

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: P246236

Luminaire Tested: **LSR8B20D010 EC8B209727 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246236
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 EC8B209727 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1531.0 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

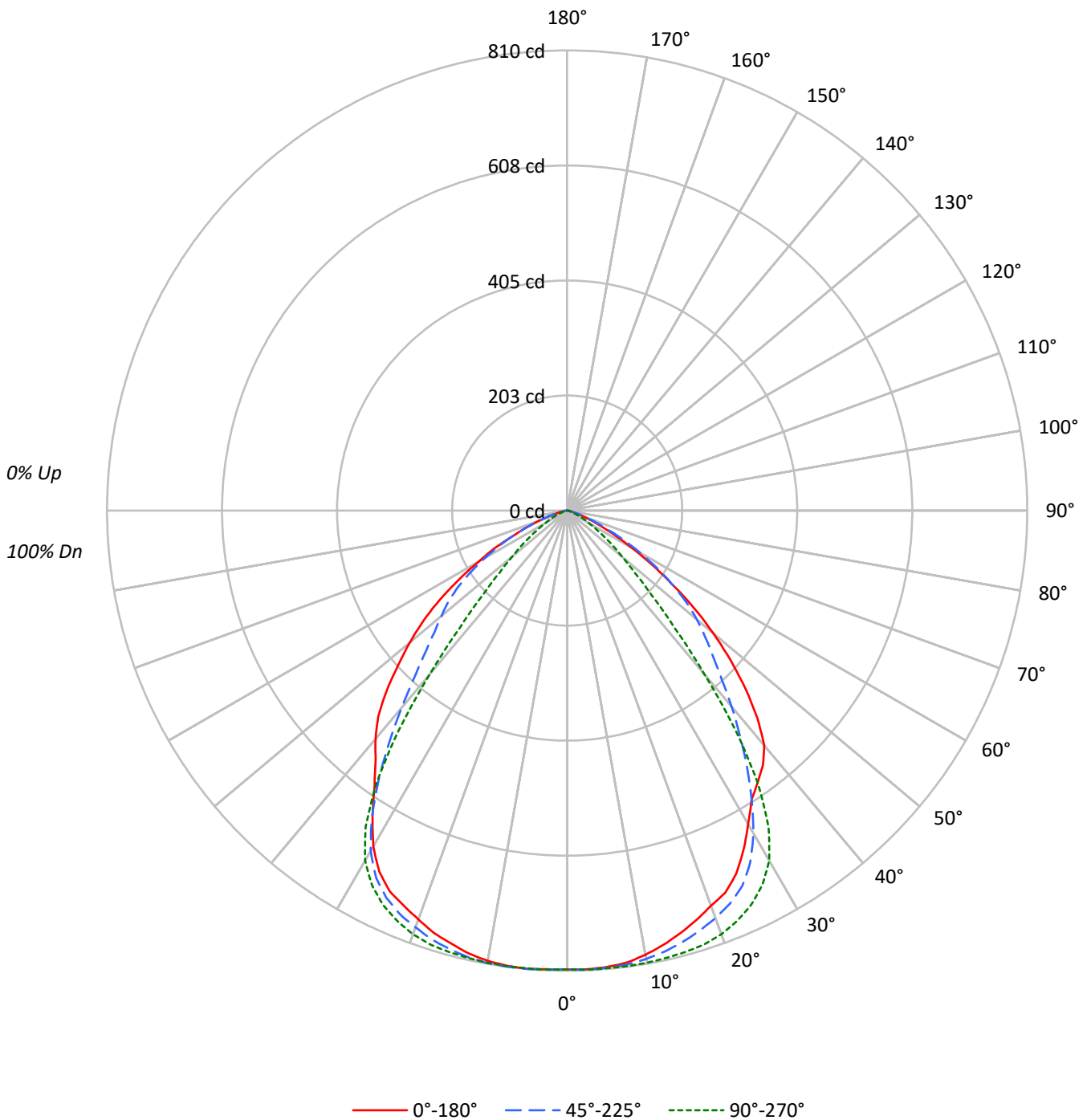
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P246236

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDW0MW

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	52	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



TEST NUMBER: P246236

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDW0MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	5.0
10°-20°	223.9	14.6
20°-30°	339.8	22.2
30°-40°	356.9	23.3
40°-50°	267.6	17.5
50°-60°	171.7	11.2
60°-70°	73.4	4.8
70°-80°	17.4	1.1
80°-90°	3.2	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°	640.8	41.9
0°-40°	997.7	65.2
0°-60°	1437.0	93.9
0°-90°	1531.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1531.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	808	808	808	808	808	
5°	806	808	809	810	810	77
15°	770	786	804	799	789	217
25°	705	729	766	752	739	322
35°	584	552	585	578	591	367
45°	444	363	209	352	450	340
55°	225	225	78	234	274	204
65°	68	80	25	103	104	72
75°	10	12	4	21	20	15
85°	4	2	2	4	5	4
90°	0	0	0	0	0	



TEST NUMBER: P246236

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8
2.5°	808.2	809.1	808.7	808.7	808.2	808.7	808.7	809.5	809.5	808.7	808.2
5°	806.5	807.4	807.4	806.5	806.5	808.7	807.4	808.2	808.2	807.8	807.8
7.5°	802.6	802.6	804.3	803.0	803.0	804.3	803.9	804.8	805.6	806.1	806.1
10°	793.9	794.8	795.2	795.2	795.6	796.9	797.8	799.6	800.4	801.3	801.7
12.5°	783.1	784.4	784.8	784.4	785.7	787.4	789.6	791.7	793.0	794.8	796.1
15°	770.1	770.1	770.9	772.2	773.1	775.7	777.9	780.5	783.9	786.1	788.3
17.5°	755.8	756.6	757.9	757.9	759.7	764.0	765.3	769.2	773.1	775.3	779.6
20°	740.2	741.0	742.3	743.2	745.3	748.8	751.4	754.9	759.2	763.1	767.5
22.5°	728.0	726.3	727.1	728.0	730.2	733.2	736.2	740.6	744.9	748.8	753.2
25°	704.6	705.0	706.3	707.2	709.8	712.4	715.9	721.1	725.0	729.3	734.1
27.5°	672.9	673.4	675.5	675.5	677.7	682.0	684.2	688.5	693.8	698.1	703.7
30°	637.0	637.8	637.8	639.6	640.8	643.0	645.2	649.5	652.1	656.0	663.8
32.5°	604.0	604.9	604.4	604.0	602.7	602.3	601.8	602.7	603.6	604.9	607.9
35°	584.5	582.3	580.6	577.6	574.1	569.7	565.8	560.6	555.9	552.0	547.6
37.5°	565.8	565.4	562.8	558.5	551.5	543.7	534.6	523.3	512.1	499.9	488.2
40°	539.8	538.5	536.4	530.3	522.5	512.9	500.8	486.9	468.7	450.1	431.0
42.5°	495.6	496.0	493.4	488.7	481.3	472.2	459.6	444.4	424.9	402.8	378.1
45°	444.0	444.0	443.1	439.2	434.0	426.7	417.1	404.5	385.5	362.9	336.5
47.5°	390.2	390.7	389.4	388.5	386.3	381.6	374.6	365.1	351.6	330.0	303.5
50°	335.6	335.6	337.8	337.3	337.3	335.6	332.6	326.9	315.2	297.9	273.2
52.5°	281.0	281.8	283.1	284.9	287.0	290.5	287.0	284.4	277.1	263.6	242.4
55°	224.6	225.5	227.6	230.7	233.3	236.7	237.6	237.6	233.7	224.6	208.6
57.5°	176.5	175.2	176.9	179.5	183.0	186.4	189.0	192.1	191.6	185.6	172.6
60°	132.7	133.1	134.4	137.0	139.6	142.7	146.1	148.7	150.0	147.0	138.7
62.5°	96.7	96.7	98.4	101.0	102.3	106.7	108.8	110.1	111.4	111.0	105.8
65°	67.6	68.5	69.4	70.7	72.0	74.6	75.9	78.5	79.3	79.8	75.9
67.5°	47.7	46.4	47.3	48.1	49.4	51.2	53.8	53.8	55.1	55.1	52.5
70°	30.4	30.4	30.8	32.1	33.0	33.4	34.3	35.1	36.4	36.0	36.0
72.5°	20.4	19.9	20.4	20.8	21.3	22.5	22.5	23.0	23.8	24.3	22.5
75°	10.4	10.8	11.7	11.3	12.6	11.7	12.1	13.4	13.0	12.1	12.1
77.5°	8.7	8.7	8.7	8.2	9.1	9.1	8.7	9.5	9.1	9.1	8.7
80°	6.1	6.5	6.1	5.6	6.1	5.6	5.6	5.6	5.6	5.6	5.2
82.5°	4.8	3.9	4.3	3.9	4.3	4.3	3.9	3.5	3.5	3.9	3.5
85°	3.5	2.6	3.0	3.0	2.6	2.6	2.6	2.6	2.6	2.2	2.2
87.5°	2.2	1.3	1.3	1.3	1.7	1.7	1.7	1.3	1.7	1.7	0.9
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: P246236

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8
2.5°	809.1	808.7	809.5	809.1	809.1	808.7	809.1	808.7	809.5	807.8	808.2
5°	809.1	808.2	808.7	809.1	809.5	808.7	808.7	808.7	809.5	808.7	809.1
7.5°	807.4	806.9	808.2	809.1	808.7	808.2	809.1	808.7	809.5	809.1	810.0
10°	803.9	804.3	805.2	806.5	806.9	807.4	808.2	808.2	809.5	807.8	808.7
12.5°	798.7	800.4	802.6	803.4	805.2	805.2	806.1	806.5	807.4	806.9	808.2
15°	792.2	794.3	796.9	799.1	801.3	802.6	803.9	804.3	805.6	804.3	804.8
17.5°	784.4	787.0	790.9	793.5	796.9	798.2	800.0	800.8	802.2	801.3	801.7
20°	773.5	776.6	780.9	784.8	787.0	790.0	792.2	793.5	794.3	793.5	793.9
22.5°	758.4	762.7	768.3	771.4	775.7	778.3	778.7	781.8	783.9	781.8	782.6
25°	740.6	744.9	749.3	755.8	759.7	762.7	765.7	766.2	768.3	767.9	767.5
27.5°	711.1	716.7	724.1	729.3	734.5	739.3	742.8	743.6	745.8	744.9	745.3
30°	670.8	676.8	683.8	692.0	699.4	704.2	708.5	711.5	713.7	712.4	712.0
32.5°	613.5	619.6	627.0	635.2	643.9	650.8	656.0	659.9	662.5	661.7	659.5
35°	548.1	549.8	554.6	561.1	568.4	575.8	580.6	584.9	587.9	588.8	588.8
37.5°	480.9	475.2	471.8	471.8	476.1	479.1	483.5	486.1	490.8	492.6	493.9
40°	415.8	402.8	390.7	381.6	375.5	375.1	375.1	376.4	380.7	386.3	391.5
42.5°	357.7	336.9	318.3	301.3	289.2	282.3	279.2	279.7	283.1	288.3	297.0
45°	311.3	285.3	261.9	241.5	225.0	214.2	209.0	208.6	211.2	217.2	226.8
47.5°	275.3	247.6	221.1	197.7	179.9	168.2	162.2	160.4	162.2	167.8	179.1
50°	245.4	216.8	189.5	165.2	146.1	134.0	128.3	126.2	128.3	133.1	144.4
52.5°	217.7	188.2	162.6	139.2	118.8	108.4	102.3	101.0	102.3	108.0	117.1
55°	185.6	160.4	135.3	111.9	94.1	83.7	78.9	77.6	78.9	84.1	93.7
57.5°	153.9	132.2	110.1	88.9	73.7	64.6	60.3	58.5	61.6	65.0	76.3
60°	124.4	107.1	88.5	69.8	57.2	49.0	45.5	45.1	46.0	50.3	58.1
62.5°	97.6	83.3	68.5	53.3	42.9	39.5	35.1	34.7	35.6	38.2	44.2
65°	70.2	61.1	49.9	39.0	30.8	26.0	24.3	24.7	25.6	27.3	33.0
67.5°	49.0	42.5	34.7	27.3	21.3	19.1	17.3	16.9	17.3	20.4	23.4
70°	33.0	29.0	23.4	20.8	14.7	11.7	12.1	10.8	12.6	12.6	15.2
72.5°	21.7	19.1	15.6	12.1	10.4	8.2	8.2	7.8	8.7	9.1	11.3
75°	11.3	8.7	8.7	6.1	4.3	2.2	3.9	3.5	3.0	3.5	4.3
77.5°	7.8	6.5	6.1	4.8	4.3	3.5	3.5	3.5	3.5	3.9	4.3
80°	4.8	4.8	3.5	3.0	2.6	2.2	2.6	2.6	2.6	2.6	3.0
82.5°	3.0	2.6	2.6	2.2	2.2	1.7	1.7	1.7	1.7	1.7	2.6
85°	2.6	1.7	1.7	1.3	1.7	3.0	1.3	1.7	1.7	1.7	1.3
87.5°	0.9	1.3	1.3	1.3	0.9	0.4	0.9	1.3	1.3	2.2	1.7
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: P246236

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8	807.8
2.5°	809.1	809.5	809.5	809.1	809.1	808.2	810.0	808.7	809.1	810.8	809.5
5°	810.0	810.4	810.4	810.0	810.0	810.0	810.4	810.4	810.0	809.5	810.4
7.5°	811.7	811.3	811.3	810.4	810.4	809.5	810.4	809.1	810.0	809.1	810.4
10°	809.5	810.0	809.5	809.1	809.1	808.7	808.7	807.4	807.8	806.5	807.4
12.5°	808.2	807.8	807.8	806.9	806.1	805.2	804.8	803.4	803.4	800.4	801.7
15°	804.8	805.2	803.9	802.2	801.3	799.1	798.2	796.5	794.8	792.6	793.0
17.5°	801.7	800.4	798.7	796.9	793.5	791.7	790.0	787.4	786.5	783.9	783.1
20°	792.6	791.7	789.6	786.5	784.4	780.5	778.7	776.1	774.0	771.4	770.1
22.5°	780.9	780.0	777.4	774.4	770.9	769.2	767.5	762.7	760.5	757.9	757.5
25°	766.2	764.9	762.3	758.8	757.1	752.3	750.5	747.1	746.2	743.6	743.2
27.5°	743.6	741.9	738.8	734.5	731.5	728.4	726.7	724.1	723.2	720.6	720.2
30°	709.8	707.6	701.6	699.8	694.6	691.6	691.6	688.1	688.5	686.8	686.8
32.5°	656.5	653.0	648.2	644.8	641.3	639.6	639.6	638.2	639.1	639.1	640.0
35°	585.8	581.0	578.4	576.2	576.2	578.0	583.2	584.5	587.1	589.3	591.0
37.5°	495.2	494.7	497.8	500.4	506.9	514.2	523.3	531.2	538.5	543.7	548.9
40°	397.2	408.0	416.7	428.8	438.8	453.1	469.6	483.0	495.6	504.7	514.2
42.5°	310.0	323.9	342.1	359.9	377.7	397.2	418.9	437.5	454.0	466.5	476.5
45°	241.5	260.6	282.7	305.3	328.2	352.5	375.1	394.1	411.5	424.5	434.5
47.5°	194.7	215.5	240.6	265.4	291.4	317.0	342.1	358.6	372.9	383.3	392.4
50°	160.9	183.0	209.4	237.6	263.6	289.2	310.9	326.9	338.6	347.7	353.4
52.5°	134.4	157.8	186.0	214.2	240.2	263.6	283.1	295.3	304.8	311.3	316.5
55°	111.0	133.6	160.0	186.4	212.0	234.1	250.2	259.3	266.7	270.6	273.6
57.5°	90.6	111.4	135.7	160.0	182.1	200.3	212.9	222.0	225.5	228.5	228.1
60°	71.1	90.6	112.7	133.6	152.6	167.4	176.5	181.7	184.3	185.6	184.7
62.5°	55.9	73.7	90.6	108.8	122.7	135.3	144.0	144.0	145.3	145.7	147.0
65°	41.6	55.1	69.8	83.3	94.5	102.8	107.5	108.8	110.6	110.1	109.3
67.5°	30.8	40.8	51.6	61.6	69.4	74.6	78.0	81.1	80.7	79.8	79.3
70°	21.3	27.8	37.3	43.4	49.0	54.2	55.1	55.5	55.9	56.4	55.5
72.5°	14.7	19.5	24.7	29.9	33.4	35.6	37.7	38.2	38.2	38.2	37.7
75°	7.4	10.0	14.7	16.9	19.9	20.8	22.5	22.5	23.8	22.1	21.7
77.5°	6.5	7.8	10.4	12.1	13.4	14.7	15.2	16.5	16.0	15.2	15.6
80°	3.9	4.8	6.5	7.4	9.1	9.5	10.0	10.4	10.0	10.4	10.4
82.5°	3.0	3.5	4.3	4.3	5.6	5.6	6.1	6.1	6.5	6.5	6.5
85°	1.7	3.0	2.6	5.2	3.5	3.5	4.3	5.2	4.3	4.3	5.2
87.5°	1.7	1.7	1.3	1.7	1.7	1.7	2.2	2.6	2.6	3.0	2.6
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: P246236

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	807.8	807.8	807.8	807.8
2.5°	809.1	810.0	808.7	808.2
5°	810.4	810.4	809.5	809.5
7.5°	810.4	810.4	809.1	808.2
10°	806.9	806.9	805.6	804.8
12.5°	800.4	800.4	800.0	798.7
15°	792.2	792.2	790.4	789.1
17.5°	780.9	781.8	779.6	779.6
20°	768.8	768.3	766.6	765.7
22.5°	756.2	755.3	754.9	752.3
25°	742.8	741.9	740.6	739.3
27.5°	719.8	719.3	718.0	716.3
30°	684.6	684.2	682.5	682.5
32.5°	639.1	638.7	637.0	637.4
35°	591.9	593.6	592.7	591.0
37.5°	552.4	553.7	554.6	553.7
40°	519.4	523.3	523.8	524.7
42.5°	484.3	489.5	491.3	492.1
45°	442.3	447.0	450.9	450.1
47.5°	399.3	402.8	406.3	403.7
50°	358.2	360.3	361.6	361.6
52.5°	319.1	319.1	318.7	319.1
55°	274.5	274.5	272.7	273.6
57.5°	227.6	228.5	227.2	225.0
60°	184.3	182.1	181.2	179.9
62.5°	143.5	143.5	140.5	144.4
65°	107.5	106.2	104.9	104.5
67.5°	78.0	77.6	76.3	75.9
70°	55.1	53.3	52.9	52.0
72.5°	36.9	36.9	36.0	36.0
75°	22.5	20.4	19.9	20.4
77.5°	15.6	15.2	15.2	14.7
80°	10.4	10.0	10.8	9.5
82.5°	6.5	6.9	6.5	6.9
85°	4.3	5.2	4.8	4.8
87.5°	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)