

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: P246032

Luminaire Tested: **LSR8B20D010 EC8B20827 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246032
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 EC8B20827 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2040.0 lumens
Efficiency: N/A
Efficacy: 95.8 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

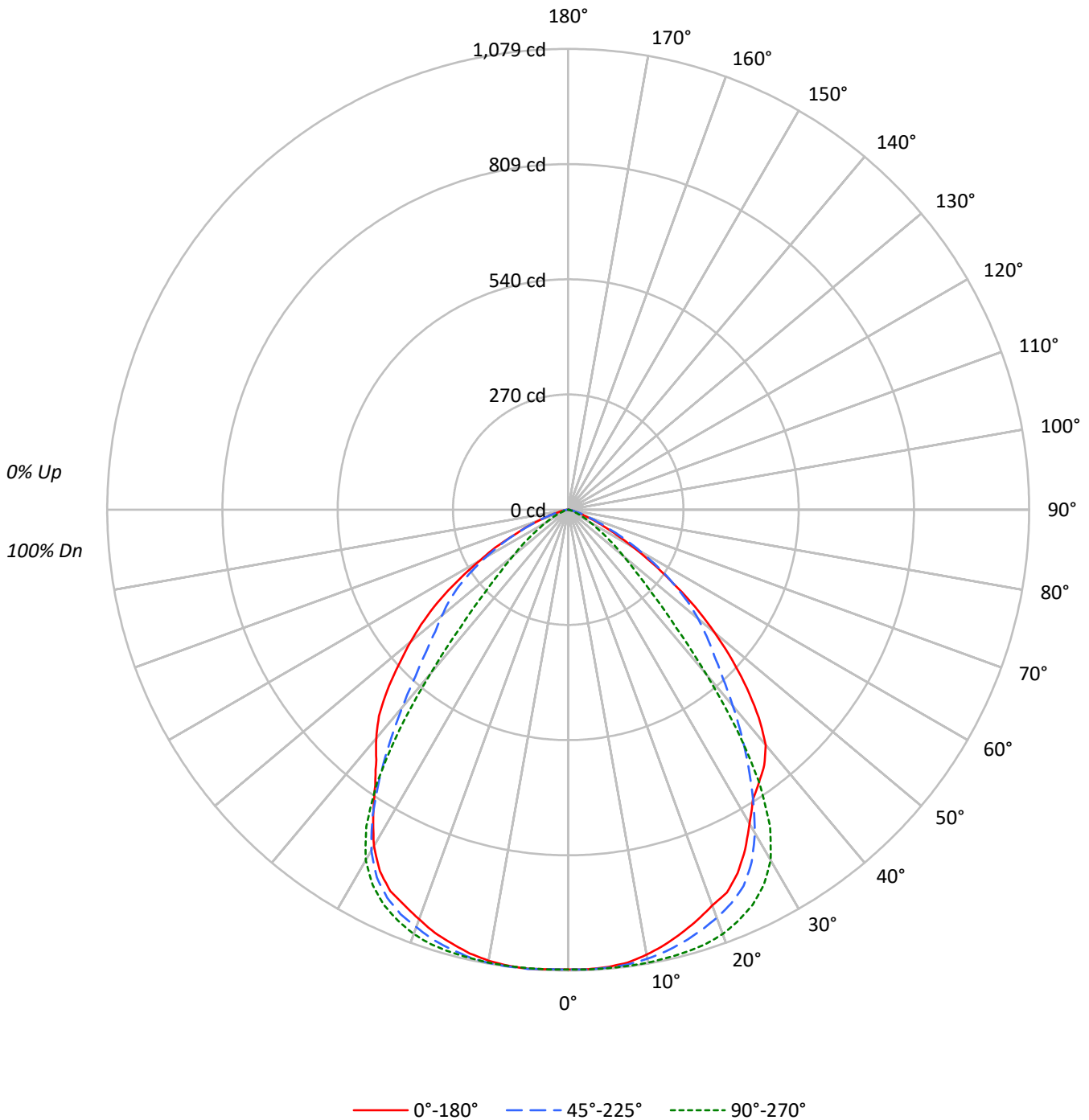
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	33189	33189	33189
5°	33263	33353	33390
10°	33125	33720	33576
15°	32757	34213	33568
20°	32362	34696	33481
25°	31942	34735	33517
30°	30219	33759	32381
35°	29317	29340	29645
40°	28955	20187	28142
45°	25799	12119	26152
50°	21453	8064	23113
55°	16091	5559	19601
60°	10904	3707	14789
65°	6574	2401	10157
70°	3642	1298	6248
75°	1656	548	3241
80°	1438	622	2255
85°	1628	814	2264



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.7	5.0
10°-20°	298.3	14.6
20°-30°	452.8	22.2
30°-40°	475.6	23.3
40°-50°	356.5	17.5
50°-60°	228.8	11.2
60°-70°	97.9	4.8
70°-80°	23.1	1.1
80°-90°	4.3	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°	853.8	41.9
0°-40°	1329.4	65.2
0°-60°	1914.7	93.9
0°-90°	2040.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2040.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1076	1076	1076	1076	1076	
5°	1075	1076	1078	1079	1079	102
15°	1026	1048	1072	1065	1052	289
25°	939	972	1021	1002	985	429
35°	779	736	779	770	788	489
45°	592	484	278	470	600	453
55°	299	299	103	312	365	271
65°	90	106	33	137	139	96
75°	14	16	5	28	27	20
85°	5	3	2	5	6	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°	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3
2.5°	1076.9	1078.1	1077.5	1077.5	1076.9	1077.5	1077.5	1078.7	1078.7	1077.5	1076.9
5°	1074.6	1075.8	1075.8	1074.6	1074.6	1077.5	1075.8	1076.9	1076.9	1076.3	1076.3
7.5°	1069.4	1069.4	1071.7	1070.0	1070.0	1071.7	1071.1	1072.3	1073.5	1074.0	1074.0
10°	1057.9	1059.0	1059.6	1059.6	1060.2	1061.9	1063.1	1065.4	1066.5	1067.7	1068.3
12.5°	1043.4	1045.1	1045.7	1045.1	1046.9	1049.2	1052.1	1055.0	1056.7	1059.0	1060.8
15°	1026.1	1026.1	1027.2	1029.0	1030.1	1033.6	1036.5	1039.9	1044.6	1047.5	1050.3
17.5°	1007.0	1008.2	1009.9	1009.9	1012.2	1018.0	1019.7	1024.9	1030.1	1033.0	1038.8
20°	986.2	987.4	989.1	990.3	993.2	997.8	1001.2	1005.9	1011.6	1016.8	1022.6
22.5°	970.0	967.7	968.9	970.0	972.9	977.0	981.0	986.8	992.6	997.8	1003.6
25°	938.8	939.4	941.2	942.3	945.8	949.2	953.9	960.8	966.0	971.8	978.1
27.5°	896.7	897.2	900.1	900.1	903.0	908.8	911.7	917.5	924.4	930.2	937.7
30°	848.7	849.9	849.9	852.2	853.9	856.8	859.7	865.5	868.9	874.1	884.5
32.5°	804.8	806.0	805.4	804.8	803.1	802.5	801.9	803.1	804.2	806.0	810.0
35°	778.8	775.9	773.6	769.6	764.9	759.2	754.0	747.0	740.7	735.5	729.7
37.5°	754.0	753.4	749.9	744.1	734.9	724.5	712.4	697.3	682.3	666.1	650.6
40°	719.3	717.6	714.7	706.6	696.2	683.5	667.3	648.8	624.5	599.7	574.3
42.5°	660.4	660.9	657.5	651.1	641.3	629.2	612.4	592.2	566.2	536.7	503.8
45°	591.6	591.6	590.5	585.3	578.3	568.5	555.8	539.0	513.6	483.6	448.3
47.5°	520.0	520.6	518.8	517.7	514.8	508.4	499.2	486.5	468.6	439.7	404.4
50°	447.2	447.2	450.1	449.5	449.5	447.2	443.1	435.6	420.0	396.9	364.0
52.5°	374.4	375.5	377.3	379.6	382.5	387.1	382.5	379.0	369.2	351.3	323.0
55°	299.3	300.4	303.3	307.4	310.8	315.5	316.6	316.6	311.4	299.3	277.9
57.5°	235.1	233.4	235.7	239.2	243.8	248.4	251.9	255.9	255.4	247.3	229.9
60°	176.8	177.4	179.1	182.6	186.0	190.1	194.7	198.2	199.9	195.9	184.9
62.5°	128.8	128.8	131.1	134.6	136.3	142.1	145.0	146.8	148.5	147.9	141.0
65°	90.1	91.3	92.4	94.2	95.9	99.4	101.1	104.6	105.7	106.3	101.1
67.5°	63.6	61.8	63.0	64.1	65.9	68.2	71.6	71.6	73.4	73.4	69.9
70°	40.4	40.4	41.0	42.7	43.9	44.5	45.6	46.8	48.5	48.0	48.0
72.5°	27.2	26.6	27.2	27.7	28.3	30.0	30.0	30.6	31.8	32.4	30.0
75°	13.9	14.4	15.6	15.0	16.8	15.6	16.2	17.9	17.3	16.2	16.2
77.5°	11.5	11.5	11.5	11.0	12.1	12.1	11.5	12.7	12.1	12.1	11.5
80°	8.1	8.7	8.1	7.5	8.1	7.5	7.5	7.5	7.5	7.5	6.9
82.5°	6.4	5.2	5.8	5.2	5.8	5.8	5.2	4.6	4.6	5.2	4.6
85°	4.6	3.5	4.0	4.0	3.5	3.5	3.5	3.5	3.5	2.9	2.9
87.5°	2.9	1.7	1.7	1.7	2.3	2.3	2.3	1.7	2.3	2.3	1.2
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°	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3
2.5°	1078.1	1077.5	1078.7	1078.1	1078.1	1077.5	1078.1	1077.5	1078.7	1076.3	1076.9
5°	1078.1	1076.9	1077.5	1078.1	1078.7	1077.5	1077.5	1077.5	1078.7	1077.5	1078.1
7.5°	1075.8	1075.2	1076.9	1078.1	1077.5	1076.9	1078.1	1077.5	1078.7	1078.1	1079.2
10°	1071.1	1071.7	1072.9	1074.6	1075.2	1075.8	1076.9	1076.9	1078.7	1076.3	1077.5
12.5°	1064.2	1066.5	1069.4	1070.6	1072.9	1072.9	1074.0	1074.6	1075.8	1075.2	1076.9
15°	1055.5	1058.4	1061.9	1064.8	1067.7	1069.4	1071.1	1071.7	1073.5	1071.7	1072.3
17.5°	1045.1	1048.6	1053.8	1057.3	1061.9	1063.6	1065.9	1067.1	1068.8	1067.7	1068.3
20°	1030.7	1034.8	1040.5	1045.7	1048.6	1052.7	1055.5	1057.3	1058.4	1057.3	1057.9
22.5°	1010.5	1016.3	1023.8	1027.8	1033.6	1037.1	1037.6	1041.7	1044.6	1041.7	1042.8
25°	986.8	992.6	998.4	1007.0	1012.2	1016.3	1020.3	1020.9	1023.8	1023.2	1022.6
27.5°	947.5	955.0	964.8	971.8	978.7	985.1	989.7	990.8	993.7	992.6	993.2
30°	893.8	901.9	911.1	922.1	931.9	938.3	944.0	948.1	951.0	949.2	948.7
32.5°	817.5	825.6	835.4	846.4	858.0	867.2	874.1	879.3	882.8	881.6	878.8
35°	730.3	732.6	738.9	747.6	757.4	767.2	773.6	779.4	783.4	784.6	784.6
37.5°	640.7	633.2	628.6	628.6	634.4	638.4	644.2	647.7	654.0	656.3	658.1
40°	554.1	536.7	520.6	508.4	500.3	499.8	499.8	501.5	507.3	514.8	521.7
42.5°	476.6	448.9	424.1	401.5	385.4	376.1	372.1	372.7	377.3	384.2	395.8
45°	414.8	380.2	349.0	321.8	299.9	285.4	278.5	277.9	281.4	289.4	302.2
47.5°	366.9	329.9	294.6	263.4	239.8	224.2	216.1	213.8	216.1	223.6	238.6
50°	327.0	288.9	252.5	220.1	194.7	178.5	171.0	168.1	171.0	177.4	192.4
52.5°	290.0	250.7	216.7	185.5	158.3	144.4	136.3	134.6	136.3	143.9	156.0
55°	247.3	213.8	180.3	149.1	125.4	111.5	105.1	103.4	105.1	112.1	124.8
57.5°	205.1	176.2	146.8	118.4	98.2	86.1	80.3	78.0	82.0	86.7	101.7
60°	165.8	142.7	117.9	93.0	76.3	65.3	60.7	60.1	61.2	67.0	77.4
62.5°	130.0	110.9	91.3	71.1	57.2	52.6	46.8	46.2	47.4	50.8	58.9
65°	93.6	81.5	66.4	52.0	41.0	34.7	32.4	32.9	34.1	36.4	43.9
67.5°	65.3	56.6	46.2	36.4	28.3	25.4	23.1	22.5	23.1	27.2	31.2
70°	43.9	38.7	31.2	27.7	19.6	15.6	16.2	14.4	16.8	16.8	20.2
72.5°	28.9	25.4	20.8	16.2	13.9	11.0	11.0	10.4	11.5	12.1	15.0
75°	15.0	11.5	11.5	8.1	5.8	2.9	5.2	4.6	4.0	4.6	5.8
77.5°	10.4	8.7	8.1	6.4	5.8	4.6	4.6	4.6	4.6	5.2	5.8
80°	6.4	6.4	4.6	4.0	3.5	2.9	3.5	3.5	3.5	3.5	4.0
82.5°	4.0	3.5	3.5	2.9	2.9	2.3	2.3	2.3	2.3	2.3	3.5
85°	3.5	2.3	2.3	1.7	2.3	4.0	1.7	2.3	2.3	2.3	1.7
87.5°	1.2	1.7	1.7	1.7	1.2	0.6	1.2	1.7	1.7	2.9	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3	1076.3
2.5°	1078.1	1078.7	1078.7	1078.1	1078.1	1076.9	1079.2	1077.5	1078.1	1080.4	1078.7
5°	1079.2	1079.8	1079.8	1079.2	1079.2	1079.2	1079.8	1079.8	1079.2	1078.7	1079.8
7.5°	1081.5	1081.0	1081.0	1079.8	1079.8	1078.7	1079.8	1078.1	1079.2	1078.1	1079.8
10°	1078.7	1079.2	1078.7	1078.1	1078.1	1077.5	1077.5	1075.8	1076.3	1074.6	1075.8
12.5°	1076.9	1076.3	1076.3	1075.2	1074.0	1072.9	1072.3	1070.6	1070.6	1066.5	1068.3
15°	1072.3	1072.9	1071.1	1068.8	1067.7	1064.8	1063.6	1061.3	1059.0	1056.1	1056.7
17.5°	1068.3	1066.5	1064.2	1061.9	1057.3	1055.0	1052.7	1049.2	1048.0	1044.6	1043.4
20°	1056.1	1055.0	1052.1	1048.0	1045.1	1039.9	1037.6	1034.2	1031.3	1027.8	1026.1
22.5°	1040.5	1039.4	1035.9	1031.9	1027.2	1024.9	1022.6	1016.3	1013.4	1009.9	1009.3
25°	1020.9	1019.1	1015.7	1011.1	1008.7	1002.4	1000.1	995.5	994.3	990.8	990.3
27.5°	990.8	988.5	984.5	978.7	974.7	970.6	968.3	964.8	963.7	960.2	959.6
30°	945.8	942.9	934.8	932.5	925.5	921.5	921.5	916.9	917.5	915.2	915.2
32.5°	874.7	870.1	863.7	859.1	854.5	852.2	852.2	850.4	851.6	851.6	852.8
35°	780.5	774.2	770.7	767.8	767.8	770.1	777.1	778.8	782.3	785.2	787.5
37.5°	659.8	659.2	663.3	666.7	675.4	685.2	697.3	707.7	717.6	724.5	731.4
40°	529.2	543.7	555.2	571.4	584.7	603.7	625.7	643.6	660.4	672.5	685.2
42.5°	413.1	431.6	455.8	479.5	503.2	529.2	558.1	582.9	604.9	621.7	634.9
45°	321.8	347.2	376.7	406.7	437.4	469.7	499.8	525.2	548.3	565.6	578.9
47.5°	259.4	287.1	320.6	353.6	388.2	422.3	455.8	477.8	496.9	510.7	522.9
50°	214.3	243.8	279.1	316.6	351.3	385.4	414.2	435.6	451.2	463.4	470.9
52.5°	179.1	210.3	247.9	285.4	320.1	351.3	377.3	393.4	406.2	414.8	421.8
55°	147.9	178.0	213.2	248.4	282.5	312.0	333.4	345.5	355.3	360.5	364.6
57.5°	120.8	148.5	180.8	213.2	242.7	266.9	283.7	295.8	300.4	304.5	303.9
60°	94.8	120.8	150.2	178.0	203.4	223.0	235.1	242.1	245.5	247.3	246.1
62.5°	74.5	98.2	120.8	145.0	163.5	180.3	191.8	191.8	193.5	194.1	195.9
65°	55.5	73.4	93.0	110.9	125.9	136.9	143.3	145.0	147.3	146.8	145.6
67.5°	41.0	54.3	68.7	82.0	92.4	99.4	104.0	108.0	107.5	106.3	105.7
70°	28.3	37.0	49.7	57.8	65.3	72.2	73.4	73.9	74.5	75.1	73.9
72.5°	19.6	26.0	32.9	39.9	44.5	47.4	50.3	50.8	50.8	50.8	50.3
75°	9.8	13.3	19.6	22.5	26.6	27.7	30.0	30.0	31.8	29.5	28.9
77.5°	8.7	10.4	13.9	16.2	17.9	19.6	20.2	22.0	21.4	20.2	20.8
80°	5.2	6.4	8.7	9.8	12.1	12.7	13.3	13.9	13.3	13.9	13.9
82.5°	4.0	4.6	5.8	5.8	7.5	7.5	8.1	8.1	8.7	8.7	8.7
85°	2.3	4.0	3.5	6.9	4.6	4.6	5.8	6.9	5.8	5.8	6.9
87.5°	2.3	2.3	1.7	2.3	2.3	2.3	2.9	3.5	3.5	4.0	3.5
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: P246032

CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1076.3	1076.3	1076.3	1076.3
2.5°	1078.1	1079.2	1077.5	1076.9
5°	1079.8	1079.8	1078.7	1078.7
7.5°	1079.8	1079.8	1078.1	1076.9
10°	1075.2	1075.2	1073.5	1072.3
12.5°	1066.5	1066.5	1065.9	1064.2
15°	1055.5	1055.5	1053.2	1051.5
17.5°	1040.5	1041.7	1038.8	1038.8
20°	1024.3	1023.8	1021.5	1020.3
22.5°	1007.6	1006.4	1005.9	1002.4
25°	989.7	988.5	986.8	985.1
27.5°	959.1	958.5	956.7	954.4
30°	912.3	911.7	909.4	909.4
32.5°	851.6	851.0	848.7	849.3
35°	788.6	790.9	789.8	787.5
37.5°	736.0	737.8	738.9	737.8
40°	692.1	697.3	697.9	699.1
42.5°	645.3	652.3	654.6	655.7
45°	589.3	595.7	600.9	599.7
47.5°	532.1	536.7	541.3	537.9
50°	477.2	480.1	481.8	481.8
52.5°	425.2	425.2	424.6	425.2
55°	365.7	365.7	363.4	364.6
57.5°	303.3	304.5	302.7	299.9
60°	245.5	242.7	241.5	239.8
62.5°	191.2	191.2	187.2	192.4
65°	143.3	141.5	139.8	139.2
67.5°	104.0	103.4	101.7	101.1
70°	73.4	71.1	70.5	69.3
72.5°	49.1	49.1	48.0	48.0
75°	30.0	27.2	26.6	27.2
77.5°	20.8	20.2	20.2	19.6
80°	13.9	13.3	14.4	12.7
82.5°	8.7	9.2	8.7	9.2
85°	5.8	6.9	6.4	6.4
87.5°	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)