1006.9	1013.3	1020.9	1027.3	1035.6
30°	937.3	938.6	938.6	941.2	943.1	946.3	949.4	955.8	959.7	965.4	976.9
32.5°	888.8	890.1	889.5	888.8	886.9	886.3	885.6	886.9	888.2	890.1	894.6
35°	860.1	856.9	854.4	849.9	844.8	838.4	832.7	825.0	818.0	812.3	805.9
37.5°	832.7	832.0	828.2	821.8	811.6	800.1	786.7	770.2	753.6	735.7	718.5
40°	794.4	792.5	789.3	780.4	768.9	754.8	737.0	716.6	689.7	662.3	634.2
42.5°	729.3	730.0	726.1	719.1	708.3	694.9	676.4	654.0	625.3	592.8	556.4
45°	653.4	653.4	652.1	646.4	638.7	627.9	613.8	595.3	567.3	534.1	495.1
47.5°	574.3	574.9	573.0	571.7	568.5	561.5	551.3	537.3	517.5	485.6	446.6
50°	493.9	493.9	497.1	496.4	496.4	493.9	489.4	481.1	463.9	438.4	402.0
52.5°	413.5	414.7	416.7	419.2	422.4	427.5	422.4	418.6	407.7	387.9	356.7
55°	330.5	331.8	335.0	339.4	343.3	348.4	349.7	349.7	343.9	330.5	306.9
57.5°	259.7	257.8	260.3	264.2	269.3	274.4	278.2	282.7	282.0	273.1	254.0
60°	195.3	195.9	197.8	201.6	205.5	209.9	215.0	218.9	220.8	216.3	204.2
62.5°	142.3	142.3	144.8	148.7	150.6	157.0	160.2	162.1	164.0	163.3	155.7
65°	99.5	100.8	102.1	104.0	105.9	109.7	111.7	115.5	116.8	117.4	111.7
67.5°	70.2	68.3	69.6	70.8	72.7	75.3	79.1	79.1	81.0	81.0	77.2
70°	44.7	44.7	45.3	47.2	48.5	49.1	50.4	51.7	53.6	53.0	53.0
72.5°	30.0	29.4	30.0	30.6	31.3	33.2	33.2	33.8	35.1	35.7	33.2
75°	15.3	16.0	17.2	16.6	18.5	17.2	17.9	19.8	19.1	17.9	17.9
77.5°	12.8	12.8	12.8	12.1	13.4	13.4	12.8	14.0	13.4	13.4	12.8
80°	8.9	9.6	8.9	8.3	8.9	8.3	8.3	8.3	8.3	8.3	7.7
82.5°	7.0	5.7	6.4	5.7	6.4	6.4	5.7	5.1	5.1	5.7	5.1
85°	5.1	3.8	4.5	4.5	3.8	3.8	3.8	3.8	3.8	3.2	3.2
87.5°	3.2	1.9	1.9	1.9	2.5	2.5	2.5	1.9	2.5	2.5	1.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7
2.5°	1190.6	1190.0	1191.3	1190.6	1190.6	1190.0	1190.6	1190.0	1191.3	1188.7	1189.4
5°	1190.6	1189.4	1190.0	1190.6	1191.3	1190.0	1190.0	1190.0	1191.3	1190.0	1190.6
7.5°	1188.1	1187.4	1189.4	1190.6	1190.0	1189.4	1190.6	1190.0	1191.3	1190.6	1191.9
10°	1183.0	1183.6	1184.9	1186.8	1187.4	1188.1	1189.4	1189.4	1191.3	1188.7	1190.0
12.5°	1175.3	1177.9	1181.1	1182.3	1184.9	1184.9	1186.2	1186.8	1188.1	1187.4	1189.4
15°	1165.8	1168.9	1172.8	1176.0	1179.2	1181.1	1183.0	1183.6	1185.5	1183.6	1184.3
17.5°	1154.3	1158.1	1163.8	1167.7	1172.8	1174.7	1177.2	1178.5	1180.4	1179.2	1179.8
20°	1138.3	1142.8	1149.2	1154.9	1158.1	1162.6	1165.8	1167.7	1168.9	1167.7	1168.3
22.5°	1116.0	1122.4	1130.7	1135.1	1141.5	1145.3	1146.0	1150.4	1153.6	1150.4	1151.7
25°	1089.8	1096.2	1102.6	1112.2	1117.9	1122.4	1126.8	1127.5	1130.7	1130.0	1129.4
27.5°	1046.4	1054.7	1065.6	1073.2	1080.9	1087.9	1093.0	1094.3	1097.5	1096.2	1096.8
30°	987.1	996.0	1006.2	1018.4	1029.2	1036.2	1042.6	1047.1	1050.3	1048.4	1047.7
32.5°	902.9	911.8	922.7	934.8	947.5	957.7	965.4	971.1	975.0	973.7	970.5
35°	806.5	809.1	816.1	825.7	836.5	847.4	854.4	860.8	865.2	866.5	866.5
37.5°	707.6	699.3	694.2	694.2	700.6	705.1	711.5	715.3	722.3	724.8	726.8
40°	611.9	592.8	574.9	561.5	552.6	551.9	551.9	553.8	560.2	568.5	576.2
42.5°	526.4	495.8	468.3	443.5	425.6	415.4	410.9	411.6	416.7	424.3	437.1
45°	458.1	419.9	385.4	355.4	331.2	315.2	307.6	306.9	310.7	319.7	333.7
47.5°	405.2	364.3	325.4	291.0	264.8	247.6	238.6	236.1	238.6	246.9	263.5
50°	361.2	319.0	278.8	243.1	215.0	197.2	188.9	185.7	188.9	195.9	212.5
52.5°	320.3	276.9	239.3	204.8	174.8	159.5	150.6	148.7	150.6	158.9	172.3
55°	273.1	236.1	199.1	164.6	138.5	123.2	116.1	114.2	116.1	123.8	137.8
57.5°	226.5	194.6	162.1	130.8	108.5	95.1	88.7	86.1	90.6	95.7	112.3
60°	183.1	157.6	130.2	102.7	84.2	72.1	67.0	66.4	67.6	74.0	85.5
62.5°	143.6	122.5	100.8	78.5	63.2	58.1	51.7	51.1	52.3	56.1	65.1
65°	103.4	90.0	73.4	57.4	45.3	38.3	35.7	36.4	37.6	40.2	48.5
67.5°	72.1	62.5	51.1	40.2	31.3	28.1	25.5	24.9	25.5	30.0	34.5
70°	48.5	42.7	34.5	30.6	21.7	17.2	17.9	16.0	18.5	18.5	22.3
72.5°	31.9	28.1	23.0	17.9	15.3	12.1	12.1	11.5	12.8	13.4	16.6
75°	16.6	12.8	12.8	8.9	6.4	3.2	5.7	5.1	4.5	5.1	6.4
77.5°	11.5	9.6	8.9	7.0	6.4	5.1	5.1	5.1	5.1	5.7	6.4
80°	7.0	7.0	5.1	4.5	3.8	3.2	3.8	3.8	3.8	3.8	4.5
82.5°	4.5	3.8	3.8	3.2	3.2	2.5	2.5	2.5	2.5	2.5	3.8
85°	3.8	2.5	2.5	1.9	2.5	4.5	1.9	2.5	2.5	2.5	1.9
87.5°	1.3	1.9	1.9	1.9	1.3	0.6	1.3	1.9	1.9	3.2	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7	1188.7
2.5°	1190.6	1191.3	1191.3	1190.6	1190.6	1189.4	1191.9	1190.0	1190.6	1193.2	1191.3
5°	1191.9	1192.6	1192.6	1191.9	1191.9	1191.9	1192.6	1192.6	1191.9	1191.3	1192.6
7.5°	1194.5	1193.8	1193.8	1192.6	1192.6	1191.3	1192.6	1190.6	1191.9	1190.6	1192.6
10°	1191.3	1191.9	1191.3	1190.6	1190.6	1190.0	1190.0	1188.1	1188.7	1186.8	1188.1
12.5°	1189.4	1188.7	1188.7	1187.4	1186.2	1184.9	1184.3	1182.3	1182.3	1177.9	1179.8
15°	1184.3	1184.9	1183.0	1180.4	1179.2	1176.0	1174.7	1172.1	1169.6	1166.4	1167.0
17.5°	1179.8	1177.9	1175.3	1172.8	1167.7	1165.1	1162.6	1158.7	1157.5	1153.6	1152.4
20°	1166.4	1165.1	1161.9	1157.5	1154.3	1148.5	1146.0	1142.2	1139.0	1135.1	1133.2
22.5°	1149.2	1147.9	1144.1	1139.6	1134.5	1131.9	1129.4	1122.4	1119.2	1115.3	1114.7
25°	1127.5	1125.6	1121.7	1116.6	1114.1	1107.1	1104.5	1099.4	1098.1	1094.3	1093.7
27.5°	1094.3	1091.7	1087.3	1080.9	1076.4	1072.0	1069.4	1065.6	1064.3	1060.5	1059.8
30°	1044.5	1041.3	1032.4	1029.9	1022.2	1017.7	1017.7	1012.6	1013.3	1010.7	1010.7
32.5°	966.0	960.9	953.9	948.8	943.7	941.2	941.2	939.2	940.5	940.5	941.8
35°	862.0	855.0	851.2	848.0	848.0	850.5	858.2	860.1	864.0	867.1	869.7
37.5°	728.7	728.0	732.5	736.3	745.9	756.8	770.2	781.6	792.5	800.1	807.8
40°	584.5	600.4	613.2	631.1	645.7	666.8	691.0	710.8	729.3	742.7	756.8
42.5°	456.2	476.6	503.4	529.6	555.8	584.5	616.4	643.8	668.1	686.6	701.2
45°	355.4	383.5	416.0	449.2	483.0	518.8	551.9	580.0	605.5	624.7	639.4
47.5°	286.5	317.1	354.1	390.5	428.8	466.4	503.4	527.7	548.7	564.1	577.5
50°	236.7	269.3	308.2	349.7	387.9	425.6	457.5	481.1	498.3	511.7	520.0
52.5°	197.8	232.3	273.7	315.2	353.5	387.9	416.7	434.5	448.6	458.1	465.8
55°	163.3	196.5	235.5	274.4	312.0	344.6	368.2	381.6	392.4	398.2	402.6
57.5°	133.4	164.0	199.7	235.5	268.0	294.8	313.3	326.7	331.8	336.3	335.6
60°	104.7	133.4	165.9	196.5	224.6	246.3	259.7	267.4	271.2	273.1	271.8
62.5°	82.3	108.5	133.4	160.2	180.6	199.1	211.8	211.8	213.8	214.4	216.3
65°	61.2	81.0	102.7	122.5	139.1	151.2	158.2	160.2	162.7	162.1	160.8
67.5°	45.3	60.0	75.9	90.6	102.1	109.7	114.8	119.3	118.7	117.4	116.8
70°	31.3	40.8	54.9	63.8	72.1	79.8	81.0	81.7	82.3	82.9	81.7
72.5°	21.7	28.7	36.4	44.0	49.1	52.3	55.5	56.1	56.1	56.1	55.5
75°	10.9	14.7	21.7	24.9	29.4	30.6	33.2	33.2	35.1	32.5	31.9
77.5°	9.6	11.5	15.3	17.9	19.8	21.7	22.3	24.2	23.6	22.3	23.0
80°	5.7	7.0	9.6	10.9	13.4	14.0	14.7	15.3	14.7	15.3	15.3
82.5°	4.5	5.1	6.4	6.4	8.3	8.3	8.9	8.9	9.6	9.6	9.6
85°	2.5	4.5	3.8	7.7	5.1	5.1	6.4	7.7	6.4	6.4	7.7
87.5°	2.5	2.5	1.9	2.5	2.5	2.5	3.2	3.8	3.8	4.5	3.8
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: P244616

CATALOG NUMBER: LSR8B20D010 EC8B20850 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1188.7	1188.7	1188.7	1188.7
2.5°	1190.6	1191.9	1190.0	1189.4
5°	1192.6	1192.6	1191.3	1191.3
7.5°	1192.6	1192.6	1190.6	1189.4
10°	1187.4	1187.4	1185.5	1184.3
12.5°	1177.9	1177.9	1177.2	1175.3
15°	1165.8	1165.8	1163.2	1161.3
17.5°	1149.2	1150.4	1147.3	1147.3
20°	1131.3	1130.7	1128.1	1126.8
22.5°	1112.8	1111.5	1110.9	1107.1
25°	1093.0	1091.7	1089.8	1087.9
27.5°	1059.2	1058.6	1056.6	1054.1
30°	1007.5	1006.9	1004.3	1004.3
32.5°	940.5	939.9	937.3	938.0
35°	871.0	873.5	872.2	869.7
37.5°	812.9	814.8	816.1	814.8
40°	764.4	770.2	770.8	772.1
42.5°	712.7	720.4	722.9	724.2
45°	650.8	657.9	663.6	662.3
47.5°	587.7	592.8	597.9	594.0
50°	527.0	530.2	532.2	532.2
52.5°	469.6	469.6	469.0	469.6
55°	403.9	403.9	401.4	402.6
57.5°	335.0	336.3	334.3	331.2
60°	271.2	268.0	266.7	264.8
62.5°	211.2	211.2	206.7	212.5
65°	158.2	156.3	154.4	153.8
67.5°	114.8	114.2	112.3	111.7
70°	81.0	78.5	77.8	76.6
72.5°	54.2	54.2	53.0	53.0
75°	33.2	30.0	29.4	30.0
77.5°	23.0	22.3	22.3	21.7
80°	15.3	14.7	16.0	14.0
82.5°	9.6	10.2	9.6	10.2
85°	6.4	7.7	7.0	7.0
87.5°	3.8	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)