

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: P246182

Luminaire Tested: **LSR8B20D010 EC8B20830 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246182
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 EC8B20830 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2115.0 lumens
Efficiency: N/A
Efficacy: 99.3 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

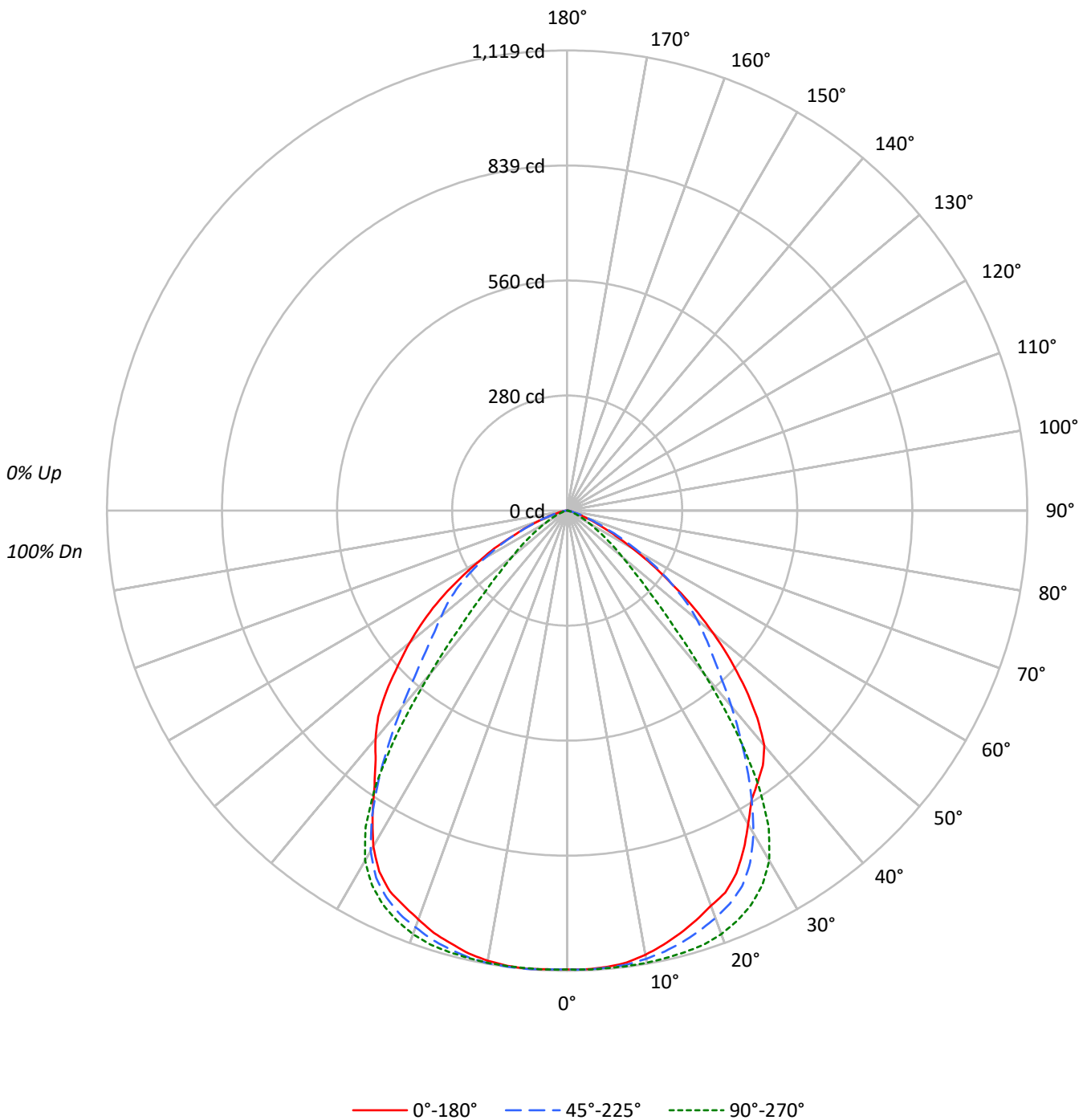
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	34410	34410	34410
5°	34486	34579	34616
10°	34340	34960	34810
15°	33961	35471	34804
20°	33554	35969	34712
25°	33119	36011	34749
30°	31330	34998	33570
35°	30394	30417	30733
40°	30017	20928	29176
45°	26750	12564	27112
50°	22240	8362	23967
55°	16682	5763	20322
60°	11305	3842	15332
65°	6815	2488	10536
70°	3778	1352	6482
75°	1716	572	3360
80°	1492	639	2344
85°	1698	849	2335



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.5	5.0
10°-20°	309.3	14.6
20°-30°	469.4	22.2
30°-40°	493.1	23.3
40°-50°	369.7	17.5
50°-60°	237.2	11.2
60°-70°	101.5	4.8
70°-80°	24.0	1.1
80°-90°	4.5	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°	885.2	41.9
0°-40°	1378.3	65.2
0°-60°	1985.1	93.9
0°-90°	2115.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2115.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1116	1116	1116	1116	1116	
5°	1114	1116	1117	1119	1118	106
15°	1064	1086	1111	1104	1090	300
25°	973	1008	1058	1039	1021	445
35°	807	762	808	798	816	507
45°	613	501	288	487	622	470
55°	310	310	107	323	378	281
65°	93	110	34	142	144	100
75°	14	17	5	29	28	21
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°	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9
2.5°	1116.5	1117.7	1117.1	1117.1	1116.5	1117.1	1117.1	1118.3	1118.3	1117.1	1116.5
5°	1114.1	1115.3	1115.3	1114.1	1114.1	1117.1	1115.3	1116.5	1116.5	1115.9	1115.9
7.5°	1108.7	1108.7	1111.1	1109.3	1109.3	1111.1	1110.5	1111.7	1112.9	1113.5	1113.5
10°	1096.7	1097.9	1098.5	1098.5	1099.1	1100.9	1102.1	1104.5	1105.7	1106.9	1107.5
12.5°	1081.8	1083.6	1084.2	1083.6	1085.4	1087.8	1090.8	1093.8	1095.6	1097.9	1099.7
15°	1063.8	1063.8	1065.0	1066.8	1068.0	1071.6	1074.6	1078.2	1083.0	1086.0	1089.0
17.5°	1044.0	1045.2	1047.0	1047.0	1049.4	1055.4	1057.2	1062.6	1068.0	1071.0	1077.0
20°	1022.5	1023.7	1025.5	1026.7	1029.7	1034.5	1038.0	1042.8	1048.8	1054.2	1060.2
22.5°	1005.7	1003.3	1004.5	1005.7	1008.7	1012.9	1017.1	1023.1	1029.1	1034.5	1040.5
25°	973.4	974.0	975.8	976.9	980.5	984.1	988.9	996.1	1001.5	1007.5	1014.1
27.5°	929.6	930.2	933.2	933.2	936.2	942.2	945.2	951.2	958.4	964.4	972.2
30°	879.9	881.1	881.1	883.5	885.3	888.3	891.3	897.3	900.9	906.3	917.1
32.5°	834.4	835.6	835.0	834.4	832.6	832.0	831.4	832.6	833.8	835.6	839.8
35°	807.4	804.4	802.1	797.9	793.1	787.1	781.7	774.5	767.9	762.5	756.5
37.5°	781.7	781.1	777.5	771.5	761.9	751.1	738.6	723.0	707.4	690.6	674.5
40°	745.7	743.9	740.9	732.6	721.8	708.6	691.8	672.7	647.5	621.7	595.4
42.5°	684.6	685.2	681.6	675.1	664.9	652.3	634.9	614.0	587.0	556.5	522.3
45°	613.4	613.4	612.2	606.8	599.6	589.4	576.2	558.9	532.5	501.3	464.8
47.5°	539.1	539.7	537.9	536.7	533.7	527.1	517.5	504.4	485.8	455.8	419.3
50°	463.6	463.6	466.6	466.0	466.0	463.6	459.4	451.6	435.5	411.5	377.4
52.5°	388.1	389.3	391.1	393.5	396.5	401.3	396.5	392.9	382.7	364.2	334.8
55°	310.3	311.5	314.5	318.7	322.3	327.1	328.2	328.2	322.8	310.3	288.1
57.5°	243.8	242.0	244.4	248.0	252.8	257.6	261.2	265.4	264.8	256.4	238.4
60°	183.3	183.9	185.7	189.3	192.9	197.1	201.9	205.5	207.3	203.1	191.7
62.5°	133.6	133.6	136.0	139.6	141.4	147.4	150.3	152.1	153.9	153.3	146.2
65°	93.4	94.6	95.8	97.6	99.4	103.0	104.8	108.4	109.6	110.2	104.8
67.5°	65.9	64.1	65.3	66.5	68.3	70.7	74.3	74.3	76.1	76.1	72.5
70°	41.9	41.9	42.5	44.3	45.5	46.1	47.3	48.5	50.3	49.7	49.7
72.5°	28.2	27.6	28.2	28.8	29.4	31.1	31.1	31.7	32.9	33.5	31.1
75°	14.4	15.0	16.2	15.6	17.4	16.2	16.8	18.6	18.0	16.8	16.8
77.5°	12.0	12.0	12.0	11.4	12.6	12.6	12.0	13.2	12.6	12.6	12.0
80°	8.4	9.0	8.4	7.8	8.4	7.8	7.8	7.8	7.8	7.8	7.2
82.5°	6.6	5.4	6.0	5.4	6.0	6.0	5.4	4.8	4.8	5.4	4.8
85°	4.8	3.6	4.2	4.2	3.6	3.6	3.6	3.6	3.6	3.0	3.0
87.5°	3.0	1.8	1.8	1.8	2.4	2.4	2.4	1.8	2.4	2.4	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°	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9
2.5°	1117.7	1117.1	1118.3	1117.7	1117.7	1117.1	1117.7	1117.1	1118.3	1115.9	1116.5
5°	1117.7	1116.5	1117.1	1117.7	1118.3	1117.1	1117.1	1117.1	1118.3	1117.1	1117.7
7.5°	1115.3	1114.7	1116.5	1117.7	1117.1	1116.5	1117.7	1117.1	1118.3	1117.7	1118.9
10°	1110.5	1111.1	1112.3	1114.1	1114.7	1115.3	1116.5	1116.5	1118.3	1115.9	1117.1
12.5°	1103.3	1105.7	1108.7	1109.9	1112.3	1112.3	1113.5	1114.1	1115.3	1114.7	1116.5
15°	1094.4	1097.3	1100.9	1103.9	1106.9	1108.7	1110.5	1111.1	1112.9	1111.1	1111.7
17.5°	1083.6	1087.2	1092.6	1096.1	1100.9	1102.7	1105.1	1106.3	1108.1	1106.9	1107.5
20°	1068.6	1072.8	1078.8	1084.2	1087.2	1091.4	1094.4	1096.1	1097.3	1096.1	1096.7
22.5°	1047.6	1053.6	1061.4	1065.6	1071.6	1075.2	1075.8	1080.0	1083.0	1080.0	1081.2
25°	1023.1	1029.1	1035.1	1044.0	1049.4	1053.6	1057.8	1058.4	1061.4	1060.8	1060.2
27.5°	982.3	990.1	1000.3	1007.5	1014.7	1021.3	1026.1	1027.3	1030.3	1029.1	1029.7
30°	926.6	935.0	944.6	956.0	966.2	972.8	978.7	982.9	985.9	984.1	983.5
32.5°	847.6	856.0	866.1	877.5	889.5	899.1	906.3	911.7	915.3	914.1	911.1
35°	757.1	759.5	766.1	775.1	785.3	795.5	802.1	808.0	812.2	813.4	813.4
37.5°	664.3	656.5	651.7	651.7	657.7	661.9	667.9	671.5	678.1	680.4	682.3
40°	574.4	556.5	539.7	527.1	518.7	518.1	518.1	519.9	525.9	533.7	540.9
42.5°	494.2	465.4	439.7	416.3	399.5	389.9	385.8	386.4	391.1	398.3	410.3
45°	430.1	394.1	361.8	333.6	310.9	295.9	288.7	288.1	291.7	300.1	313.3
47.5°	380.4	342.0	305.5	273.1	248.6	232.4	224.0	221.6	224.0	231.8	247.4
50°	339.0	299.5	261.8	228.2	201.9	185.1	177.3	174.3	177.3	183.9	199.5
52.5°	300.7	260.0	224.6	192.3	164.1	149.7	141.4	139.6	141.4	149.1	161.7
55°	256.4	221.6	186.9	154.5	130.0	115.6	109.0	107.2	109.0	116.2	129.4
57.5°	212.6	182.7	152.1	122.8	101.8	89.2	83.3	80.9	85.1	89.8	105.4
60°	171.9	148.0	122.2	96.4	79.1	67.7	62.9	62.3	63.5	69.5	80.3
62.5°	134.8	115.0	94.6	73.7	59.3	54.5	48.5	47.9	49.1	52.7	61.1
65°	97.0	84.5	68.9	53.9	42.5	35.9	33.5	34.1	35.3	37.7	45.5
67.5°	67.7	58.7	47.9	37.7	29.4	26.4	24.0	23.4	24.0	28.2	32.3
70°	45.5	40.1	32.3	28.8	20.4	16.2	16.8	15.0	17.4	17.4	21.0
72.5°	29.9	26.4	21.6	16.8	14.4	11.4	11.4	10.8	12.0	12.6	15.6
75°	15.6	12.0	12.0	8.4	6.0	3.0	5.4	4.8	4.2	4.8	6.0
77.5°	10.8	9.0	8.4	6.6	6.0	4.8	4.8	4.8	4.8	5.4	6.0
80°	6.6	6.6	4.8	4.2	3.6	3.0	3.6	3.6	3.6	3.6	4.2
82.5°	4.2	3.6	3.6	3.0	3.0	2.4	2.4	2.4	2.4	2.4	3.6
85°	3.6	2.4	2.4	1.8	2.4	4.2	1.8	2.4	2.4	2.4	1.8
87.5°	1.2	1.8	1.8	1.8	1.2	0.6	1.2	1.8	1.8	3.0	2.4
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°	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9	1115.9
2.5°	1117.7	1118.3	1118.3	1117.7	1117.7	1116.5	1118.9	1117.1	1117.7	1120.1	1118.3
5°	1118.9	1119.5	1119.5	1118.9	1118.9	1118.9	1119.5	1119.5	1118.9	1118.3	1119.5
7.5°	1121.3	1120.7	1120.7	1119.5	1119.5	1118.3	1119.5	1117.7	1118.9	1117.7	1119.5
10°	1118.3	1118.9	1118.3	1117.7	1117.7	1117.1	1117.1	1115.3	1115.9	1114.1	1115.3
12.5°	1116.5	1115.9	1115.9	1114.7	1113.5	1112.3	1111.7	1109.9	1109.9	1105.7	1107.5
15°	1111.7	1112.3	1110.5	1108.1	1106.9	1103.9	1102.7	1100.3	1097.9	1095.0	1095.6
17.5°	1107.5	1105.7	1103.3	1100.9	1096.1	1093.8	1091.4	1087.8	1086.6	1083.0	1081.8
20°	1095.0	1093.8	1090.8	1086.6	1083.6	1078.2	1075.8	1072.2	1069.2	1065.6	1063.8
22.5°	1078.8	1077.6	1074.0	1069.8	1065.0	1062.6	1060.2	1053.6	1050.6	1047.0	1046.4
25°	1058.4	1056.6	1053.0	1048.2	1045.8	1039.2	1036.8	1032.1	1030.9	1027.3	1026.7
27.5°	1027.3	1024.9	1020.7	1014.7	1010.5	1006.3	1003.9	1000.3	999.1	995.5	994.9
30°	980.5	977.5	969.2	966.8	959.6	955.4	955.4	950.6	951.2	948.8	948.8
32.5°	906.9	902.1	895.5	890.7	885.9	883.5	883.5	881.7	882.9	882.9	884.1
35°	809.2	802.7	799.0	796.1	796.1	798.4	805.6	807.4	811.0	814.0	816.4
37.5°	684.0	683.5	687.6	691.2	700.2	710.4	723.0	733.8	743.9	751.1	758.3
40°	548.7	563.7	575.6	592.4	606.2	625.9	648.7	667.3	684.6	697.2	710.4
42.5°	428.3	447.4	472.6	497.2	521.7	548.7	578.6	604.4	627.1	644.5	658.3
45°	333.6	360.0	390.5	421.7	453.4	487.0	518.1	544.5	568.4	586.4	600.2
47.5°	268.9	297.7	332.4	366.6	402.5	437.9	472.6	495.4	515.1	529.5	542.1
50°	222.2	252.8	289.3	328.2	364.2	399.5	429.5	451.6	467.8	480.4	488.2
52.5°	185.7	218.0	257.0	295.9	331.8	364.2	391.1	407.9	421.1	430.1	437.3
55°	153.3	184.5	221.0	257.6	292.9	323.4	345.6	358.2	368.4	373.8	378.0
57.5°	125.2	153.9	187.5	221.0	251.6	276.7	294.1	306.7	311.5	315.7	315.1
60°	98.2	125.2	155.7	184.5	210.8	231.2	243.8	251.0	254.6	256.4	255.2
62.5°	77.3	101.8	125.2	150.3	169.5	186.9	198.9	198.9	200.7	201.3	203.1
65°	57.5	76.1	96.4	115.0	130.6	142.0	148.6	150.3	152.7	152.1	150.9
67.5°	42.5	56.3	71.3	85.1	95.8	103.0	107.8	112.0	111.4	110.2	109.6
70°	29.4	38.3	51.5	59.9	67.7	74.9	76.1	76.7	77.3	77.9	76.7
72.5°	20.4	27.0	34.1	41.3	46.1	49.1	52.1	52.7	52.7	52.7	52.1
75°	10.2	13.8	20.4	23.4	27.6	28.8	31.1	31.1	32.9	30.5	29.9
77.5°	9.0	10.8	14.4	16.8	18.6	20.4	21.0	22.8	22.2	21.0	21.6
80°	5.4	6.6	9.0	10.2	12.6	13.2	13.8	14.4	13.8	14.4	14.4
82.5°	4.2	4.8	6.0	6.0	7.8	7.8	8.4	8.4	9.0	9.0	9.0
85°	2.4	4.2	3.6	7.2	4.8	4.8	6.0	7.2	6.0	6.0	7.2
87.5°	2.4	2.4	1.8	2.4	2.4	2.4	3.0	3.6	3.6	4.2	3.6
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: P246182

CATALOG NUMBER: LSR8B20D010 EC8B20830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1115.9	1115.9	1115.9	1115.9
2.5°	1117.7	1118.9	1117.1	1116.5
5°	1119.5	1119.5	1118.3	1118.3
7.5°	1119.5	1119.5	1117.7	1116.5
10°	1114.7	1114.7	1112.9	1111.7
12.5°	1105.7	1105.7	1105.1	1103.3
15°	1094.4	1094.4	1092.0	1090.2
17.5°	1078.8	1080.0	1077.0	1077.0
20°	1062.0	1061.4	1059.0	1057.8
22.5°	1044.6	1043.4	1042.8	1039.2
25°	1026.1	1024.9	1023.1	1021.3
27.5°	994.3	993.7	991.9	989.5
30°	945.8	945.2	942.8	942.8
32.5°	882.9	882.3	879.9	880.5
35°	817.6	820.0	818.8	816.4
37.5°	763.1	764.9	766.1	764.9
40°	717.6	723.0	723.6	724.8
42.5°	669.1	676.3	678.7	679.8
45°	611.0	617.6	623.0	621.7
47.5°	551.7	556.5	561.2	557.7
50°	494.8	497.8	499.6	499.6
52.5°	440.9	440.9	440.3	440.9
55°	379.2	379.2	376.8	378.0
57.5°	314.5	315.7	313.9	310.9
60°	254.6	251.6	250.4	248.6
62.5°	198.3	198.3	194.1	199.5
65°	148.6	146.8	145.0	144.4
67.5°	107.8	107.2	105.4	104.8
70°	76.1	73.7	73.1	71.9
72.5°	50.9	50.9	49.7	49.7
75°	31.1	28.2	27.6	28.2
77.5°	21.6	21.0	21.0	20.4
80°	14.4	13.8	15.0	13.2
82.5°	9.0	9.6	9.0	9.6
85°	6.0	7.2	6.6	6.6
87.5°	3.6	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)