

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: P244214

Luminaire Tested: **LSR8B20D010 EC8B20950 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244214
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 EC8B20950 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2126.0 lumens
Efficiency: N/A
Efficacy: 99.8 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

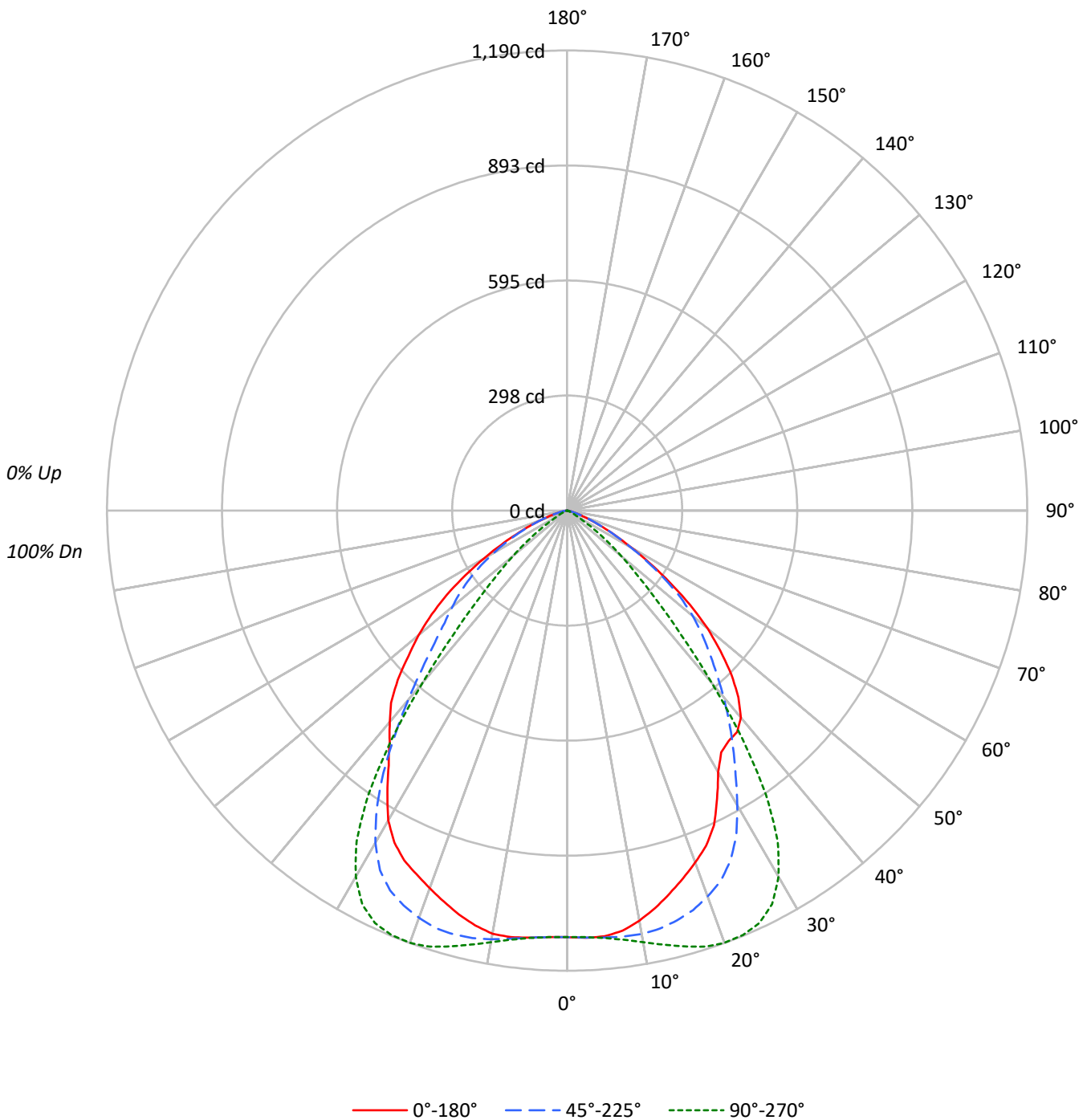
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	34009	34009	34009
5°	34210	34337	34303
10°	33711	35486	34791
15°	32722	37246	34516
20°	31775	39034	34098
25°	30554	40036	33939
30°	27805	38936	32933
35°	27394	33740	30300
40°	28138	23400	28725
45°	26192	14142	27011
50°	22720	8736	24068
55°	17435	4564	20424
60°	11878	1844	15418
65°	7391	941	10638
70°	4012	577	6491
75°	2097	274	3836
80°	941	320	2078
85°	637	212	1875



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.1	5.0
10°-20°	314.2	14.8
20°-30°	479.3	22.5
30°-40°	500.2	23.5
40°-50°	375.7	17.7
50°-60°	231.2	10.9
60°-70°	94.1	4.4
70°-80°	22.2	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°	899.6	42.3
0°-40°	1399.8	65.8
0°-60°	2006.7	94.4
0°-90°	2126.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2126.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1103	1103	1103	1103	1103	
5°	1105	1108	1109	1108	1108	105
15°	1025	1097	1167	1134	1081	289
25°	898	999	1177	1084	998	408
35°	728	748	896	828	805	459
45°	601	520	324	484	619	458
55°	324	308	85	308	380	292
65°	101	102	13	138	146	106
75°	18	18	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°	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9
2.5°	1105.8	1104.1	1105.8	1105.8	1106.4	1105.2	1105.8	1106.4	1105.2	1105.2	1105.2
5°	1105.2	1104.1	1105.2	1104.7	1105.8	1105.8	1107.0	1107.0	1108.2	1108.2	1109.9
7.5°	1095.9	1093.5	1095.9	1097.6	1098.8	1101.1	1104.1	1106.4	1108.8	1111.1	1114.0
10°	1076.6	1076.6	1078.3	1081.8	1085.3	1089.4	1094.7	1100.6	1106.4	1111.7	1116.9
12.5°	1052.6	1050.8	1054.3	1059.0	1064.3	1070.7	1078.9	1087.7	1097.0	1107.6	1115.8
15°	1025.0	1023.3	1027.4	1032.1	1038.5	1047.9	1057.8	1069.5	1083.0	1097.0	1110.5
17.5°	996.9	996.4	1000.4	1006.9	1012.2	1022.1	1035.0	1049.0	1064.3	1083.0	1100.6
20°	968.3	967.7	971.8	977.0	984.1	993.4	1006.3	1022.7	1040.8	1061.9	1082.4
22.5°	938.4	939.0	942.5	948.4	954.2	964.2	977.6	994.0	1013.9	1036.7	1059.6
25°	898.0	895.1	899.8	905.6	915.6	923.8	936.7	954.2	974.7	998.7	1025.6
27.5°	839.5	838.9	843.0	848.2	857.0	867.0	881.0	899.2	920.8	947.2	973.5
30°	780.9	782.1	783.9	789.1	795.0	804.9	819.0	834.2	854.7	879.9	908.0
32.5°	741.1	741.1	743.5	747.0	751.1	756.3	766.3	777.4	793.2	810.8	831.3
35°	727.7	725.3	727.7	728.2	728.8	730.0	731.7	735.3	740.5	748.1	755.8
37.5°	721.8	720.0	720.0	717.7	714.8	711.3	706.6	701.3	695.5	687.8	682.0
40°	699.0	697.8	696.6	694.3	687.8	680.8	673.2	660.9	647.5	628.7	610.0
42.5°	655.1	653.9	653.3	648.6	642.8	634.6	625.8	612.9	595.9	571.9	545.0
45°	600.6	598.3	596.5	592.4	588.3	581.3	573.1	561.4	544.4	519.8	487.6
47.5°	537.4	536.2	535.6	533.9	529.8	525.7	520.4	511.1	495.8	472.4	439.1
50°	473.6	471.3	472.4	471.8	470.1	467.2	463.6	457.2	445.5	424.4	394.0
52.5°	400.4	400.4	399.8	401.6	402.2	401.6	402.2	395.2	385.2	369.4	343.6
55°	324.3	324.3	326.1	328.4	330.8	331.3	330.8	327.8	320.8	307.9	285.1
57.5°	252.9	251.7	255.2	258.7	261.1	263.4	261.7	259.3	255.2	244.7	227.1
60°	192.6	192.6	194.9	197.3	199.6	202.0	201.4	200.8	197.3	190.2	176.2
62.5°	141.7	142.3	142.3	144.0	146.3	148.7	150.4	148.7	146.9	142.3	132.9
65°	101.3	100.7	101.3	103.0	104.8	107.1	108.3	107.7	106.0	102.4	95.4
67.5°	67.9	67.3	69.7	70.2	71.4	73.8	73.2	73.8	73.2	70.2	64.4
70°	44.5	43.3	44.5	43.9	45.7	46.3	47.4	48.0	47.4	45.7	43.9
72.5°	27.5	26.9	27.5	28.1	28.7	29.3	30.4	30.4	29.9	28.7	26.3
75°	17.6	15.8	16.4	15.2	16.4	16.4	17.6	18.1	17.6	17.6	16.4
77.5°	10.5	10.5	10.5	10.5	10.5	10.5	10.5	11.1	11.7	10.5	10.0
80°	5.3	5.3	5.9	5.9	5.9	6.4	5.9	5.9	5.9	6.4	4.7
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°	1.8	2.3	1.8	1.2	1.8	1.8	2.3	1.8	1.8	1.8	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°	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9
2.5°	1105.8	1104.7	1104.7	1104.1	1105.2	1104.1	1104.7	1104.1	1104.1	1105.2	1104.1
5°	1109.9	1110.5	1109.3	1108.8	1110.5	1110.5	1110.5	1109.3	1109.3	1109.9	1109.3
7.5°	1115.8	1116.9	1117.5	1118.1	1119.3	1119.9	1119.9	1119.3	1118.7	1120.5	1118.1
10°	1122.2	1124.0	1127.5	1129.2	1132.2	1132.2	1133.3	1133.3	1132.2	1133.3	1132.8
12.5°	1119.9	1130.4	1136.3	1140.4	1144.5	1148.0	1149.1	1149.7	1149.1	1151.5	1149.1
15°	1124.0	1132.8	1142.1	1149.1	1156.8	1160.8	1162.0	1166.7	1167.9	1168.5	1165.0
17.5°	1117.5	1133.3	1143.3	1153.8	1165.0	1172.6	1179.6	1182.5	1183.1	1184.3	1179.6
20°	1102.9	1120.5	1135.7	1150.9	1163.8	1175.5	1181.3	1189.5	1187.2	1191.9	1185.4
22.5°	1083.0	1102.9	1122.2	1142.1	1155.6	1169.6	1181.9	1187.8	1190.7	1190.7	1183.7
25°	1051.4	1074.8	1095.9	1116.4	1136.9	1153.8	1167.9	1176.7	1178.4	1177.8	1169.6
27.5°	1002.2	1027.4	1052.0	1075.4	1100.6	1120.5	1136.9	1147.4	1150.3	1150.3	1141.5
30°	934.3	961.2	985.2	1013.3	1039.1	1061.3	1084.2	1093.5	1098.8	1098.8	1088.9
32.5°	853.5	876.3	898.6	926.1	954.2	979.4	1001.0	1013.9	1020.4	1019.8	1011.0
35°	765.7	776.8	793.8	814.3	839.5	862.9	884.0	896.3	907.4	906.8	898.6
37.5°	677.9	675.0	676.7	684.3	700.1	716.5	732.9	744.6	754.0	758.1	756.3
40°	591.8	576.6	562.0	556.7	557.9	563.7	572.5	581.3	591.8	597.1	599.5
42.5°	514.6	488.8	463.0	443.7	432.6	429.1	433.2	436.1	442.6	450.2	457.8
45°	452.5	418.0	384.0	354.2	335.4	324.3	322.0	324.3	327.8	335.4	345.4
47.5°	401.6	361.2	323.1	289.8	262.3	247.6	243.5	242.4	245.9	252.9	266.4
50°	356.5	316.1	274.0	235.3	206.7	190.2	184.4	182.1	186.2	191.4	203.7
52.5°	307.3	267.5	224.2	186.7	156.9	139.9	133.5	130.0	132.3	139.3	151.6
55°	254.1	217.2	178.0	139.3	110.6	94.8	87.2	84.9	87.2	94.8	107.1
57.5°	200.8	169.8	137.0	100.7	74.9	59.1	51.5	49.2	55.6	58.5	71.4
60°	156.9	131.7	103.6	73.8	51.5	39.2	31.6	29.9	32.8	38.0	48.6
62.5°	117.7	101.9	79.6	52.7	38.0	25.2	21.1	19.3	21.1	25.2	33.4
65°	85.5	73.2	55.6	38.6	25.8	18.7	14.1	12.9	14.6	17.6	24.6
67.5°	58.5	49.2	38.6	26.9	17.6	11.7	10.0	10.0	10.5	12.9	18.1
70°	38.0	32.2	24.6	17.6	11.7	8.8	7.6	6.4	7.6	9.4	12.3
72.5°	24.0	20.5	15.8	12.3	8.8	6.4	5.3	4.7	5.9	7.0	9.4
75°	14.6	11.1	8.2	6.4	4.7	4.7	4.7	2.3	2.9	4.7	5.9
77.5°	8.8	7.6	6.4	5.3	4.1	2.3	2.3	2.3	2.9	3.5	5.3
80°	4.7	4.1	2.9	2.9	2.3	1.8	2.3	1.8	1.2	2.9	3.5
82.5°	2.9	2.3	2.3	2.3	2.9	1.2	1.8	1.2	1.8	2.3	1.8
85°	1.8	1.8	1.8	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°	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9	1102.9
2.5°	1104.7	1104.1	1104.7	1104.1	1104.1	1104.1	1104.7	1104.7	1104.1	1104.1	1105.2
5°	1109.3	1109.3	1109.3	1108.8	1108.2	1108.2	1109.3	1109.3	1107.6	1109.3	1109.3
7.5°	1119.3	1117.5	1119.3	1116.9	1115.8	1116.4	1116.9	1115.8	1114.6	1115.2	1115.2
10°	1132.2	1130.4	1130.4	1128.7	1126.9	1125.7	1124.6	1121.6	1118.7	1118.1	1115.8
12.5°	1147.4	1144.5	1142.7	1139.2	1136.3	1132.2	1128.7	1124.0	1118.1	1114.0	1109.9
15°	1162.6	1157.9	1153.8	1148.0	1141.5	1134.5	1126.9	1119.3	1109.9	1101.7	1094.7
17.5°	1174.9	1168.5	1160.8	1151.5	1142.1	1131.6	1120.5	1109.3	1095.9	1085.3	1077.1
20°	1179.0	1169.6	1159.7	1147.4	1135.1	1120.5	1106.4	1091.8	1076.6	1065.4	1056.1
22.5°	1173.7	1162.6	1150.3	1137.4	1121.0	1105.2	1088.9	1071.9	1058.4	1043.2	1034.4
25°	1159.1	1145.6	1132.2	1116.9	1101.1	1083.6	1066.0	1048.5	1032.1	1023.9	1012.8
27.5°	1129.2	1114.6	1100.0	1084.2	1066.0	1048.5	1030.3	1013.3	999.3	988.2	981.7
30°	1076.6	1059.6	1042.6	1025.6	1009.8	991.7	974.7	960.6	946.6	937.8	931.4
32.5°	995.8	980.6	963.6	947.2	932.6	917.3	903.3	891.0	881.0	875.2	870.5
35°	886.9	871.7	858.8	847.1	834.8	828.3	819.6	812.5	808.4	806.1	805.5
37.5°	749.9	741.1	737.0	734.7	732.3	730.6	731.7	734.7	737.0	741.1	745.8
40°	603.5	611.2	613.5	621.7	629.3	639.3	650.4	663.3	673.8	687.3	696.6
42.5°	470.1	484.1	500.5	518.1	536.8	555.0	577.2	597.7	616.4	633.4	648.0
45°	361.2	382.8	407.4	432.6	457.8	484.1	511.1	536.2	558.5	576.6	591.8
47.5°	281.6	305.6	337.2	368.2	398.7	429.7	459.5	485.9	504.6	522.2	535.6
50°	223.0	250.6	285.1	320.8	354.2	386.9	418.6	443.2	461.9	475.9	485.9
52.5°	172.7	205.5	240.6	278.1	313.8	349.5	378.8	401.6	416.8	429.1	436.7
55°	128.8	161.0	198.5	237.1	273.4	307.9	335.4	355.3	368.8	375.8	379.9
57.5°	93.1	122.4	159.8	198.5	231.2	264.0	286.3	304.4	312.0	316.1	317.9
60°	67.9	94.8	128.2	161.6	192.6	218.9	238.3	250.6	256.4	258.7	258.2
62.5°	49.8	73.2	101.9	130.0	155.1	176.8	192.0	200.2	203.1	204.3	202.6
65°	38.0	56.2	80.8	102.4	121.8	137.6	148.7	154.0	155.7	155.1	154.0
67.5°	28.1	42.2	60.3	76.7	90.7	103.0	108.9	113.6	114.7	113.0	111.2
70°	19.9	31.0	43.9	55.0	65.6	72.6	79.0	79.6	79.6	79.0	77.9
72.5°	14.1	21.7	29.9	37.5	43.9	49.2	51.5	53.3	52.7	52.1	50.9
75°	9.4	13.5	21.7	23.4	29.3	31.0	33.4	33.4	33.9	32.2	32.2
77.5°	5.9	9.4	12.9	15.2	17.6	19.9	21.1	21.1	21.7	21.1	21.1
80°	3.5	5.9	7.0	10.5	10.5	12.3	12.9	13.5	12.3	14.1	12.3
82.5°	2.3	3.5	5.3	5.3	6.4	7.6	7.6	8.2	8.2	7.6	7.6
85°	1.8	2.3	2.9	3.5	3.5	4.1	3.5	3.5	4.1	4.7	4.1
87.5°	0.6	1.2	0.6	1.2	1.2	2.3	1.8	1.8	1.8	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: P244214

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1102.9	1102.9	1102.9	1102.9
2.5°	1104.1	1104.7	1104.1	1104.1
5°	1109.3	1108.8	1109.3	1108.2
7.5°	1113.4	1113.4	1112.8	1112.8
10°	1113.4	1111.1	1111.1	1111.1
12.5°	1104.7	1101.7	1100.0	1098.8
15°	1089.4	1084.2	1081.8	1081.2
17.5°	1069.5	1064.8	1061.9	1060.2
20°	1046.7	1042.0	1038.5	1039.1
22.5°	1026.8	1021.5	1019.2	1018.0
25°	1006.9	1000.4	998.7	997.5
27.5°	974.7	971.2	969.4	967.7
30°	925.5	923.8	920.8	924.9
32.5°	868.7	865.8	863.5	865.2
35°	806.1	804.3	806.1	804.9
37.5°	748.7	750.5	752.8	754.0
40°	703.7	710.1	712.4	713.6
42.5°	658.6	666.2	670.9	673.8
45°	603.0	610.6	615.8	619.4
47.5°	545.6	552.0	557.3	556.7
50°	493.5	497.0	499.3	501.7
52.5°	440.8	440.8	441.4	441.4
55°	381.1	379.9	379.3	379.9
57.5°	315.5	314.4	313.8	312.0
60°	255.8	252.3	250.0	250.0
62.5°	200.2	196.1	194.4	193.8
65°	150.4	149.9	146.3	145.8
67.5°	108.9	106.5	104.2	104.8
70°	76.7	73.2	73.2	72.0
72.5°	49.8	48.0	47.4	47.4
75°	31.0	31.0	29.9	32.2
77.5°	20.5	20.5	19.9	20.5
80°	12.3	12.3	12.3	11.7
82.5°	7.6	8.2	7.6	7.6
85°	4.1	4.7	3.5	5.3
87.5°	2.3	2.9	2.3	2.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)