

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: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29413)  
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-S-BK-L1-UNV  
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS, SPOT OPTIC, BLACK HOUSING.  
Light Source: (1) 3500K CCT, 90 CRI LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

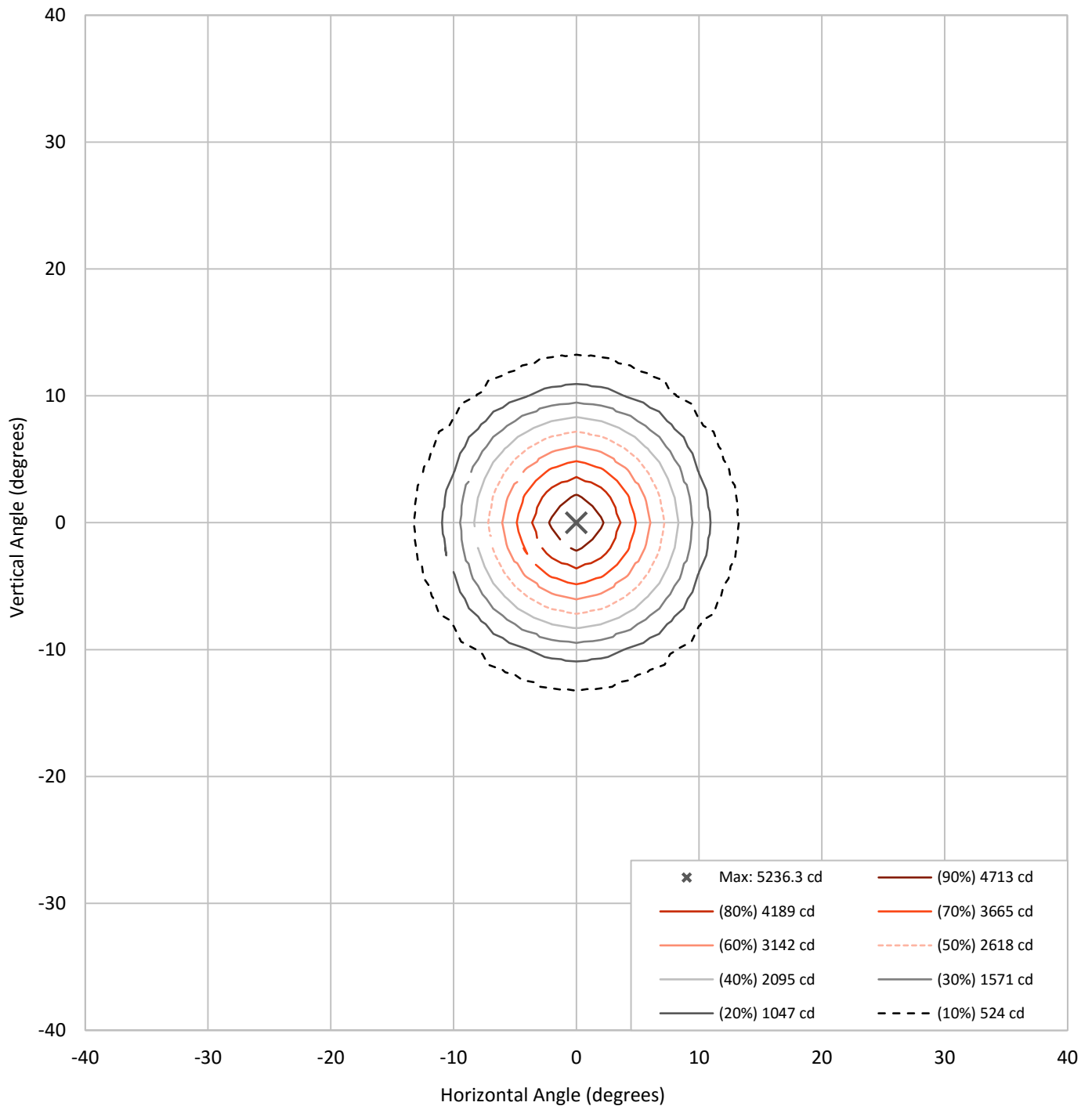
Lumens per Lamp:	N/A	NEMA Type:	2H x 2V
Luminaire Lumens:	409.5 lumens	Max Intensity:	5236.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	40.9 lumens/watt		
Luminous Opening:	Circular (Dia: 0.17' x H: 0')		
Beam Angle (50%):	14.3°H x 14.3°V	Field Angle (10%):	25.9°H x 25.9°V
Beam Lumens:	166.9 lumens	Field Lumens:	325 lumens
Beam Efficiency:	40.8%	Field Efficiency:	79.4%

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: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-BK-L1-UNV

### Iso-Candela Plot





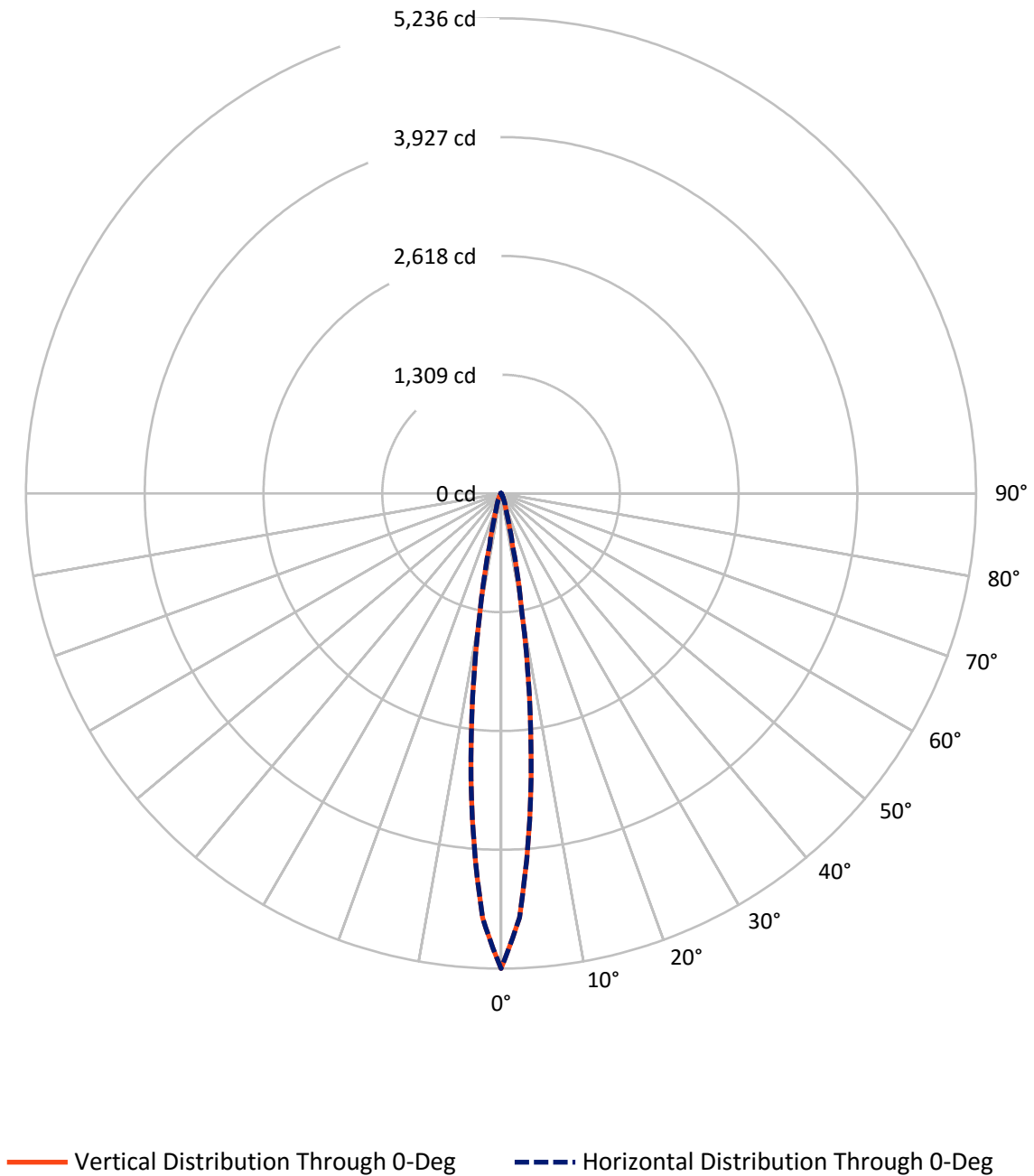
REPORT NUMBER: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-BK-L1-UNV

### Lumen Table

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	0.0	0.0
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	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	0.0	0.0	0.0	0.0
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		
50	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40		0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.1	0.3	0.9	1.7	1.7	0.9	0.3	0.1	0.0	0.0	0.0	0.0	0.0
20		0.0	0.0	0.0	0.2	0.8	3.4	9.9	9.9	3.4	0.8	0.2	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.1	0.2	1.6	9.7	72.8	72.8	9.7	1.6	0.2	0.1	0.0	0.0	0.0	0.0
0		0.0	0.0	0.1	0.2	1.6	9.7	72.8	72.8	9.7	1.6	0.2	0.1	0.0	0.0		
-10	0.0	0.0	0.0	0.0	0.2	0.8	3.4	9.9	9.9	3.4	0.8	0.2	0.0	0.0	0.0	0.0	0.0
-20		0.0	0.0	0.0	0.1	0.3	0.9	1.7	1.7	0.9	0.3	0.1	0.0	0.0	0.0		
-30	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
-40		0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0		
-50	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	0.0	0.0
-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		
-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	0.0	0.0	0.0	0.0
-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		
-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	0.0	0.0

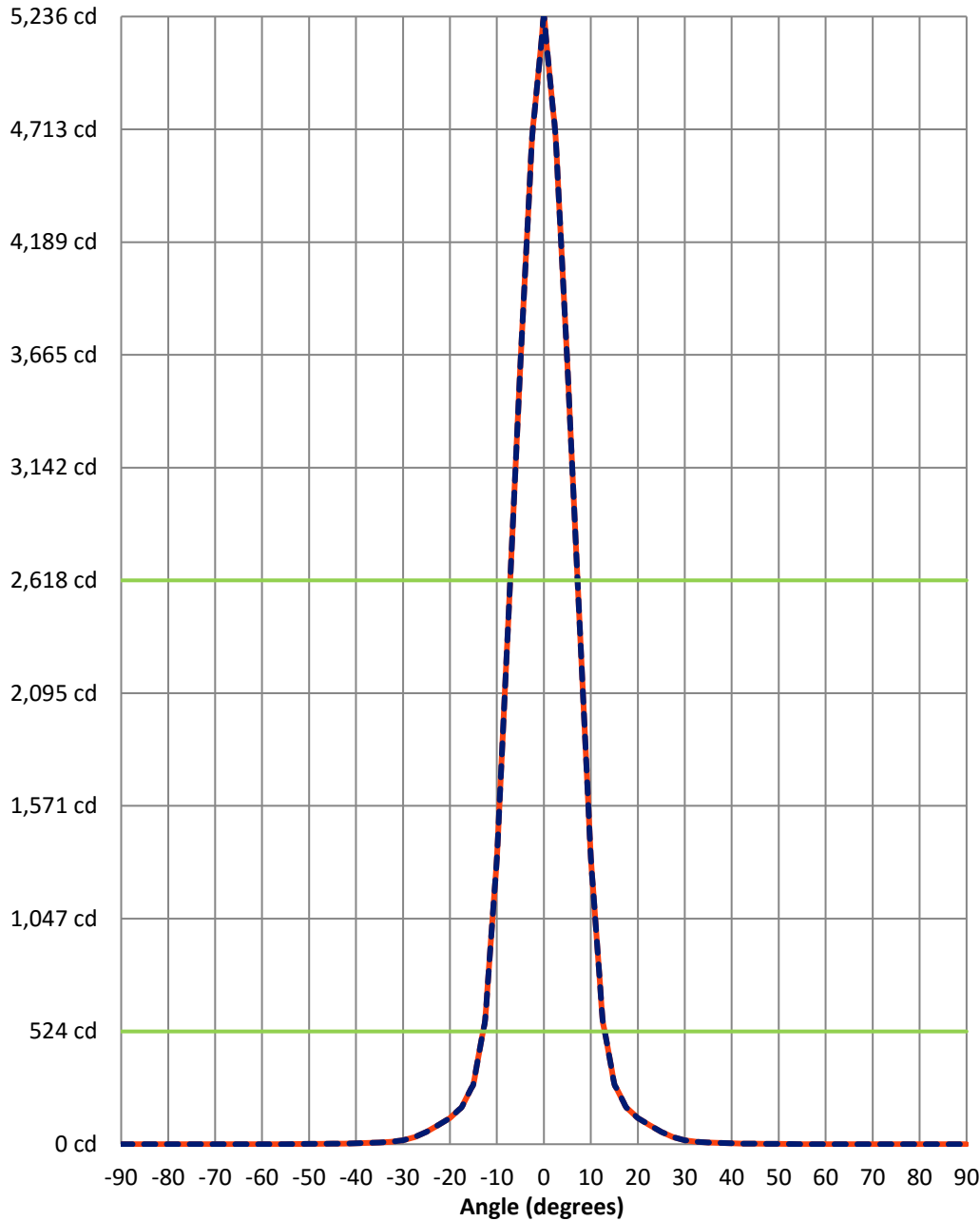
REPORT NUMBER: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-BK-L1-UNV

### Luminous Intensity Polar Plot



REPORT NUMBER: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-BK-L1-UNV

### Luminous Intensity Plot



**Beam:**  
 H Angle: 14.3°  
 V Angle: 14.3°  
 Lumens: 166.9  
 Efficiency: 40.8%

**Field:**  
 H Angle: 25.9°  
 V Angle: 25.9°  
 Lumens: 325  
 Efficiency: 79.4%

**Spill:**  
 Lumens: 84.5  
 Efficiency: 20.6%

- Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 0-Deg



REPORT NUMBER: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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	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	1
37.5°	0	0	0	0	0	0	0	0	0	1	1
35°	0	0	0	0	0	0	0	0	1	1	2
32.5°	0	0	0	0	0	0	0	1	1	2	2
30°	0	0	0	0	0	0	0	1	2	2	2
27.5°	0	0	0	0	0	0	1	1	2	2	3
25°	0	0	0	0	0	0	1	2	2	2	3
22.5°	0	0	0	0	0	1	1	2	2	3	3
20°	0	0	0	0	0	1	2	2	2	3	3
17.5°	0	0	0	0	0	1	2	2	2	3	4
15°	0	0	0	0	0	1	2	2	3	3	4
12.5°	0	0	0	0	1	1	2	2	3	3	5
10°	0	0	0	0	1	1	2	2	3	4	5
7.5°	0	0	0	0	1	2	2	2	3	4	6
5°	0	0	0	0	1	2	2	3	3	4	6
2.5°	0	0	0	0	1	2	2	3	3	4	6
0°	0	0	0	0	1	2	2	3	3	4	6
-2.5°	0	0	0	0	1	2	2	3	3	4	6
-5°	0	0	0	0	1	2	2	3	3	4	6
-7.5°	0	0	0	0	1	2	2	2	3	4	6
-10°	0	0	0	0	1	1	2	2	3	4	5
-12.5°	0	0	0	0	1	1	2	2	3	3	5
-15°	0	0	0	0	0	1	2	2	3	3	4
-17.5°	0	0	0	0	0	1	2	2	2	3	4
-20°	0	0	0	0	0	1	2	2	2	3	3



REPORT NUMBER: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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	0	0	1	1	2	2	3	3
-25°	0	0	0	0	0	0	1	2	2	2	3
-27.5°	0	0	0	0	0	0	1	1	2	2	3
-30°	0	0	0	0	0	0	0	1	2	2	2
-32.5°	0	0	0	0	0	0	0	1	1	2	2
-35°	0	0	0	0	0	0	0	0	1	1	2
-37.5°	0	0	0	0	0	0	0	0	0	1	1
-40°	0	0	0	0	0	0	0	0	0	0	1
-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: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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	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	1	1
50°	0	0	0	0	0	1	1	1	1	1	1
47.5°	0	0	0	1	1	1	2	2	2	2	2
45°	0	1	1	1	2	2	2	2	2	2	2
42.5°	1	1	2	2	2	2	2	2	3	3	3
40°	1	2	2	2	2	3	3	3	3	3	4
37.5°	2	2	2	3	3	3	3	4	4	5	5
35°	2	2	3	3	3	4	5	5	6	7	7
32.5°	2	3	3	3	4	5	6	7	7	8	9
30°	3	3	3	4	6	7	7	9	10	12	14
27.5°	3	3	4	6	7	8	10	12	15	18	23
25°	3	4	6	7	8	10	14	18	25	31	40
22.5°	4	5	7	8	10	14	20	29	40	52	63
20°	5	6	7	10	14	20	30	44	60	77	92
17.5°	5	7	9	12	18	29	44	63	84	103	121
15°	6	7	10	15	25	40	60	84	107	133	163
12.5°	7	8	12	18	31	52	77	103	133	170	238
10°	7	9	14	23	40	63	92	121	163	238	350
7.5°	7	10	16	28	47	74	104	142	205	315	583
5°	8	11	17	31	53	82	114	158	246	426	913
2.5°	8	11	18	32	56	87	120	169	271	531	1217
0°	8	11	18	33	57	89	122	172	280	579	1330
-2.5°	8	11	18	32	56	87	120	169	271	531	1217
-5°	8	11	17	31	53	82	114	158	246	426	913
-7.5°	7	10	16	28	47	74	104	142	205	315	583
-10°	7	9	14	23	40	63	92	121	163	238	350
-12.5°	7	8	12	18	31	52	77	103	133	170	238
-15°	6	7	10	15	25	40	60	84	107	133	163
-17.5°	5	7	9	12	18	29	44	63	84	103	121
-20°	5	6	7	10	14	20	30	44	60	77	92



REPORT NUMBER: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-BK-L1-UNV

**CANDELA DISTRIBUTION (continued):**

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	4	5	7	8	10	14	20	29	40	52	63
-25°	3	4	6	7	8	10	14	18	25	31	40
-27.5°	3	3	4	6	7	8	10	12	15	18	23
-30°	3	3	3	4	6	7	7	9	10	12	14
-32.5°	2	3	3	3	4	5	6	7	7	8	9
-35°	2	2	3	3	3	4	5	5	6	7	7
-37.5°	2	2	2	3	3	3	3	4	4	5	5
-40°	1	2	2	2	2	3	3	3	3	3	4
-42.5°	1	1	2	2	2	2	2	2	3	3	3
-45°	0	1	1	1	2	2	2	2	2	2	2
-47.5°	0	0	0	1	1	1	2	2	2	2	2
-50°	0	0	0	0	0	1	1	1	1	1	1
-52.5°	0	0	0	0	0	0	0	0	0	1	1
-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: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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°	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°	1	1	1	1	1	1	1	1	1	0	0
50°	2	2	2	2	2	2	2	1	1	1	1
47.5°	2	2	2	2	2	2	2	2	2	2	2
45°	2	3	3	3	3	3	2	2	2	2	2
42.5°	3	3	3	3	3	3	3	3	3	3	2
40°	4	4	4	4	4	4	4	4	3	3	3
37.5°	6	6	6	6	6	6	6	5	5	4	4
35°	7	8	8	8	8	8	7	7	7	6	5
32.5°	10	11	11	11	11	11	10	9	8	7	7
30°	16	17	18	18	18	17	16	14	12	10	9
27.5°	28	31	32	33	32	31	28	23	18	15	12
25°	47	53	56	57	56	53	47	40	31	25	18
22.5°	74	82	87	89	87	82	74	63	52	40	29
20°	104	114	120	122	120	114	104	92	77	60	44
17.5°	142	158	169	172	169	158	142	121	103	84	63
15°	205	246	271	280	271	246	205	163	133	107	84
12.5°	315	426	531	579	531	426	315	238	170	133	103
10°	583	913	1217	1330	1217	913	583	350	238	163	121
7.5°	1112	1759	2274	2466	2274	1759	1112	583	315	205	142
5°	1759	2672	3356	3622	3356	2672	1759	913	426	246	158
2.5°	2274	3356	4271	4678	4271	3356	2274	1217	531	271	169
0°	2466	3622	4678	5236	4678	3622	2466	1330	579	280	172
-2.5°	2274	3356	4271	4678	4271	3356	2274	1217	531	271	169
-5°	1759	2672	3356	3622	3356	2672	1759	913	426	246	158
-7.5°	1112	1759	2274	2466	2274	1759	1112	583	315	205	142
-10°	583	913	1217	1330	1217	913	583	350	238	163	121
-12.5°	315	426	531	579	531	426	315	238	170	133	103
-15°	205	246	271	280	271	246	205	163	133	107	84
-17.5°	142	158	169	172	169	158	142	121	103	84	63
-20°	104	114	120	122	120	114	104	92	77	60	44



REPORT NUMBER: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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°	74	82	87	89	87	82	74	63	52	40	29
-25°	47	53	56	57	56	53	47	40	31	25	18
-27.5°	28	31	32	33	32	31	28	23	18	15	12
-30°	16	17	18	18	18	17	16	14	12	10	9
-32.5°	10	11	11	11	11	11	10	9	8	7	7
-35°	7	8	8	8	8	8	7	7	7	6	5
-37.5°	6	6	6	6	6	6	6	5	5	4	4
-40°	4	4	4	4	4	4	4	4	3	3	3
-42.5°	3	3	3	3	3	3	3	3	3	3	2
-45°	2	3	3	3	3	3	2	2	2	2	2
-47.5°	2	2	2	2	2	2	2	2	2	2	2
-50°	2	2	2	2	2	2	2	1	1	1	1
-52.5°	1	1	1	1	1	1	1	1	1	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: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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°	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°	1	1	0	0	0	0	0	0	0	0	0
47.5°	2	1	1	1	0	0	0	0	0	0	0
45°	2	2	2	1	1	1	0	0	0	0	0
42.5°	2	2	2	2	2	1	1	0	0	0	0
40°	3	3	2	2	2	2	1	1	0	0	0
37.5°	3	3	3	3	2	2	2	1	1	0	0
35°	5	4	3	3	3	2	2	2	1	1	0
32.5°	6	5	4	3	3	3	2	2	2	1	1
30°	7	7	6	4	3	3	3	2	2	2	1
27.5°	10	8	7	6	4	3	3	3	2	2	1
25°	14	10	8	7	6	4	3	3	2	2	2
22.5°	20	14	10	8	7	5	4	3	3	2	2
20°	30	20	14	10	7	6	5	3	3	2	2
17.5°	44	29	18	12	9	7	5	4	3	2	2
15°	60	40	25	15	10	7	6	4	3	3	2
12.5°	77	52	31	18	12	8	7	5	3	3	2
10°	92	63	40	23	14	9	7	5	4	3	2
7.5°	104	74	47	28	16	10	7	6	4	3	2
5°	114	82	53	31	17	11	8	6	4	3	3
2.5°	120	87	56	32	18	11	8	6	4	3	3
0°	122	89	57	33	18	11	8	6	4	3	3
-2.5°	120	87	56	32	18	11	8	6	4	3	3
-5°	114	82	53	31	17	11	8	6	4	3	3
-7.5°	104	74	47	28	16	10	7	6	4	3	2
-10°	92	63	40	23	14	9	7	5	4	3	2
-12.5°	77	52	31	18	12	8	7	5	3	3	2
-15°	60	40	25	15	10	7	6	4	3	3	2
-17.5°	44	29	18	12	9	7	5	4	3	2	2
-20°	30	20	14	10	7	6	5	3	3	2	2



REPORT NUMBER: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-BK-L1-UNV

**CANDELA DISTRIBUTION (continued):**

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
-22.5°	20	14	10	8	7	5	4	3	3	2	2
-25°	14	10	8	7	6	4	3	3	2	2	2
-27.5°	10	8	7	6	4	3	3	3	2	2	1
-30°	7	7	6	4	3	3	3	2	2	2	1
-32.5°	6	5	4	3	3	3	2	2	2	1	1
-35°	5	4	3	3	3	2	2	2	1	1	0
-37.5°	3	3	3	3	2	2	2	1	1	0	0
-40°	3	3	2	2	2	2	1	1	0	0	0
-42.5°	2	2	2	2	2	1	1	0	0	0	0
-45°	2	2	2	1	1	1	0	0	0	0	0
-47.5°	2	1	1	1	0	0	0	0	0	0	0
-50°	1	1	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: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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°	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°	1	0	0	0	0	0	0	0	0	0	0
25°	1	0	0	0	0	0	0	0	0	0	0
22.5°	1	1	0	0	0	0	0	0	0	0	0
20°	2	1	0	0	0	0	0	0	0	0	0
17.5°	2	1	0	0	0	0	0	0	0	0	0
15°	2	1	0	0	0	0	0	0	0	0	0
12.5°	2	1	1	0	0	0	0	0	0	0	0
10°	2	1	1	0	0	0	0	0	0	0	0
7.5°	2	2	1	0	0	0	0	0	0	0	0
5°	2	2	1	0	0	0	0	0	0	0	0
2.5°	2	2	1	0	0	0	0	0	0	0	0
0°	2	2	1	0	0	0	0	0	0	0	0
-2.5°	2	2	1	0	0	0	0	0	0	0	0
-5°	2	2	1	0	0	0	0	0	0	0	0
-7.5°	2	2	1	0	0	0	0	0	0	0	0
-10°	2	1	1	0	0	0	0	0	0	0	0
-12.5°	2	1	1	0	0	0	0	0	0	0	0
-15°	2	1	0	0	0	0	0	0	0	0	0
-17.5°	2	1	0	0	0	0	0	0	0	0	0
-20°	2	1	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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°	1	1	0	0	0	0	0	0	0	0	0
-25°	1	0	0	0	0	0	0	0	0	0	0
-27.5°	1	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: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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: P220339 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-S-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)