

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: LUMIERE

Report Number: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)

Luminaire Tested: **1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29416)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS,
WIDE FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 3500K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

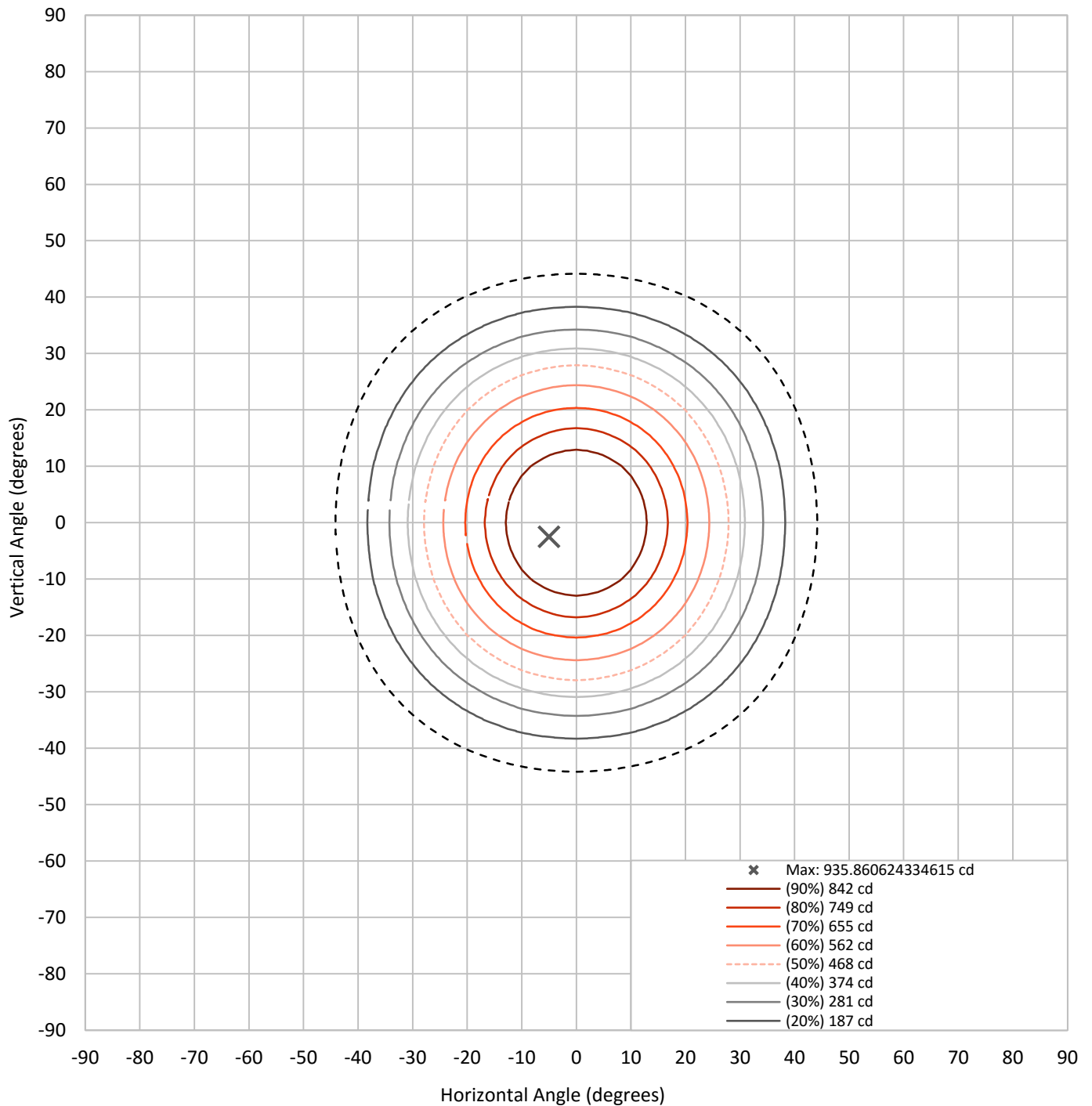
Summary

Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	784.8 lumens	Max Intensity:	935.9 candela
Efficiency:	N/A	Max Intensity Angle:	-5°H x -2.5°V
Efficacy:	78.5 lumens/watt		
Luminous Opening:	Circular (Dia: 0.17' x H: 0')		
Beam Angle (50%):	55.7°H x 55.1°V	Field Angle (10%):	88.2°H x 87.8°V
Beam Lumens:	503.5 lumens	Field Lumens:	757.4 lumens
Beam Efficiency:	64.2%	Field Efficiency:	96.5%
Input Watts (W):	10		
Input Voltage (V):	120		
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		



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

Iso-Candela Plot





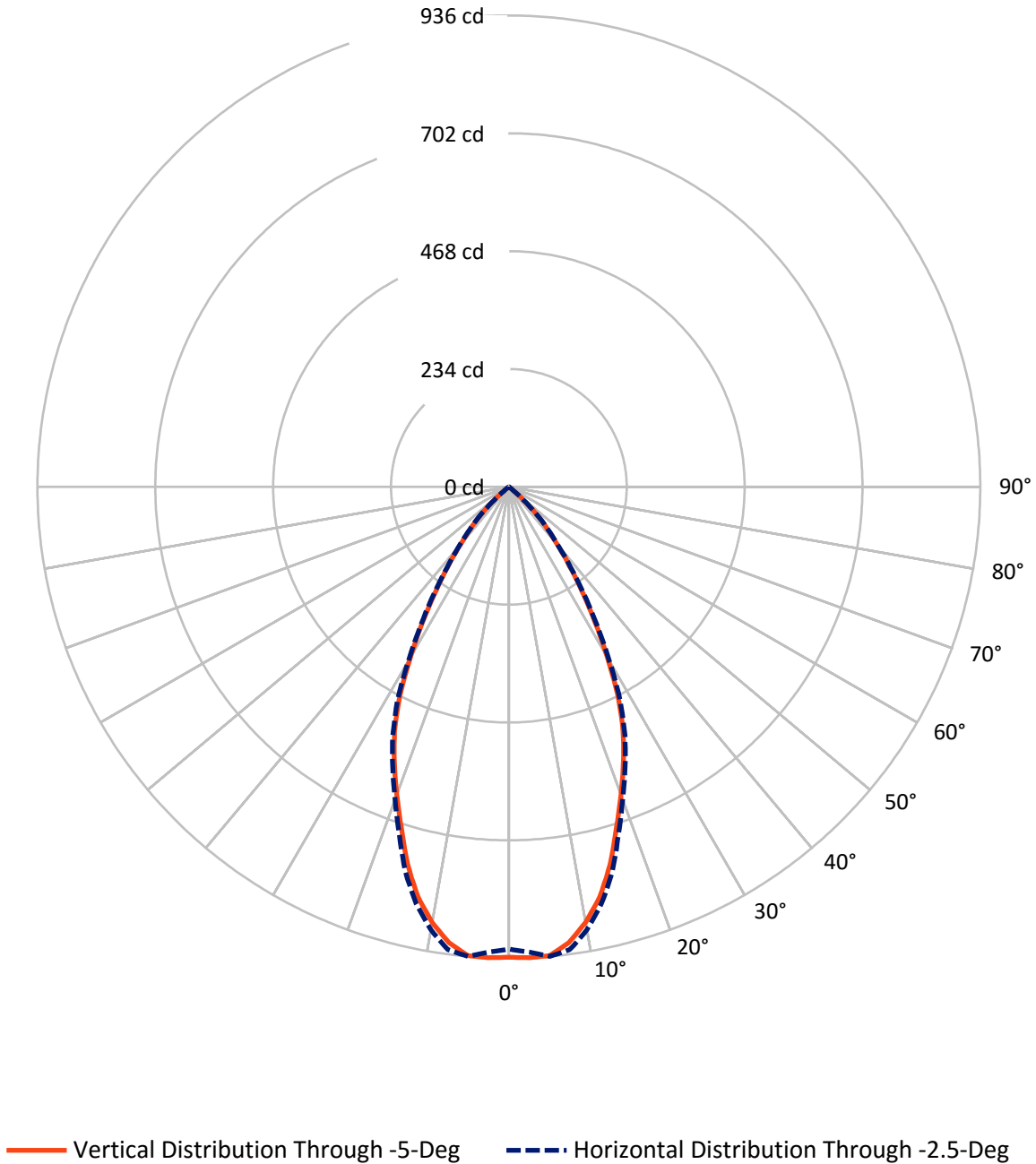
REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

Lumen Table

90																			
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
70																			
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
50		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0					
40	0.0	0.0	0.0	0.0	0.1	0.7	1.7	2.4	2.4	1.7	0.7	0.1	0.0	0.0	0.0				
30		0.0	0.0	0.1	1.1	3.4	6.0	7.8	7.8	6.0	3.4	1.1	0.1	0.0					
20	0.0	0.0	0.0	0.5	3.1	7.5	12.7	15.9	15.9	12.7	7.5	3.1	0.5	0.0	0.0				
10		0.0	0.0	1.3	5.1	11.9	18.7	23.2	23.2	18.7	11.9	5.1	1.3	0.0					
0	0.0	0.0	0.0	1.7	6.5	14.5	22.5	27.6	27.6	22.5	14.5	6.5	1.7	0.0	0.0				
-10		0.0	0.0	1.7	6.5	14.5	22.5	27.6	27.6	22.5	14.5	6.5	1.7	0.0					
-20	0.0	0.0	0.0	1.3	5.1	11.9	18.7	23.2	23.2	18.7	11.9	5.1	1.3	0.0	0.0				
-30		0.0	0.0	0.5	3.1	7.5	12.7	15.9	15.9	12.7	7.5	3.1	0.5	0.0					
-40	0.0	0.0	0.0	0.1	1.1	3.4	6.0	7.8	7.8	6.0	3.4	1.1	0.1	0.0	0.0				
-50		0.0	0.0	0.0	0.1	0.7	1.7	2.4	2.4	1.7	0.7	0.1	0.0	0.0					
-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0				
-70		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
-80																			
-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90

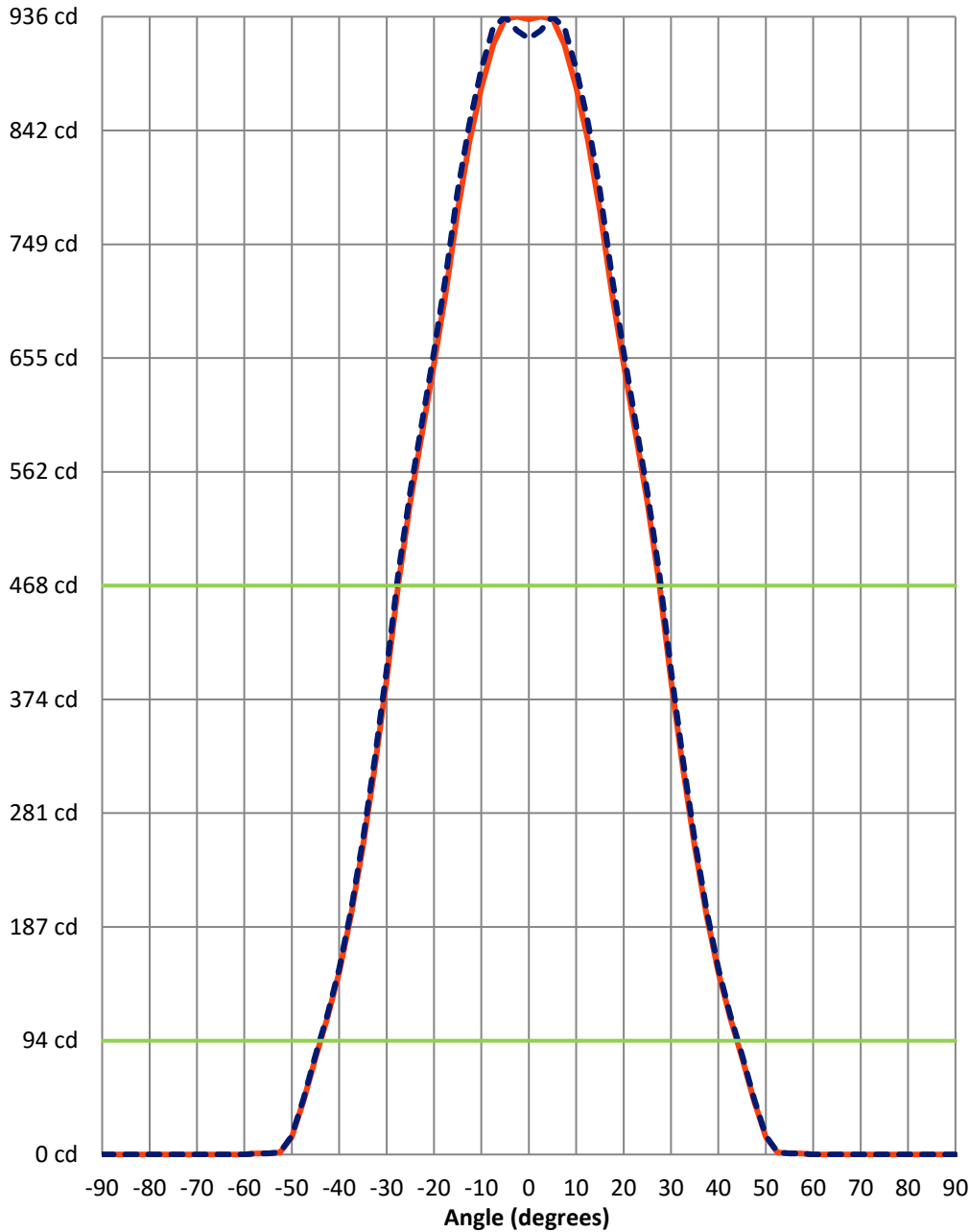
REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

Luminous Intensity Polar Plot



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

Luminous Intensity Plot



Beam:
 H Angle: 55.7°
 V Angle: 55.1°
 Lumens: 503.5
 Efficiency: 64.2%

Field:
 H Angle: 88.2°
 V Angle: 87.8°
 Lumens: 757.4
 Efficiency: 96.5%

Spill:
 Lumens: 27.3
 Efficiency: 3.5%

- Vertical Distribution through -5-Deg
- - Horizontal Distribution through -2.5-Deg



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

FIELD
 BEAM

CANDELA DISTRIBUTION:

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0	0	0	0	0
65°	0	0	0	0	0	0	0	0	0	0	0
62.5°	0	0	0	0	0	0	0	0	0	0	0
60°	0	0	0	0	0	0	0	0	0	0	0
57.5°	0	0	0	0	0	0	0	0	0	0	0
55°	0	0	0	0	0	0	0	0	0	0	0
52.5°	0	0	0	0	0	0	0	0	0	0	0
50°	0	0	0	0	0	0	0	0	0	0	0
47.5°	0	0	0	0	0	0	0	0	0	0	0
45°	0	0	0	0	0	0	0	0	0	0	0
42.5°	0	0	0	0	0	0	0	0	0	0	0
40°	0	0	0	0	0	0	0	0	0	0	0
37.5°	0	0	0	0	0	0	0	0	0	0	0
35°	0	0	0	0	0	0	0	0	0	0	0
32.5°	0	0	0	0	0	0	0	0	0	0	0
30°	0	0	0	0	0	0	0	0	0	0	0
27.5°	0	0	0	0	0	0	0	0	0	0	0
25°	0	0	0	0	0	0	0	0	0	0	0
22.5°	0	0	0	0	0	0	0	0	0	0	0
20°	0	0	0	0	0	0	0	0	0	0	0
17.5°	0	0	0	0	0	0	0	0	0	0	0
15°	0	0	0	0	0	0	0	0	0	0	0
12.5°	0	0	0	0	0	0	0	0	0	0	0
10°	0	0	0	0	0	0	0	0	0	0	0
7.5°	0	0	0	0	0	0	0	0	0	0	0
5°	0	0	0	0	0	0	0	0	0	0	0
2.5°	0	0	0	0	0	0	0	0	0	0	0
0°	0	0	0	0	0	0	0	0	0	0	0
-2.5°	0	0	0	0	0	0	0	0	0	0	0
-5°	0	0	0	0	0	0	0	0	0	0	0
-7.5°	0	0	0	0	0	0	0	0	0	0	0
-10°	0	0	0	0	0	0	0	0	0	0	0
-12.5°	0	0	0	0	0	0	0	0	0	0	0
-15°	0	0	0	0	0	0	0	0	0	0	0
-17.5°	0	0	0	0	0	0	0	0	0	0	0
-20°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
-22.5°	0	0	0	0	0	0	0	0	0	0	0
-25°	0	0	0	0	0	0	0	0	0	0	0
-27.5°	0	0	0	0	0	0	0	0	0	0	0
-30°	0	0	0	0	0	0	0	0	0	0	0
-32.5°	0	0	0	0	0	0	0	0	0	0	0
-35°	0	0	0	0	0	0	0	0	0	0	0
-37.5°	0	0	0	0	0	0	0	0	0	0	0
-40°	0	0	0	0	0	0	0	0	0	0	0
-42.5°	0	0	0	0	0	0	0	0	0	0	0
-45°	0	0	0	0	0	0	0	0	0	0	0
-47.5°	0	0	0	0	0	0	0	0	0	0	0
-50°	0	0	0	0	0	0	0	0	0	0	0
-52.5°	0	0	0	0	0	0	0	0	0	0	0
-55°	0	0	0	0	0	0	0	0	0	0	0
-57.5°	0	0	0	0	0	0	0	0	0	0	0
-60°	0	0	0	0	0	0	0	0	0	0	0
-62.5°	0	0	0	0	0	0	0	0	0	0	0
-65°	0	0	0	0	0	0	0	0	0	0	0
-67.5°	0	0	0	0	0	0	0	0	0	0	0
-70°	0	0	0	0	0	0	0	0	0	0	0
-72.5°	0	0	0	0	0	0	0	0	0	0	0
-75°	0	0	0	0	0	0	0	0	0	0	0
-77.5°	0	0	0	0	0	0	0	0	0	0	0
-80°	0	0	0	0	0	0	0	0	0	0	0
-82.5°	0	0	0	0	0	0	0	0	0	0	0
-85°	0	0	0	0	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0	0	0	0	0
65°	0	0	0	0	0	0	0	0	0	0	0
62.5°	0	0	0	0	0	0	0	0	0	0	0
60°	0	0	0	0	0	0	0	0	0	0	0
57.5°	0	0	0	0	0	0	0	0	0	0	0
55°	0	0	0	0	0	0	0	0	0	0	0
52.5°	0	0	0	0	0	0	0	0	0	0	0
50°	0	0	0	0	0	0	0	0	0	0	0
47.5°	0	0	0	0	0	0	0	0	0	0	1
45°	0	0	0	0	0	0	0	0	1	1	1
42.5°	0	0	0	0	0	0	0	1	1	1	1
40°	0	0	0	0	0	0	0	1	1	1	2
37.5°	0	0	0	0	0	0	1	1	1	2	10
35°	0	0	0	0	0	1	1	1	2	9	22
32.5°	0	0	0	0	0	1	1	1	7	19	41
30°	0	0	0	0	1	1	1	3	14	35	60
27.5°	0	0	0	0	1	1	1	9	26	51	79
25°	0	0	0	0	1	1	3	15	40	68	95
22.5°	0	0	0	1	1	1	8	25	53	83	111
20°	0	0	0	1	1	2	12	36	66	96	126
17.5°	0	0	0	1	1	3	17	46	78	108	141
15°	0	0	0	1	1	7	25	55	88	119	154
12.5°	0	0	1	1	1	9	31	63	96	129	169
10°	0	0	1	1	1	12	37	70	103	138	181
7.5°	0	0	1	1	2	13	41	76	108	145	190
5°	0	0	1	1	2	15	44	79	112	150	197
2.5°	0	0	1	1	2	15	46	82	115	153	201
0°	0	0	1	1	2	16	47	83	116	154	202
-2.5°	0	0	1	1	2	15	46	82	115	153	201
-5°	0	0	1	1	2	15	44	79	112	150	197
-7.5°	0	0	1	1	2	13	41	76	108	145	190
-10°	0	0	1	1	1	12	37	70	103	138	181
-12.5°	0	0	1	1	1	9	31	63	96	129	169
-15°	0	0	0	1	1	7	25	55	88	119	154
-17.5°	0	0	0	1	1	3	17	46	78	108	141
-20°	0	0	0	1	1	2	12	36	66	96	126



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
-22.5°	0	0	0	1	1	1	8	25	53	83	111
-25°	0	0	0	0	1	1	3	15	40	68	95
-27.5°	0	0	0	0	1	1	1	9	26	51	79
-30°	0	0	0	0	1	1	1	3	14	35	60
-32.5°	0	0	0	0	0	1	1	1	7	19	41
-35°	0	0	0	0	0	1	1	1	2	9	22
-37.5°	0	0	0	0	0	0	1	1	1	2	10
-40°	0	0	0	0	0	0	0	1	1	1	2
-42.5°	0	0	0	0	0	0	0	1	1	1	1
-45°	0	0	0	0	0	0	0	0	1	1	1
-47.5°	0	0	0	0	0	0	0	0	0	0	1
-50°	0	0	0	0	0	0	0	0	0	0	0
-52.5°	0	0	0	0	0	0	0	0	0	0	0
-55°	0	0	0	0	0	0	0	0	0	0	0
-57.5°	0	0	0	0	0	0	0	0	0	0	0
-60°	0	0	0	0	0	0	0	0	0	0	0
-62.5°	0	0	0	0	0	0	0	0	0	0	0
-65°	0	0	0	0	0	0	0	0	0	0	0
-67.5°	0	0	0	0	0	0	0	0	0	0	0
-70°	0	0	0	0	0	0	0	0	0	0	0
-72.5°	0	0	0	0	0	0	0	0	0	0	0
-75°	0	0	0	0	0	0	0	0	0	0	0
-77.5°	0	0	0	0	0	0	0	0	0	0	0
-80°	0	0	0	0	0	0	0	0	0	0	0
-82.5°	0	0	0	0	0	0	0	0	0	0	0
-85°	0	0	0	0	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0	0	0	0	0
65°	0	0	0	0	0	0	0	0	0	0	0
62.5°	0	0	0	0	0	0	0	0	0	0	0
60°	0	0	0	0	0	0	0	0	0	0	0
57.5°	0	0	0	0	0	0	0	0	0	1	1
55°	0	0	0	0	0	1	1	1	1	1	1
52.5°	0	0	1	1	1	1	1	1	1	1	1
50°	1	1	1	1	1	1	2	3	7	9	12
47.5°	1	1	1	1	3	8	12	17	25	31	37
45°	1	1	3	9	15	25	36	46	55	63	70
42.5°	2	7	14	26	40	53	66	78	88	96	103
40°	9	19	35	51	68	83	96	108	119	129	138
37.5°	22	41	60	79	95	111	126	141	154	169	181
35°	42	64	85	104	122	141	160	181	199	216	232
32.5°	64	87	108	130	152	177	201	227	250	272	292
30°	85	108	132	157	187	217	248	279	308	334	358
27.5°	104	130	157	190	226	262	300	336	371	401	429
25°	122	152	187	226	267	310	354	396	437	474	502
22.5°	141	177	217	262	310	360	409	460	502	534	559
20°	160	201	248	300	354	409	468	515	552	584	611
17.5°	181	227	279	336	396	460	515	559	597	632	662
15°	199	250	308	371	437	502	552	597	639	678	715
12.5°	216	272	334	401	474	534	584	632	678	725	772
10°	232	292	358	429	502	559	611	662	715	772	819
7.5°	244	307	377	453	523	579	634	689	749	809	853
5°	253	318	390	470	537	594	650	709	776	834	878
2.5°	259	325	399	479	545	603	660	723	793	848	893
0°	261	328	401	482	548	606	664	728	798	853	898
-2.5°	259	325	399	479	545	603	660	723	793	848	893
-5°	253	318	390	470	537	594	650	709	776	834	878
-7.5°	244	307	377	453	523	579	634	689	749	809	853
-10°	232	292	358	429	502	559	611	662	715	772	819
-12.5°	216	272	334	401	474	534	584	632	678	725	772
-15°	199	250	308	371	437	502	552	597	639	678	715
-17.5°	181	227	279	336	396	460	515	559	597	632	662
-20°	160	201	248	300	354	409	468	515	552	584	611



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	141	177	217	262	310	360	409	460	502	534	559
-25°	122	152	187	226	267	310	354	396	437	474	502
-27.5°	104	130	157	190	226	262	300	336	371	401	429
-30°	85	108	132	157	187	217	248	279	308	334	358
-32.5°	64	87	108	130	152	177	201	227	250	272	292
-35°	42	64	85	104	122	141	160	181	199	216	232
-37.5°	22	41	60	79	95	111	126	141	154	169	181
-40°	9	19	35	51	68	83	96	108	119	129	138
-42.5°	2	7	14	26	40	53	66	78	88	96	103
-45°	1	1	3	9	15	25	36	46	55	63	70
-47.5°	1	1	1	1	3	8	12	17	25	31	37
-50°	1	1	1	1	1	1	2	3	7	9	12
-52.5°	0	0	1	1	1	1	1	1	1	1	1
-55°	0	0	0	0	0	1	1	1	1	1	1
-57.5°	0	0	0	0	0	0	0	0	0	1	1
-60°	0	0	0	0	0	0	0	0	0	0	0
-62.5°	0	0	0	0	0	0	0	0	0	0	0
-65°	0	0	0	0	0	0	0	0	0	0	0
-67.5°	0	0	0	0	0	0	0	0	0	0	0
-70°	0	0	0	0	0	0	0	0	0	0	0
-72.5°	0	0	0	0	0	0	0	0	0	0	0
-75°	0	0	0	0	0	0	0	0	0	0	0
-77.5°	0	0	0	0	0	0	0	0	0	0	0
-80°	0	0	0	0	0	0	0	0	0	0	0
-82.5°	0	0	0	0	0	0	0	0	0	0	0
-85°	0	0	0	0	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0	0	0	0	0
65°	0	0	0	0	0	0	0	0	0	0	0
62.5°	0	0	0	0	0	0	0	0	0	0	0
60°	0	0	0	0	0	0	0	0	0	0	0
57.5°	1	1	1	1	1	1	1	1	1	0	0
55°	1	1	1	1	1	1	1	1	1	1	1
52.5°	2	2	2	2	2	2	2	1	1	1	1
50°	13	15	15	16	15	15	13	12	9	7	3
47.5°	41	44	46	47	46	44	41	37	31	25	17
45°	76	79	82	83	82	79	76	70	63	55	46
42.5°	108	112	115	116	115	112	108	103	96	88	78
40°	145	150	153	154	153	150	145	138	129	119	108
37.5°	190	197	201	202	201	197	190	181	169	154	141
35°	244	253	259	261	259	253	244	232	216	199	181
32.5°	307	318	325	328	325	318	307	292	272	250	227
30°	377	390	399	401	399	390	377	358	334	308	279
27.5°	453	470	479	482	479	470	453	429	401	371	336
25°	523	537	545	548	545	537	523	502	474	437	396
22.5°	579	594	603	606	603	594	579	559	534	502	460
20°	634	650	660	664	660	650	634	611	584	552	515
17.5°	689	709	723	728	723	709	689	662	632	597	559
15°	749	776	793	798	793	776	749	715	678	639	597
12.5°	809	834	848	853	848	834	809	772	725	678	632
10°	853	878	893	898	893	878	853	819	772	715	662
7.5°	888	913	927	930	927	913	888	853	809	749	689
5°	913	934	936	934	936	934	913	878	834	776	709
2.5°	927	936	924	918	924	936	927	893	848	793	723
0°	930	934	918	916	918	934	930	898	853	798	728
-2.5°	927	936	924	918	924	936	927	893	848	793	723
-5°	913	934	936	934	936	934	913	878	834	776	709
-7.5°	888	913	927	930	927	913	888	853	809	749	689
-10°	853	878	893	898	893	878	853	819	772	715	662
-12.5°	809	834	848	853	848	834	809	772	725	678	632
-15°	749	776	793	798	793	776	749	715	678	639	597
-17.5°	689	709	723	728	723	709	689	662	632	597	559
-20°	634	650	660	664	660	650	634	611	584	552	515



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
-22.5°	579	594	603	606	603	594	579	559	534	502	460
-25°	523	537	545	548	545	537	523	502	474	437	396
-27.5°	453	470	479	482	479	470	453	429	401	371	336
-30°	377	390	399	401	399	390	377	358	334	308	279
-32.5°	307	318	325	328	325	318	307	292	272	250	227
-35°	244	253	259	261	259	253	244	232	216	199	181
-37.5°	190	197	201	202	201	197	190	181	169	154	141
-40°	145	150	153	154	153	150	145	138	129	119	108
-42.5°	108	112	115	116	115	112	108	103	96	88	78
-45°	76	79	82	83	82	79	76	70	63	55	46
-47.5°	41	44	46	47	46	44	41	37	31	25	17
-50°	13	15	15	16	15	15	13	12	9	7	3
-52.5°	2	2	2	2	2	2	2	1	1	1	1
-55°	1	1	1	1	1	1	1	1	1	1	1
-57.5°	1	1	1	1	1	1	1	1	1	0	0
-60°	0	0	0	0	0	0	0	0	0	0	0
-62.5°	0	0	0	0	0	0	0	0	0	0	0
-65°	0	0	0	0	0	0	0	0	0	0	0
-67.5°	0	0	0	0	0	0	0	0	0	0	0
-70°	0	0	0	0	0	0	0	0	0	0	0
-72.5°	0	0	0	0	0	0	0	0	0	0	0
-75°	0	0	0	0	0	0	0	0	0	0	0
-77.5°	0	0	0	0	0	0	0	0	0	0	0
-80°	0	0	0	0	0	0	0	0	0	0	0
-82.5°	0	0	0	0	0	0	0	0	0	0	0
-85°	0	0	0	0	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0	0	0	0	0
65°	0	0	0	0	0	0	0	0	0	0	0
62.5°	0	0	0	0	0	0	0	0	0	0	0
60°	0	0	0	0	0	0	0	0	0	0	0
57.5°	0	0	0	0	0	0	0	0	0	0	0
55°	1	1	0	0	0	0	0	0	0	0	0
52.5°	1	1	1	1	1	0	0	0	0	0	0
50°	2	1	1	1	1	1	1	0	0	0	0
47.5°	12	8	3	1	1	1	1	1	0	0	0
45°	36	25	15	9	3	1	1	1	1	1	0
42.5°	66	53	40	26	14	7	2	1	1	1	1
40°	96	83	68	51	35	19	9	2	1	1	1
37.5°	126	111	95	79	60	41	22	10	2	1	1
35°	160	141	122	104	85	64	42	22	9	2	1
32.5°	201	177	152	130	108	87	64	41	19	7	1
30°	248	217	187	157	132	108	85	60	35	14	3
27.5°	300	262	226	190	157	130	104	79	51	26	9
25°	354	310	267	226	187	152	122	95	68	40	15
22.5°	409	360	310	262	217	177	141	111	83	53	25
20°	468	409	354	300	248	201	160	126	96	66	36
17.5°	515	460	396	336	279	227	181	141	108	78	46
15°	552	502	437	371	308	250	199	154	119	88	55
12.5°	584	534	474	401	334	272	216	169	129	96	63
10°	611	559	502	429	358	292	232	181	138	103	70
7.5°	634	579	523	453	377	307	244	190	145	108	76
5°	650	594	537	470	390	318	253	197	150	112	79
2.5°	660	603	545	479	399	325	259	201	153	115	82
0°	664	606	548	482	401	328	261	202	154	116	83
-2.5°	660	603	545	479	399	325	259	201	153	115	82
-5°	650	594	537	470	390	318	253	197	150	112	79
-7.5°	634	579	523	453	377	307	244	190	145	108	76
-10°	611	559	502	429	358	292	232	181	138	103	70
-12.5°	584	534	474	401	334	272	216	169	129	96	63
-15°	552	502	437	371	308	250	199	154	119	88	55
-17.5°	515	460	396	336	279	227	181	141	108	78	46
-20°	468	409	354	300	248	201	160	126	96	66	36



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
-22.5°	409	360	310	262	217	177	141	111	83	53	25
-25°	354	310	267	226	187	152	122	95	68	40	15
-27.5°	300	262	226	190	157	130	104	79	51	26	9
-30°	248	217	187	157	132	108	85	60	35	14	3
-32.5°	201	177	152	130	108	87	64	41	19	7	1
-35°	160	141	122	104	85	64	42	22	9	2	1
-37.5°	126	111	95	79	60	41	22	10	2	1	1
-40°	96	83	68	51	35	19	9	2	1	1	1
-42.5°	66	53	40	26	14	7	2	1	1	1	1
-45°	36	25	15	9	3	1	1	1	1	1	0
-47.5°	12	8	3	1	1	1	1	1	0	0	0
-50°	2	1	1	1	1	1	1	0	0	0	0
-52.5°	1	1	1	1	1	0	0	0	0	0	0
-55°	1	1	0	0	0	0	0	0	0	0	0
-57.5°	0	0	0	0	0	0	0	0	0	0	0
-60°	0	0	0	0	0	0	0	0	0	0	0
-62.5°	0	0	0	0	0	0	0	0	0	0	0
-65°	0	0	0	0	0	0	0	0	0	0	0
-67.5°	0	0	0	0	0	0	0	0	0	0	0
-70°	0	0	0	0	0	0	0	0	0	0	0
-72.5°	0	0	0	0	0	0	0	0	0	0	0
-75°	0	0	0	0	0	0	0	0	0	0	0
-77.5°	0	0	0	0	0	0	0	0	0	0	0
-80°	0	0	0	0	0	0	0	0	0	0	0
-82.5°	0	0	0	0	0	0	0	0	0	0	0
-85°	0	0	0	0	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0	0	0	0	0
65°	0	0	0	0	0	0	0	0	0	0	0
62.5°	0	0	0	0	0	0	0	0	0	0	0
60°	0	0	0	0	0	0	0	0	0	0	0
57.5°	0	0	0	0	0	0	0	0	0	0	0
55°	0	0	0	0	0	0	0	0	0	0	0
52.5°	0	0	0	0	0	0	0	0	0	0	0
50°	0	0	0	0	0	0	0	0	0	0	0
47.5°	0	0	0	0	0	0	0	0	0	0	0
45°	0	0	0	0	0	0	0	0	0	0	0
42.5°	0	0	0	0	0	0	0	0	0	0	0
40°	0	0	0	0	0	0	0	0	0	0	0
37.5°	1	0	0	0	0	0	0	0	0	0	0
35°	1	1	0	0	0	0	0	0	0	0	0
32.5°	1	1	0	0	0	0	0	0	0	0	0
30°	1	1	1	0	0	0	0	0	0	0	0
27.5°	1	1	1	0	0	0	0	0	0	0	0
25°	3	1	1	0	0	0	0	0	0	0	0
22.5°	8	1	1	1	0	0	0	0	0	0	0
20°	12	2	1	1	0	0	0	0	0	0	0
17.5°	17	3	1	1	0	0	0	0	0	0	0
15°	25	7	1	1	0	0	0	0	0	0	0
12.5°	31	9	1	1	1	0	0	0	0	0	0
10°	37	12	1	1	1	0	0	0	0	0	0
7.5°	41	13	2	1	1	0	0	0	0	0	0
5°	44	15	2	1	1	0	0	0	0	0	0
2.5°	46	15	2	1	1	0	0	0	0	0	0
0°	47	16	2	1	1	0	0	0	0	0	0
-2.5°	46	15	2	1	1	0	0	0	0	0	0
-5°	44	15	2	1	1	0	0	0	0	0	0
-7.5°	41	13	2	1	1	0	0	0	0	0	0
-10°	37	12	1	1	1	0	0	0	0	0	0
-12.5°	31	9	1	1	1	0	0	0	0	0	0
-15°	25	7	1	1	0	0	0	0	0	0	0
-17.5°	17	3	1	1	0	0	0	0	0	0	0
-20°	12	2	1	1	0	0	0	0	0	0	0



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
-22.5°	8	1	1	1	0	0	0	0	0	0	0
-25°	3	1	1	0	0	0	0	0	0	0	0
-27.5°	1	1	1	0	0	0	0	0	0	0	0
-30°	1	1	1	0	0	0	0	0	0	0	0
-32.5°	1	1	0	0	0	0	0	0	0	0	0
-35°	1	1	0	0	0	0	0	0	0	0	0
-37.5°	1	0	0	0	0	0	0	0	0	0	0
-40°	0	0	0	0	0	0	0	0	0	0	0
-42.5°	0	0	0	0	0	0	0	0	0	0	0
-45°	0	0	0	0	0	0	0	0	0	0	0
-47.5°	0	0	0	0	0	0	0	0	0	0	0
-50°	0	0	0	0	0	0	0	0	0	0	0
-52.5°	0	0	0	0	0	0	0	0	0	0	0
-55°	0	0	0	0	0	0	0	0	0	0	0
-57.5°	0	0	0	0	0	0	0	0	0	0	0
-60°	0	0	0	0	0	0	0	0	0	0	0
-62.5°	0	0	0	0	0	0	0	0	0	0	0
-65°	0	0	0	0	0	0	0	0	0	0	0
-67.5°	0	0	0	0	0	0	0	0	0	0	0
-70°	0	0	0	0	0	0	0	0	0	0	0
-72.5°	0	0	0	0	0	0	0	0	0	0	0
-75°	0	0	0	0	0	0	0	0	0	0	0
-77.5°	0	0	0	0	0	0	0	0	0	0	0
-80°	0	0	0	0	0	0	0	0	0	0	0
-82.5°	0	0	0	0	0	0	0	0	0	0	0
-85°	0	0	0	0	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
90°	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0
65°	0	0	0	0	0	0	0
62.5°	0	0	0	0	0	0	0
60°	0	0	0	0	0	0	0
57.5°	0	0	0	0	0	0	0
55°	0	0	0	0	0	0	0
52.5°	0	0	0	0	0	0	0
50°	0	0	0	0	0	0	0
47.5°	0	0	0	0	0	0	0
45°	0	0	0	0	0	0	0
42.5°	0	0	0	0	0	0	0
40°	0	0	0	0	0	0	0
37.5°	0	0	0	0	0	0	0
35°	0	0	0	0	0	0	0
32.5°	0	0	0	0	0	0	0
30°	0	0	0	0	0	0	0
27.5°	0	0	0	0	0	0	0
25°	0	0	0	0	0	0	0
22.5°	0	0	0	0	0	0	0
20°	0	0	0	0	0	0	0
17.5°	0	0	0	0	0	0	0
15°	0	0	0	0	0	0	0
12.5°	0	0	0	0	0	0	0
10°	0	0	0	0	0	0	0
7.5°	0	0	0	0	0	0	0
5°	0	0	0	0	0	0	0
2.5°	0	0	0	0	0	0	0
0°	0	0	0	0	0	0	0
-2.5°	0	0	0	0	0	0	0
-5°	0	0	0	0	0	0	0
-7.5°	0	0	0	0	0	0	0
-10°	0	0	0	0	0	0	0
-12.5°	0	0	0	0	0	0	0
-15°	0	0	0	0	0	0	0
-17.5°	0	0	0	0	0	0	0
-20°	0	0	0	0	0	0	0



REPORT NUMBER: P220363 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-W-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
-22.5°	0	0	0	0	0	0	0
-25°	0	0	0	0	0	0	0
-27.5°	0	0	0	0	0	0	0
-30°	0	0	0	0	0	0	0
-32.5°	0	0	0	0	0	0	0
-35°	0	0	0	0	0	0	0
-37.5°	0	0	0	0	0	0	0
-40°	0	0	0	0	0	0	0
-42.5°	0	0	0	0	0	0	0
-45°	0	0	0	0	0	0	0
-47.5°	0	0	0	0	0	0	0
-50°	0	0	0	0	0	0	0
-52.5°	0	0	0	0	0	0	0
-55°	0	0	0	0	0	0	0
-57.5°	0	0	0	0	0	0	0
-60°	0	0	0	0	0	0	0
-62.5°	0	0	0	0	0	0	0
-65°	0	0	0	0	0	0	0
-67.5°	0	0	0	0	0	0	0
-70°	0	0	0	0	0	0	0
-72.5°	0	0	0	0	0	0	0
-75°	0	0	0	0	0	0	0
-77.5°	0	0	0	0	0	0	0
-80°	0	0	0	0	0	0	0
-82.5°	0	0	0	0	0	0	0
-85°	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0

(END OF REPORT)