

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: P245474

Luminaire Tested: **LSR8B20D010 EC8B20840 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245474
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 EC8B20840 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2227.0 lumens
Efficiency: N/A
Efficacy: 104.6 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

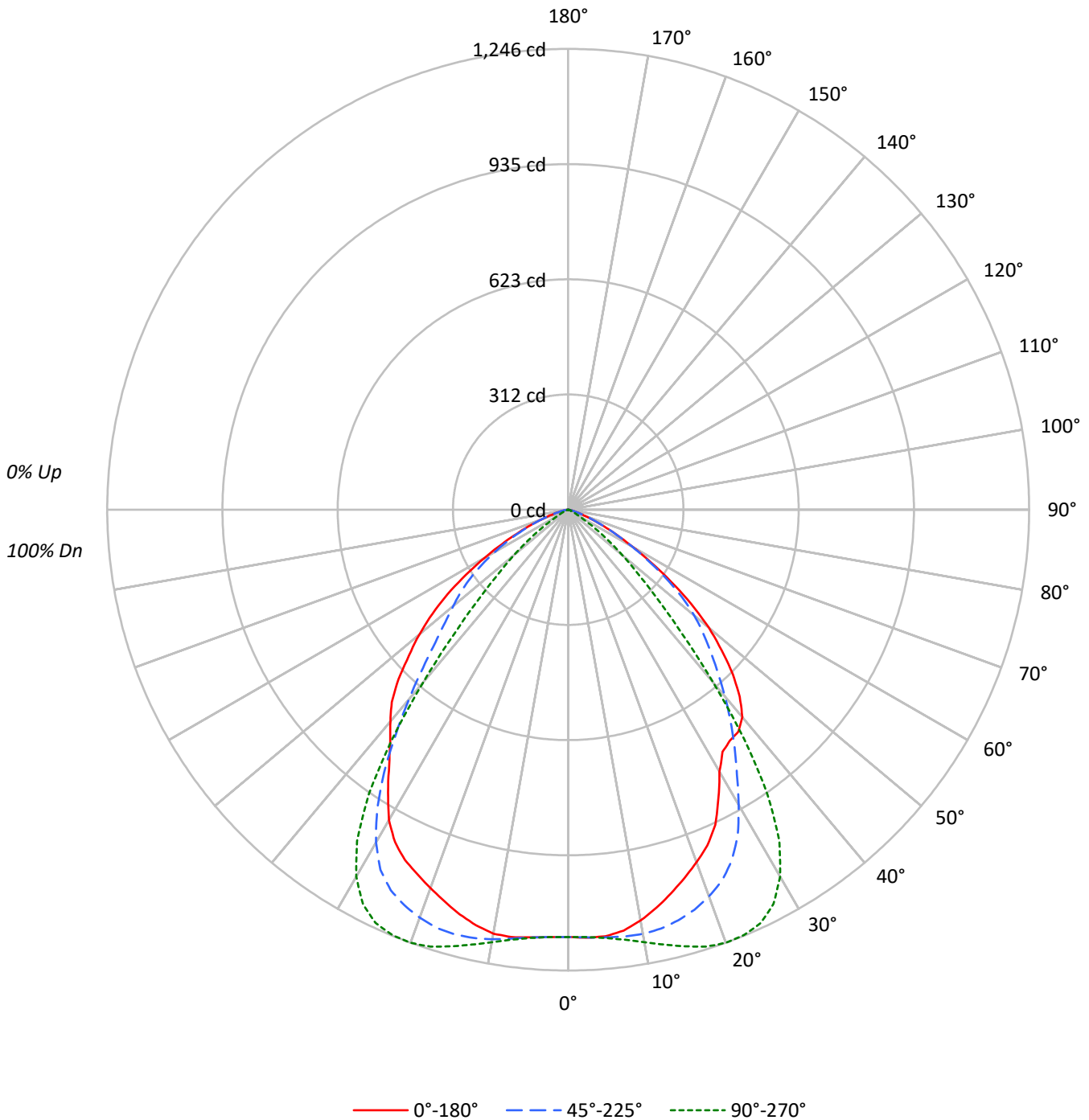
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P245474

CATALOG NUMBER: LSR8B20D010 EC8B20840 8LBDW0WH

Luminous Intensity Polar Plot





TEST NUMBER: P245474

CATALOG NUMBER: LSR8B20D010 EC8B20840 8LBDW0WH

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°	35625	35625	35625
5°	35836	35969	35932
10°	35311	37174	36444
15°	34277	39014	36157
20°	33285	40891	35719
25°	32006	41938	35552
30°	29126	40787	34499
35°	28692	35340	31742
40°	29474	24511	30090
45°	27439	14814	28294
50°	23799	9148	25210
55°	18263	4779	21397
60°	12439	1930	16146
65°	7742	985	11142
70°	4201	613	6798
75°	2192	286	4015
80°	977	320	2184
85°	637	212	1946



TEST NUMBER: P245474

CATALOG NUMBER: LSR8B20D010 EC8B20840 8LBDW0WH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.1	5.0
10°-20°	329.1	14.8
20°-30°	502.1	22.5
30°-40°	524.0	23.5
40°-50°	393.6	17.7
50°-60°	242.2	10.9
60°-70°	98.6	4.4
70°-80°	23.2	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°	942.3	42.3
0°-40°	1466.3	65.8
0°-60°	2102.0	94.4
0°-90°	2227.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2227.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1155	1155	1155	1155	1155	
5°	1158	1161	1162	1161	1161	110
15°	1074	1149	1222	1188	1133	302
25°	941	1046	1233	1135	1045	428
35°	762	784	939	868	843	481
45°	629	544	340	507	649	480
55°	340	322	89	322	398	305
65°	106	107	14	144	153	111
75°	18	18	2	32	34	22
85°	2	2	1	4	6	3
90°	0	0	0	0	0	



TEST NUMBER: P245474

CATALOG NUMBER: LSR8B20D010 EC8B20840 8LBDW0WH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3
2.5°	1158.4	1156.5	1158.4	1158.4	1159.0	1157.7	1158.4	1159.0	1157.7	1157.7	1157.7
5°	1157.7	1156.5	1157.7	1157.1	1158.4	1158.4	1159.6	1159.6	1160.8	1160.8	1162.7
7.5°	1147.9	1145.5	1147.9	1149.8	1151.0	1153.5	1156.5	1159.0	1161.4	1163.9	1166.9
10°	1127.7	1127.7	1129.5	1133.2	1136.9	1141.2	1146.7	1152.8	1159.0	1164.5	1170.0
12.5°	1102.6	1100.7	1104.4	1109.3	1114.8	1121.6	1130.2	1139.4	1149.2	1160.2	1168.8
15°	1073.7	1071.9	1076.2	1081.1	1087.8	1097.7	1108.1	1120.3	1134.4	1149.2	1163.3
17.5°	1044.3	1043.7	1048.0	1054.7	1060.3	1070.7	1084.2	1098.9	1114.8	1134.4	1152.8
20°	1014.3	1013.6	1017.9	1023.5	1030.8	1040.6	1054.1	1071.3	1090.3	1112.4	1133.8
22.5°	983.0	983.6	987.3	993.4	999.5	1010.0	1024.1	1041.2	1062.1	1086.0	1109.9
25°	940.7	937.6	942.5	948.6	959.1	967.6	981.1	999.5	1021.0	1046.1	1074.4
27.5°	879.3	878.7	883.0	888.5	897.7	908.2	922.9	941.9	964.6	992.2	1019.8
30°	818.0	819.3	821.1	826.6	832.7	843.2	857.9	873.8	895.3	921.7	951.1
32.5°	776.3	776.3	778.8	782.5	786.8	792.3	802.7	814.3	830.9	849.3	870.8
35°	762.2	759.8	762.2	762.8	763.5	764.7	766.5	770.2	775.7	783.7	791.7
37.5°	756.1	754.3	754.3	751.8	748.7	745.1	740.1	734.6	728.5	720.5	714.4
40°	732.2	731.0	729.7	727.3	720.5	713.2	705.2	692.3	678.2	658.6	639.0
42.5°	686.2	685.0	684.3	679.4	673.3	664.7	655.5	642.0	624.3	599.1	570.9
45°	629.2	626.7	624.9	620.6	616.3	608.9	600.3	588.1	570.3	544.5	510.8
47.5°	562.9	561.7	561.1	559.3	555.0	550.7	545.2	535.3	519.4	494.9	459.9
50°	496.1	493.6	494.9	494.3	492.4	489.4	485.7	478.9	466.7	444.6	412.7
52.5°	419.4	419.4	418.8	420.7	421.3	420.7	421.3	413.9	403.5	386.9	360.0
55°	339.7	339.7	341.6	344.0	346.5	347.1	346.5	343.4	336.0	322.5	298.6
57.5°	264.9	263.7	267.4	271.0	273.5	275.9	274.1	271.7	267.4	256.3	237.9
60°	201.7	201.7	204.2	206.7	209.1	211.6	210.9	210.3	206.7	199.3	184.6
62.5°	148.4	149.0	149.0	150.9	153.3	155.8	157.6	155.8	153.9	149.0	139.2
65°	106.1	105.5	106.1	107.9	109.8	112.2	113.4	112.8	111.0	107.3	100.0
67.5°	71.1	70.5	73.0	73.6	74.8	77.3	76.7	77.3	76.7	73.6	67.5
70°	46.6	45.4	46.6	46.0	47.8	48.4	49.7	50.3	49.7	47.8	46.0
72.5°	28.8	28.2	28.8	29.4	30.1	30.7	31.9	31.9	31.3	30.1	27.6
75°	18.4	16.6	17.2	15.9	17.2	17.2	18.4	19.0	18.4	18.4	17.2
77.5°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.7	12.3	11.0	10.4
80°	5.5	5.5	6.1	6.1	6.1	6.8	6.1	6.1	6.1	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°	1.8	2.4	1.8	1.2	1.8	1.8	2.4	1.8	1.8	1.8	2.4
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



TEST NUMBER: P245474

CATALOG NUMBER: LSR8B20D010 EC8B20840 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3
2.5°	1158.4	1157.1	1157.1	1156.5	1157.7	1156.5	1157.1	1156.5	1156.5	1157.7	1156.5
5°	1162.7	1163.3	1162.0	1161.4	1163.3	1163.3	1163.3	1162.0	1162.0	1162.7	1162.0
7.5°	1168.8	1170.0	1170.6	1171.2	1172.5	1173.1	1173.1	1172.5	1171.9	1173.7	1171.2
10°	1175.5	1177.4	1181.1	1182.9	1186.0	1186.0	1187.2	1187.2	1186.0	1187.2	1186.6
12.5°	1173.1	1184.1	1190.2	1194.5	1198.8	1202.5	1203.7	1204.4	1203.7	1206.2	1203.7
15°	1177.4	1186.6	1196.4	1203.7	1211.7	1216.0	1217.2	1222.1	1223.4	1224.0	1220.3
17.5°	1170.6	1187.2	1197.6	1208.6	1220.3	1228.3	1235.6	1238.7	1239.3	1240.5	1235.6
20°	1155.3	1173.7	1189.6	1205.6	1219.1	1231.3	1237.5	1246.1	1243.6	1248.5	1241.8
22.5°	1134.4	1155.3	1175.5	1196.4	1210.5	1225.2	1238.1	1244.2	1247.3	1247.3	1239.9
25°	1101.3	1125.9	1147.9	1169.4	1190.9	1208.6	1223.4	1232.6	1234.4	1233.8	1225.2
27.5°	1049.8	1076.2	1101.9	1126.5	1152.8	1173.7	1190.9	1201.9	1205.0	1205.0	1195.8
30°	978.7	1006.9	1032.0	1061.5	1088.5	1111.8	1135.7	1145.5	1151.0	1151.0	1140.6
32.5°	894.1	918.0	941.3	970.1	999.5	1025.9	1048.6	1062.1	1068.8	1068.2	1059.0
35°	802.1	813.7	831.5	853.0	879.3	903.9	925.9	938.8	950.5	949.9	941.3
37.5°	710.1	707.0	708.9	716.8	733.4	750.6	767.7	780.0	789.8	794.1	792.3
40°	620.0	604.0	588.7	583.2	584.4	590.5	599.7	608.9	620.0	625.5	627.9
42.5°	539.0	512.0	485.0	464.8	453.2	449.5	453.8	456.8	463.6	471.6	479.5
45°	474.0	437.8	402.3	371.0	351.4	339.7	337.3	339.7	343.4	351.4	361.8
47.5°	420.7	378.3	338.5	303.5	274.7	259.4	255.1	253.9	257.5	264.9	279.0
50°	373.4	331.1	287.0	246.5	216.5	199.3	193.2	190.7	195.0	200.5	213.4
52.5°	321.9	280.2	234.9	195.6	164.3	146.6	139.8	136.1	138.6	145.9	158.8
55°	266.1	227.5	186.4	145.9	115.9	99.3	91.4	88.9	91.4	99.3	112.2
57.5°	210.3	177.8	143.5	105.5	78.5	61.9	54.0	51.5	58.3	61.3	74.8
60°	164.3	138.0	108.5	77.3	54.0	41.1	33.1	31.3	34.3	39.9	50.9
62.5°	123.3	106.7	83.4	55.2	39.9	26.4	22.1	20.2	22.1	26.4	35.0
65°	89.5	76.7	58.3	40.5	27.0	19.6	14.7	13.5	15.3	18.4	25.8
67.5°	61.3	51.5	40.5	28.2	18.4	12.3	10.4	10.4	11.0	13.5	19.0
70°	39.9	33.7	25.8	18.4	12.3	9.2	8.0	6.8	8.0	9.8	12.9
72.5°	25.1	21.5	16.6	12.9	9.2	6.8	5.5	4.9	6.1	7.4	9.8
75°	15.3	11.7	8.6	6.8	4.9	4.9	4.9	2.4	3.1	4.9	6.1
77.5°	9.2	8.0	6.8	5.5	4.3	2.4	2.4	2.4	3.1	3.7	5.5
80°	4.9	4.3	3.1	3.1	2.4	1.8	2.4	1.8	1.2	3.1	3.7
82.5°	3.1	2.4	2.4	2.4	3.1	1.2	1.8	1.2	1.8	2.4	1.8
85°	1.8	1.8	1.8	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



TEST NUMBER: P245474

CATALOG NUMBER: LSR8B20D010 EC8B20840 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3	1155.3
2.5°	1157.1	1156.5	1157.1	1156.5	1156.5	1156.5	1157.1	1157.1	1156.5	1156.5	1157.7
5°	1162.0	1162.0	1162.0	1161.4	1160.8	1160.8	1162.0	1162.0	1160.2	1162.0	1162.0
7.5°	1172.5	1170.6	1172.5	1170.0	1168.8	1169.4	1170.0	1168.8	1167.6	1168.2	1168.2
10°	1186.0	1184.1	1184.1	1182.3	1180.4	1179.2	1178.0	1174.9	1171.9	1171.2	1168.8
12.5°	1201.9	1198.8	1197.0	1193.3	1190.2	1186.0	1182.3	1177.4	1171.2	1166.9	1162.7
15°	1217.8	1212.9	1208.6	1202.5	1195.8	1188.4	1180.4	1172.5	1162.7	1154.1	1146.7
17.5°	1230.7	1224.0	1216.0	1206.2	1196.4	1185.3	1173.7	1162.0	1147.9	1136.9	1128.3
20°	1235.0	1225.2	1214.8	1201.9	1189.0	1173.7	1159.0	1143.6	1127.7	1116.1	1106.2
22.5°	1229.5	1217.8	1205.0	1191.5	1174.3	1157.7	1140.6	1122.8	1108.7	1092.8	1083.6
25°	1214.2	1200.1	1186.0	1170.0	1153.5	1135.1	1116.7	1098.3	1081.1	1072.5	1060.9
27.5°	1182.9	1167.6	1152.2	1135.7	1116.7	1098.3	1079.3	1061.5	1046.8	1035.1	1028.4
30°	1127.7	1109.9	1092.1	1074.4	1057.8	1038.8	1021.0	1006.3	991.6	982.4	975.6
32.5°	1043.1	1027.1	1009.4	992.2	976.9	960.9	946.2	933.3	922.9	916.8	911.8
35°	929.0	913.1	899.6	887.3	874.4	867.7	858.5	851.1	846.8	844.4	843.8
37.5°	785.5	776.3	772.0	769.6	767.1	765.3	766.5	769.6	772.0	776.3	781.2
40°	632.2	640.2	642.7	651.2	659.2	669.6	681.3	694.8	705.8	719.9	729.7
42.5°	492.4	507.1	524.3	542.7	562.3	581.3	604.6	626.1	645.7	663.5	678.8
45°	378.3	401.0	426.8	453.2	479.5	507.1	535.3	561.7	585.0	604.0	620.0
47.5°	295.0	320.1	353.2	385.7	417.6	450.1	481.4	509.0	528.6	547.0	561.1
50°	233.6	262.5	298.6	336.0	371.0	405.3	438.4	464.2	483.8	498.5	509.0
52.5°	180.9	215.2	252.0	291.3	328.7	366.1	396.7	420.7	436.6	449.5	457.5
55°	134.9	168.6	207.9	248.4	286.4	322.5	351.4	372.2	386.3	393.7	398.0
57.5°	97.5	128.2	167.4	207.9	242.2	276.6	299.9	318.9	326.8	331.1	333.0
60°	71.1	99.3	134.3	169.2	201.7	229.3	249.6	262.5	268.6	271.0	270.4
62.5°	52.1	76.7	106.7	136.1	162.5	185.2	201.1	209.7	212.8	214.0	212.2
65°	39.9	58.9	84.6	107.3	127.6	144.1	155.8	161.3	163.1	162.5	161.3
67.5°	29.4	44.2	63.2	80.3	95.1	107.9	114.1	119.0	120.2	118.4	116.5
70°	20.9	32.5	46.0	57.6	68.7	76.0	82.8	83.4	83.4	82.8	81.6
72.5°	14.7	22.7	31.3	39.3	46.0	51.5	54.0	55.8	55.2	54.6	53.4
75°	9.8	14.1	22.7	24.5	30.7	32.5	35.0	35.0	35.6	33.7	33.7
77.5°	6.1	9.8	13.5	15.9	18.4	20.9	22.1	22.1	22.7	22.1	22.1
80°	3.7	6.1	7.4	11.0	11.0	12.9	13.5	14.1	12.9	14.7	12.9
82.5°	2.4	3.7	5.5	5.5	6.8	8.0	8.0	8.6	8.6	8.0	8.0
85°	1.8	2.4	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	2.4	1.8	1.8	1.8	2.4	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



TEST NUMBER: P245474

CATALOG NUMBER: LSR8B20D010 EC8B20840 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1155.3	1155.3	1155.3	1155.3
2.5°	1156.5	1157.1	1156.5	1156.5
5°	1162.0	1161.4	1162.0	1160.8
7.5°	1166.3	1166.3	1165.7	1165.7
10°	1166.3	1163.9	1163.9	1163.9
12.5°	1157.1	1154.1	1152.2	1151.0
15°	1141.2	1135.7	1133.2	1132.6
17.5°	1120.3	1115.4	1112.4	1110.5
20°	1096.4	1091.5	1087.8	1088.5
22.5°	1075.6	1070.1	1067.6	1066.4
25°	1054.7	1048.0	1046.1	1044.9
27.5°	1021.0	1017.3	1015.5	1013.6
30°	969.5	967.6	964.6	968.9
32.5°	910.0	906.9	904.5	906.3
35°	844.4	842.6	844.4	843.2
37.5°	784.3	786.1	788.6	789.8
40°	737.1	743.8	746.3	747.5
42.5°	689.9	697.8	702.7	705.8
45°	631.6	639.6	645.1	648.8
47.5°	571.5	578.3	583.8	583.2
50°	516.9	520.6	523.1	525.5
52.5°	461.7	461.7	462.4	462.4
55°	399.2	398.0	397.4	398.0
57.5°	330.5	329.3	328.7	326.8
60°	268.0	264.3	261.8	261.8
62.5°	209.7	205.4	203.6	203.0
65°	157.6	157.0	153.3	152.7
67.5°	114.1	111.6	109.2	109.8
70°	80.3	76.7	76.7	75.4
72.5°	52.1	50.3	49.7	49.7
75°	32.5	32.5	31.3	33.7
77.5°	21.5	21.5	20.9	21.5
80°	12.9	12.9	12.9	12.3
82.5°	8.0	8.6	8.0	8.0
85°	4.3	4.9	3.7	5.5
87.5°	2.4	3.1	2.4	3.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)