

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: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29410)
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-M-WT-L1-UNV
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS,
MEDIUM FLOOD OPTIC, WHITE HOUSING.
Light Source: (1) 3500K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

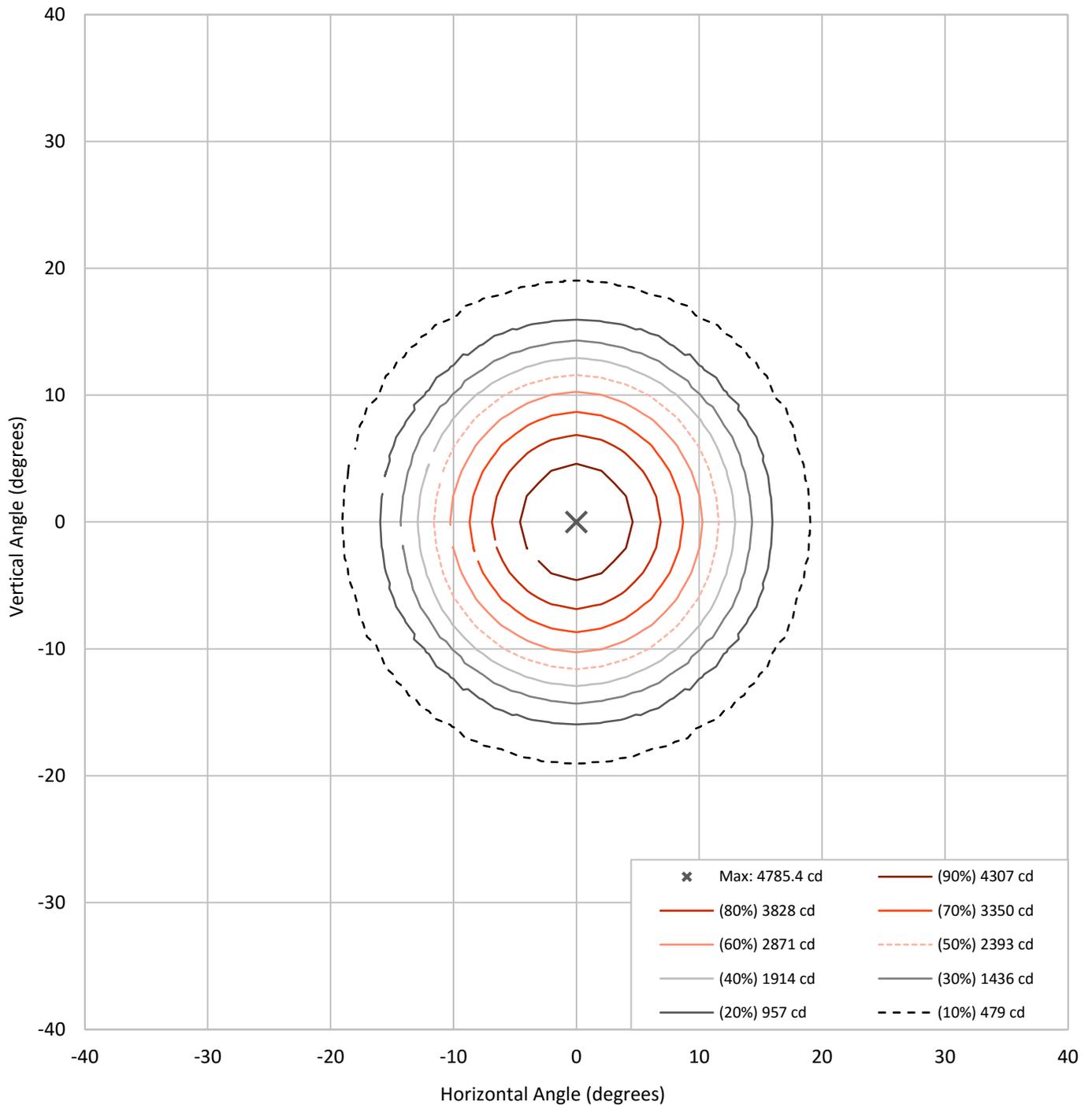
Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	854 lumens	Max Intensity:	4785.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	85.4 lumens/watt		
Luminous Opening:	Circular (Dia: 0.17' x H: 0')		
Beam Angle (50%):	23.2°H x 23.2°V	Field Angle (10%):	38.1°H x 38.1°V
Beam Lumens:	448 lumens	Field Lumens:	691.2 lumens
Beam Efficiency:	52.5%	Field Efficiency:	80.9%

Input Watts (W): 10
Input Voltage (V): 120
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



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

Iso-Candela Plot



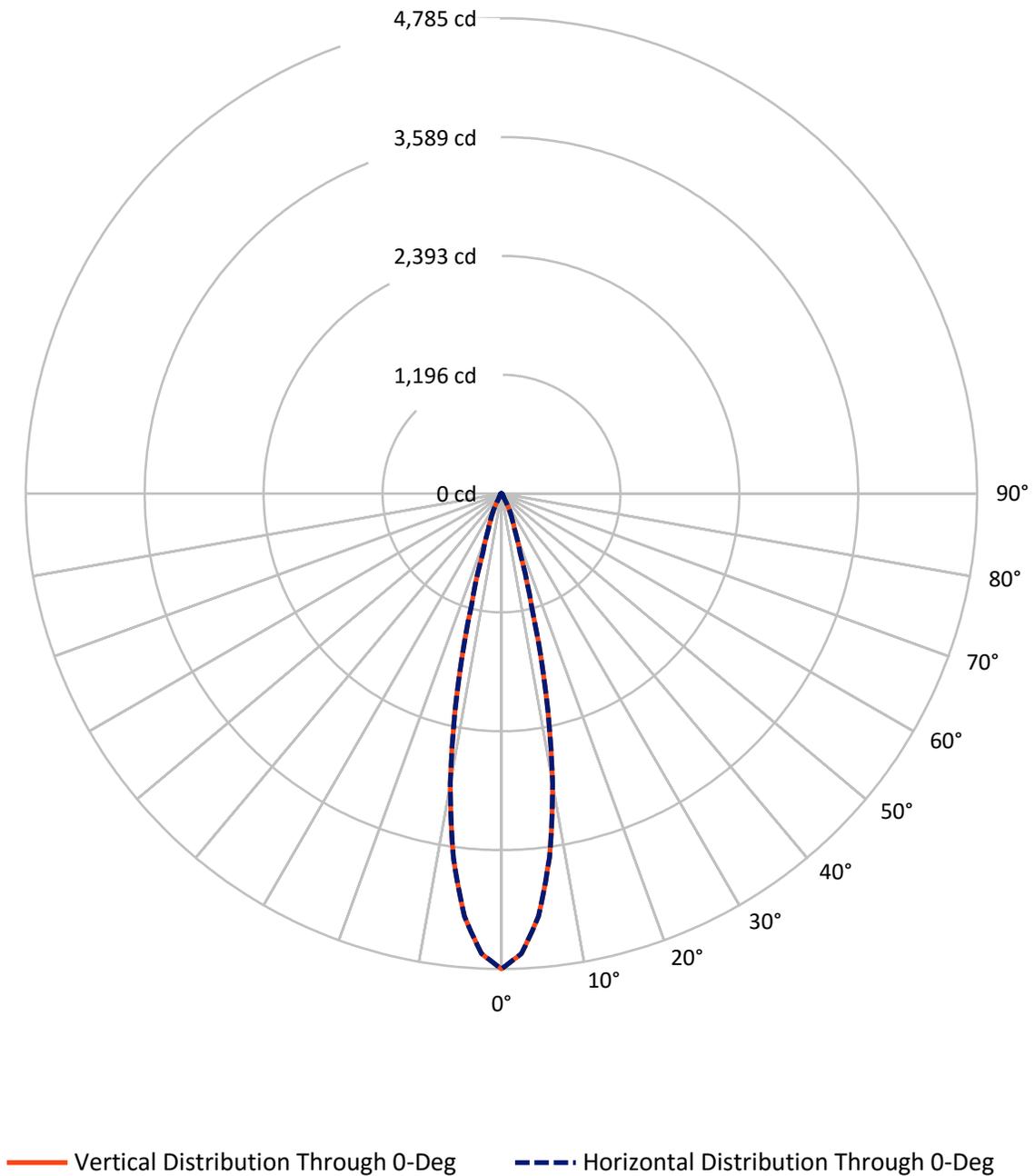
REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

Lumen Table

90	0.0	0.1	0.3	0.4	0.4	0.4	0.4	0.3	0.1	0.0									
80	0.0	0.1	0.3	0.4	0.4	0.4	0.4	0.3	0.1	0.0									
70	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.0			
60		0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1				
50	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1			
40		0.1	0.2	0.3	0.3	0.5	0.6	0.8	0.8	0.6	0.5	0.3	0.3	0.2	0.1				
30	0.1	0.1	0.2	0.3	0.4	0.8	2.6	5.5	5.5	2.6	0.8	0.4	0.3	0.2	0.1	0.1			
20		0.1	0.2	0.3	0.5	2.5	11.5	33.8	33.8	11.5	2.5	0.5	0.3	0.2	0.1				
10	0.1	0.1	0.2	0.3	0.7	5.1	32.9	106.6	106.6	32.9	5.1	0.7	0.3	0.2	0.1	0.1			
0		0.1	0.2	0.3	0.7	5.1	32.9	106.6	106.6	32.9	5.1	0.7	0.3	0.2	0.1				
-10	0.1	0.1	0.2	0.3	0.7	5.1	32.9	106.6	106.6	32.9	5.1	0.7	0.3	0.2	0.1	0.1			
-20		0.1	0.2	0.3	0.5	2.5	11.5	33.8	33.8	11.5	2.5	0.5	0.3	0.2	0.1				
-30	0.1	0.1	0.2	0.3	0.4	0.8	2.6	5.5	5.5	2.6	0.8	0.4	0.3	0.2	0.1	0.1			
-40		0.1	0.2	0.3	0.3	0.5	0.6	0.8	0.8	0.6	0.5	0.3	0.3	0.2	0.1				
-50	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1			
-60		0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1				
-70	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.0			
-80		0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1				
-90	0.0	0.1	0.3	0.4	0.4	0.4	0.4	0.3	0.1	0.0									

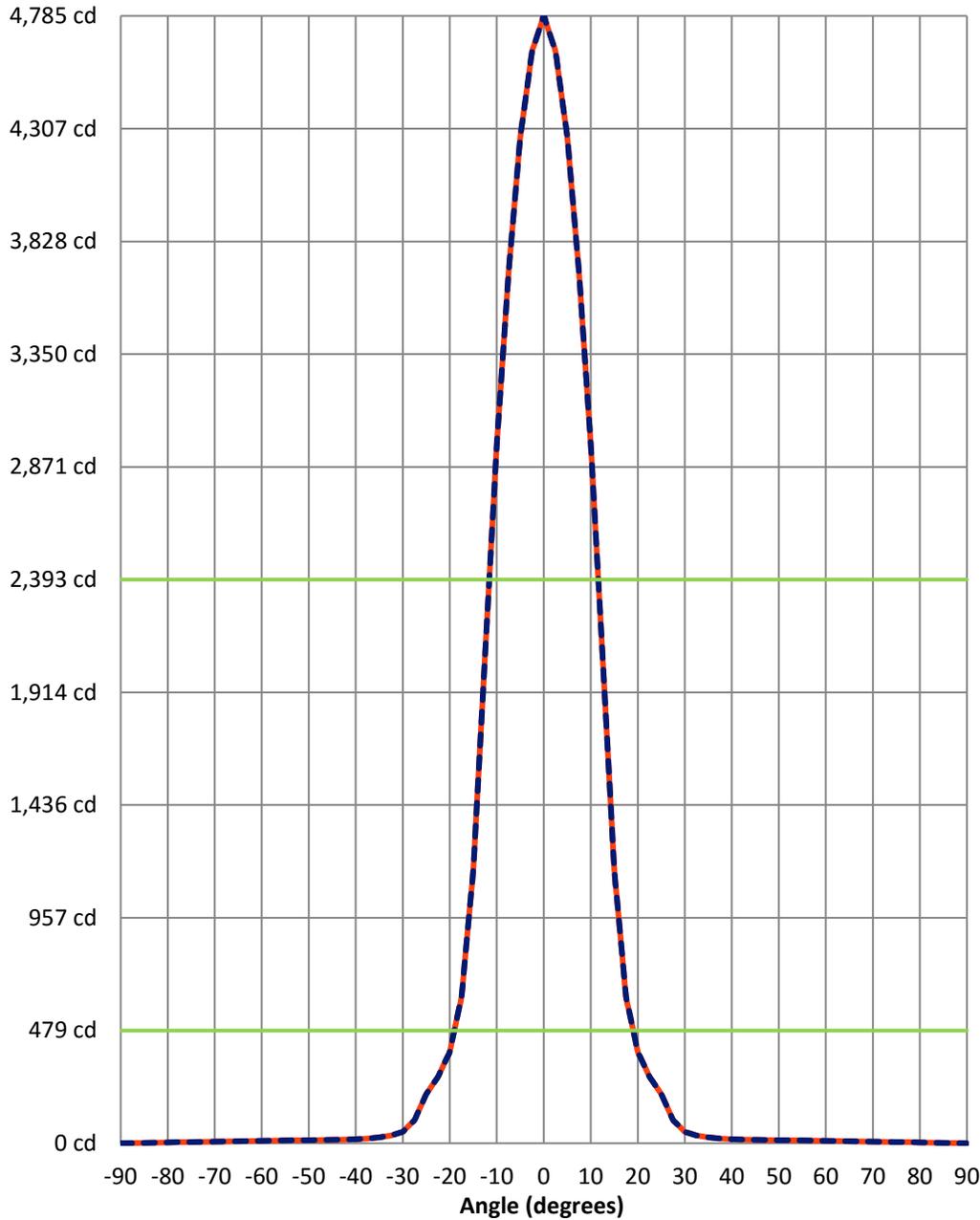
REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

Luminous Intensity Polar Plot



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

Luminous Intensity Plot



Beam:
 H Angle: 23.2°
 V Angle: 23.2°
 Lumens: 448
 Efficiency: 52.5%

Field:
 H Angle: 38.1°
 V Angle: 38.1°
 Lumens: 691.2
 Efficiency: 80.9%

Spill:
 Lumens: 162.9
 Efficiency: 19.1%

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



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-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	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4
85°	0.0	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.8
82.5°	0.0	0.1	0.2	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1
80°	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.3	1.4
77.5°	0.0	0.2	0.4	0.6	0.8	1.0	1.1	1.3	1.5	1.6	1.8
75°	0.0	0.2	0.5	0.7	0.9	1.1	1.3	1.5	1.7	1.9	2.2
72.5°	0.0	0.3	0.5	0.8	1.1	1.3	1.5	1.8	2.0	2.3	2.5
70°	0.0	0.3	0.6	0.9	1.2	1.5	1.7	2.0	2.3	2.6	2.9
67.5°	0.0	0.3	0.7	1.0	1.3	1.6	1.9	2.3	2.6	2.9	3.3
65°	0.0	0.4	0.8	1.1	1.4	1.8	2.2	2.5	2.9	3.3	3.7
62.5°	0.0	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.4
60°	0.0	0.4	0.9	1.3	1.7	2.1	2.6	3.0	3.4	4.2	5.0
57.5°	0.0	0.5	1.0	1.4	1.8	2.3	2.8	3.2	3.9	4.8	5.2
55°	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.4	5.2	5.2
52.5°	0.0	0.5	1.1	1.6	2.1	2.6	3.2	3.9	4.9	5.2	5.2
50°	0.0	0.6	1.1	1.6	2.2	2.8	3.3	4.3	5.2	5.2	5.5
47.5°	0.0	0.6	1.2	1.7	2.3	2.9	3.5	4.7	5.2	5.2	5.8
45°	0.0	0.6	1.2	1.8	2.4	3.1	3.9	5.0	5.2	5.5	6.1
42.5°	0.0	0.7	1.3	1.9	2.5	3.2	4.2	5.2	5.2	5.7	6.3
40°	0.0	0.7	1.3	2.0	2.7	3.3	4.5	5.2	5.3	5.9	6.5
37.5°	0.0	0.7	1.4	2.0	2.8	3.5	4.8	5.2	5.5	6.2	6.8
35°	0.0	0.7	1.4	2.1	2.8	3.6	5.0	5.2	5.7	6.3	7.0
32.5°	0.0	0.8	1.4	2.2	2.9	3.9	5.2	5.2	5.8	6.5	7.2
30°	0.0	0.8	1.5	2.2	3.0	4.0	5.2	5.2	6.0	6.7	7.4
27.5°	0.0	0.8	1.5	2.3	3.1	4.2	5.2	5.4	6.2	6.8	7.6
25°	0.0	0.8	1.5	2.3	3.2	4.4	5.2	5.5	6.3	7.0	7.8
22.5°	0.0	0.8	1.6	2.4	3.2	4.5	5.2	5.6	6.4	7.2	8.0
20°	0.0	0.8	1.6	2.4	3.3	4.7	5.2	5.7	6.5	7.3	8.1
17.5°	0.0	0.9	1.6	2.5	3.3	4.8	5.2	5.8	6.6	7.4	8.3
15°	0.0	0.9	1.6	2.5	3.4	4.9	5.2	5.9	6.7	7.5	8.4
12.5°	0.0	0.9	1.7	2.5	3.4	5.0	5.2	5.9	6.7	7.6	8.5
10°	0.0	0.9	1.7	2.6	3.4	5.1	5.2	6.0	6.8	7.7	8.6
7.5°	0.0	0.9	1.7	2.6	3.5	5.1	5.2	6.0	6.8	7.7	8.6
5°	0.0	0.9	1.7	2.6	3.5	5.2	5.2	6.1	6.9	7.8	8.7
2.5°	0.0	0.9	1.7	2.6	3.5	5.2	5.2	6.1	6.9	7.8	8.7
0°	0.0	0.9	1.7	2.6	3.5	5.2	5.2	6.1	6.9	7.8	8.7
-2.5°	0.0	0.9	1.7	2.6	3.5	5.2	5.2	6.1	6.9	7.8	8.7
-5°	0.0	0.9	1.7	2.6	3.5	5.2	5.2	6.1	6.9	7.8	8.7
-7.5°	0.0	0.9	1.7	2.6	3.5	5.1	5.2	6.0	6.8	7.7	8.6
-10°	0.0	0.9	1.7	2.6	3.4	5.1	5.2	6.0	6.8	7.7	8.6
-12.5°	0.0	0.9	1.7	2.5	3.4	5.0	5.2	5.9	6.7	7.6	8.5
-15°	0.0	0.9	1.6	2.5	3.4	4.9	5.2	5.9	6.7	7.5	8.4
-17.5°	0.0	0.9	1.6	2.5	3.3	4.8	5.2	5.8	6.6	7.4	8.3
-20°	0.0	0.8	1.6	2.4	3.3	4.7	5.2	5.7	6.5	7.3	8.1



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-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	0.8	1.6	2.4	3.2	4.5	5.2	5.6	6.4	7.2	8.0
-25°	0.0	0.8	1.5	2.3	3.2	4.4	5.2	5.5	6.3	7.0	7.8
-27.5°	0.0	0.8	1.5	2.3	3.1	4.2	5.2	5.4	6.2	6.8	7.6
-30°	0.0	0.8	1.5	2.2	3.0	4.0	5.2	5.2	6.0	6.7	7.4
-32.5°	0.0	0.8	1.4	2.2	2.9	3.9	5.2	5.2	5.8	6.5	7.2
-35°	0.0	0.7	1.4	2.1	2.8	3.6	5.0	5.2	5.7	6.3	7.0
-37.5°	0.0	0.7	1.4	2.0	2.8	3.5	4.8	5.2	5.5	6.2	6.8
-40°	0.0	0.7	1.3	2.0	2.7	3.3	4.5	5.2	5.3	5.9	6.5
-42.5°	0.0	0.7	1.3	1.9	2.5	3.2	4.2	5.2	5.2	5.7	6.3
-45°	0.0	0.6	1.2	1.8	2.4	3.1	3.9	5.0	5.2	5.5	6.1
-47.5°	0.0	0.6	1.2	1.7	2.3	2.9	3.5	4.7	5.2	5.2	5.8
-50°	0.0	0.6	1.1	1.6	2.2	2.8	3.3	4.3	5.2	5.2	5.5
-52.5°	0.0	0.5	1.1	1.6	2.1	2.6	3.2	3.9	4.9	5.2	5.2
-55°	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.4	5.2	5.2
-57.5°	0.0	0.5	1.0	1.4	1.8	2.3	2.8	3.2	3.9	4.8	5.2
-60°	0.0	0.4	0.9	1.3	1.7	2.1	2.6	3.0	3.4	4.2	5.0
-62.5°	0.0	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.4
-65°	0.0	0.4	0.8	1.1	1.4	1.8	2.2	2.5	2.9	3.3	3.7
-67.5°	0.0	0.3	0.7	1.0	1.3	1.6	1.9	2.3	2.6	2.9	3.3
-70°	0.0	0.3	0.6	0.9	1.2	1.5	1.7	2.0	2.3	2.6	2.9
-72.5°	0.0	0.3	0.5	0.8	1.1	1.3	1.5	1.8	2.0	2.3	2.5
-75°	0.0	0.2	0.5	0.7	0.9	1.1	1.3	1.5	1.7	1.9	2.2
-77.5°	0.0	0.2	0.4	0.6	0.8	1.0	1.1	1.3	1.5	1.6	1.8
-80°	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.3	1.4
-82.5°	0.0	0.1	0.2	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1
-85°	0.0	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.8
-87.5°	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-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	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7
85°	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4
82.5°	1.2	1.3	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.0	2.0
80°	1.6	1.7	1.8	2.0	2.1	2.2	2.3	2.4	2.5	2.7	2.8
77.5°	2.0	2.1	2.3	2.5	2.6	2.8	2.9	3.1	3.2	3.3	3.5
75°	2.4	2.6	2.8	3.0	3.2	3.3	3.5	3.9	4.2	4.5	4.8
72.5°	2.8	3.0	3.2	3.5	3.9	4.3	4.7	5.0	5.2	5.2	5.2
70°	3.2	3.4	3.9	4.4	4.9	5.2	5.2	5.2	5.2	5.3	5.5
67.5°	3.6	4.2	4.8	5.2	5.2	5.2	5.2	5.5	5.7	5.9	6.2
65°	4.4	5.0	5.2	5.2	5.2	5.5	5.8	6.1	6.3	6.5	6.8
62.5°	5.1	5.2	5.2	5.3	5.7	6.0	6.3	6.6	6.9	7.2	7.4
60°	5.2	5.2	5.4	5.8	6.2	6.5	6.8	7.2	7.5	7.8	8.1
57.5°	5.2	5.4	5.8	6.2	6.6	7.0	7.4	7.7	8.1	8.4	8.8
55°	5.3	5.8	6.2	6.6	7.1	7.5	7.9	8.3	8.7	9.1	9.4
52.5°	5.7	6.2	6.6	7.1	7.5	8.0	8.4	8.9	9.3	9.7	10.0
50°	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.4	9.9	10.2	10.6
47.5°	6.3	6.8	7.4	7.9	8.4	9.0	9.5	9.9	10.4	10.8	11.3
45°	6.6	7.2	7.7	8.3	8.9	9.4	9.9	10.4	10.9	11.4	11.9
42.5°	6.9	7.5	8.1	8.7	9.3	9.9	10.4	10.9	11.5	12.0	12.5
40°	7.2	7.8	8.4	9.1	9.7	10.2	10.8	11.4	12.0	12.5	13.0
37.5°	7.4	8.1	8.8	9.4	10.0	10.6	11.3	11.9	12.5	13.0	13.0
35°	7.7	8.4	9.1	9.8	10.4	11.0	11.7	12.3	12.9	13.0	13.2
32.5°	8.0	8.7	9.4	10.1	10.7	11.4	12.1	12.7	13.0	13.1	13.7
30°	8.2	8.9	9.7	10.3	11.1	11.8	12.5	13.0	13.0	13.6	14.2
27.5°	8.4	9.2	9.9	10.6	11.4	12.1	12.8	13.0	13.3	14.0	14.7
25°	8.6	9.4	10.1	10.9	11.7	12.4	13.0	13.0	13.7	14.4	15.1
22.5°	8.8	9.6	10.3	11.1	11.9	12.7	13.0	13.3	14.1	14.8	15.5
20°	9.0	9.8	10.5	11.3	12.2	12.9	13.0	13.6	14.4	15.1	16.1
17.5°	9.1	9.9	10.7	11.5	12.4	13.0	13.0	13.9	14.7	15.4	16.8
15°	9.2	10.0	10.9	11.7	12.5	13.0	13.3	14.1	14.9	15.8	17.4
12.5°	9.3	10.2	11.0	11.9	12.7	13.0	13.5	14.3	15.1	16.3	18.2
10°	9.4	10.2	11.1	12.0	12.8	13.0	13.6	14.5	15.3	16.7	18.8
7.5°	9.5	10.3	11.2	12.1	12.9	13.0	13.7	14.6	15.4	17.0	19.3
5°	9.6	10.4	11.3	12.1	12.9	13.0	13.8	14.7	15.5	17.2	19.7
2.5°	9.6	10.4	11.3	12.2	13.0	13.0	13.9	14.8	15.6	17.4	19.9
0°	9.6	10.4	11.3	12.2	13.0	13.0	13.9	14.8	15.6	17.4	20.0
-2.5°	9.6	10.4	11.3	12.2	13.0	13.0	13.9	14.8	15.6	17.4	19.9
-5°	9.6	10.4	11.3	12.1	12.9	13.0	13.8	14.7	15.5	17.2	19.7
-7.5°	9.5	10.3	11.2	12.1	12.9	13.0	13.7	14.6	15.4	17.0	19.3
-10°	9.4	10.2	11.1	12.0	12.8	13.0	13.6	14.5	15.3	16.7	18.8
-12.5°	9.3	10.2	11.0	11.9	12.7	13.0	13.5	14.3	15.1	16.3	18.2
-15°	9.2	10.0	10.9	11.7	12.5	13.0	13.3	14.1	14.9	15.8	17.4
-17.5°	9.1	9.9	10.7	11.5	12.4	13.0	13.0	13.9	14.7	15.4	16.8
-20°	9.0	9.8	10.5	11.3	12.2	12.9	13.0	13.6	14.4	15.1	16.1



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
-22.5°	8.8	9.6	10.3	11.1	11.9	12.7	13.0	13.3	14.1	14.8	15.5
-25°	8.6	9.4	10.1	10.9	11.7	12.4	13.0	13.0	13.7	14.4	15.1
-27.5°	8.4	9.2	9.9	10.6	11.4	12.1	12.8	13.0	13.3	14.0	14.7
-30°	8.2	8.9	9.7	10.3	11.1	11.8	12.5	13.0	13.0	13.6	14.2
-32.5°	8.0	8.7	9.4	10.1	10.7	11.4	12.1	12.7	13.0	13.1	13.7
-35°	7.7	8.4	9.1	9.8	10.4	11.0	11.7	12.3	12.9	13.0	13.2
-37.5°	7.4	8.1	8.8	9.4	10.0	10.6	11.3	11.9	12.5	13.0	13.0
-40°	7.2	7.8	8.4	9.1	9.7	10.2	10.8	11.4	12.0	12.5	13.0
-42.5°	6.9	7.5	8.1	8.7	9.3	9.9	10.4	10.9	11.5	12.0	12.5
-45°	6.6	7.2	7.7	8.3	8.9	9.4	9.9	10.4	10.9	11.4	11.9
-47.5°	6.3	6.8	7.4	7.9	8.4	9.0	9.5	9.9	10.4	10.8	11.3
-50°	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.4	9.9	10.2	10.6
-52.5°	5.7	6.2	6.6	7.1	7.5	8.0	8.4	8.9	9.3	9.7	10.0
-55°	5.3	5.8	6.2	6.6	7.1	7.5	7.9	8.3	8.7	9.1	9.4
-57.5°	5.2	5.4	5.8	6.2	6.6	7.0	7.4	7.7	8.1	8.4	8.8
-60°	5.2	5.2	5.4	5.8	6.2	6.5	6.8	7.2	7.5	7.8	8.1
-62.5°	5.1	5.2	5.2	5.3	5.7	6.0	6.3	6.6	6.9	7.2	7.4
-65°	4.4	5.0	5.2	5.2	5.2	5.5	5.8	6.1	6.3	6.5	6.8
-67.5°	3.6	4.2	4.8	5.2	5.2	5.2	5.2	5.5	5.7	5.9	6.2
-70°	3.2	3.4	3.9	4.4	4.9	5.2	5.2	5.2	5.2	5.3	5.5
-72.5°	2.8	3.0	3.2	3.5	3.9	4.3	4.7	5.0	5.2	5.2	5.2
-75°	2.4	2.6	2.8	3.0	3.2	3.3	3.5	3.9	4.2	4.5	4.8
-77.5°	2.0	2.1	2.3	2.5	2.6	2.8	2.9	3.1	3.2	3.3	3.5
-80°	1.6	1.7	1.8	2.0	2.1	2.2	2.3	2.4	2.5	2.7	2.8
-82.5°	1.2	1.3	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.0	2.0
-85°	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4
-87.5°	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-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	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
85°	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.7	1.7
82.5°	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.5	2.6
80°	2.8	2.9	3.0	3.1	3.2	3.2	3.3	3.3	3.4	3.4	3.4
77.5°	3.6	3.9	4.0	4.2	4.4	4.5	4.7	4.8	4.9	5.0	5.1
75°	5.0	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
72.5°	5.2	5.2	5.2	5.4	5.5	5.6	5.7	5.8	5.9	5.9	6.0
70°	5.7	5.8	6.0	6.2	6.3	6.4	6.5	6.6	6.7	6.7	6.8
67.5°	6.3	6.5	6.7	6.8	7.0	7.2	7.3	7.4	7.5	7.6	7.7
65°	7.0	7.2	7.4	7.6	7.8	8.0	8.1	8.3	8.4	8.5	8.6
62.5°	7.7	8.0	8.2	8.4	8.6	8.8	9.0	9.1	9.2	9.3	9.4
60°	8.4	8.7	8.9	9.2	9.4	9.6	9.8	9.9	10.0	10.2	10.2
57.5°	9.1	9.4	9.7	9.9	10.1	10.3	10.5	10.7	10.9	11.0	11.1
55°	9.8	10.1	10.3	10.6	10.9	11.1	11.3	11.5	11.7	11.9	12.0
52.5°	10.4	10.7	11.1	11.4	11.7	11.9	12.2	12.4	12.5	12.7	12.8
50°	11.0	11.4	11.8	12.1	12.4	12.7	12.9	13.0	13.0	13.0	13.0
47.5°	11.7	12.1	12.5	12.8	13.0	13.0	13.0	13.0	13.3	13.5	13.6
45°	12.3	12.7	13.0	13.0	13.0	13.3	13.6	13.9	14.1	14.3	14.5
42.5°	12.9	13.0	13.0	13.3	13.7	14.1	14.4	14.7	14.9	15.1	15.3
40°	13.0	13.1	13.6	14.0	14.4	14.8	15.1	15.4	15.8	16.3	16.7
37.5°	13.2	13.7	14.2	14.7	15.1	15.5	16.1	16.8	17.4	18.2	18.8
35°	13.8	14.3	14.9	15.3	15.9	16.8	17.7	18.8	19.8	21.3	22.7
32.5°	14.3	14.9	15.4	16.3	17.3	18.6	19.9	22.2	24.3	26.5	28.8
30°	14.9	15.4	16.4	17.6	19.2	21.3	24.1	27.3	30.7	34.4	39.4
27.5°	15.3	16.3	17.6	19.4	22.1	25.3	29.8	34.7	42.1	48.6	57.8
25°	15.9	17.3	19.2	22.1	25.9	31.0	38.6	47.4	61.0	88.0	127.7
22.5°	16.8	18.6	21.3	25.3	31.0	39.9	51.2	74.6	126.8	184.8	222.8
20°	17.7	19.9	24.1	29.8	38.6	51.2	79.4	150.9	214.0	254.3	292.1
17.5°	18.8	22.2	27.3	34.7	47.4	74.6	150.9	221.7	270.6	329.3	385.0
15°	19.8	24.3	30.7	42.1	61.0	126.8	214.0	270.6	342.1	426.7	557.5
12.5°	21.3	26.5	34.4	48.6	88.0	184.8	254.3	329.3	426.7	607.1	900.9
10°	22.7	28.8	39.4	57.8	127.7	222.8	292.1	385.0	557.5	900.9	1461.9
7.5°	23.8	30.6	43.4	70.5	166.0	248.2	332.9	456.7	744.5	1313.3	2079.7
5°	24.6	31.9	46.3	82.3	189.5	266.9	363.3	535.2	945.5	1708.0	2569.6
2.5°	25.0	32.7	48.0	94.5	203.7	278.4	382.0	598.0	1105.7	1977.3	2864.0
0°	25.2	33.0	48.6	98.6	208.5	282.3	388.3	622.0	1160.5	2070.9	2965.6
-2.5°	25.0	32.7	48.0	94.5	203.7	278.4	382.0	598.0	1105.7	1977.3	2864.0
-5°	24.6	31.9	46.3	82.3	189.5	266.9	363.3	535.2	945.5	1708.0	2569.6
-7.5°	23.8	30.6	43.4	70.5	166.0	248.2	332.9	456.7	744.5	1313.3	2079.7
-10°	22.7	28.8	39.4	57.8	127.7	222.8	292.1	385.0	557.5	900.9	1461.9
-12.5°	21.3	26.5	34.4	48.6	88.0	184.8	254.3	329.3	426.7	607.1	900.9
-15°	19.8	24.3	30.7	42.1	61.0	126.8	214.0	270.6	342.1	426.7	557.5
-17.5°	18.8	22.2	27.3	34.7	47.4	74.6	150.9	221.7	270.6	329.3	385.0
-20°	17.7	19.9	24.1	29.8	38.6	51.2	79.4	150.9	214.0	254.3	292.1



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	16.8	18.6	21.3	25.3	31.0	39.9	51.2	74.6	126.8	184.8	222.8
-25°	15.9	17.3	19.2	22.1	25.9	31.0	38.6	47.4	61.0	88.0	127.7
-27.5°	15.3	16.3	17.6	19.4	22.1	25.3	29.8	34.7	42.1	48.6	57.8
-30°	14.9	15.4	16.4	17.6	19.2	21.3	24.1	27.3	30.7	34.4	39.4
-32.5°	14.3	14.9	15.4	16.3	17.3	18.6	19.9	22.2	24.3	26.5	28.8
-35°	13.8	14.3	14.9	15.3	15.9	16.8	17.7	18.8	19.8	21.3	22.7
-37.5°	13.2	13.7	14.2	14.7	15.1	15.5	16.1	16.8	17.4	18.2	18.8
-40°	13.0	13.1	13.6	14.0	14.4	14.8	15.1	15.4	15.8	16.3	16.7
-42.5°	12.9	13.0	13.0	13.3	13.7	14.1	14.4	14.7	14.9	15.1	15.3
-45°	12.3	12.7	13.0	13.0	13.0	13.3	13.6	13.9	14.1	14.3	14.5
-47.5°	11.7	12.1	12.5	12.8	13.0	13.0	13.0	13.0	13.3	13.5	13.6
-50°	11.0	11.4	11.8	12.1	12.4	12.7	12.9	13.0	13.0	13.0	13.0
-52.5°	10.4	10.7	11.1	11.4	11.7	11.9	12.2	12.4	12.5	12.7	12.8
-55°	9.8	10.1	10.3	10.6	10.9	11.1	11.3	11.5	11.7	11.9	12.0
-57.5°	9.1	9.4	9.7	9.9	10.1	10.3	10.5	10.7	10.9	11.0	11.1
-60°	8.4	8.7	8.9	9.2	9.4	9.6	9.8	9.9	10.0	10.2	10.2
-62.5°	7.7	8.0	8.2	8.4	8.6	8.8	9.0	9.1	9.2	9.3	9.4
-65°	7.0	7.2	7.4	7.6	7.8	8.0	8.1	8.3	8.4	8.5	8.6
-67.5°	6.3	6.5	6.7	6.8	7.0	7.2	7.3	7.4	7.5	7.6	7.7
-70°	5.7	5.8	6.0	6.2	6.3	6.4	6.5	6.6	6.7	6.7	6.8
-72.5°	5.2	5.2	5.2	5.4	5.5	5.6	5.7	5.8	5.9	5.9	6.0
-75°	5.0	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
-77.5°	3.6	3.9	4.0	4.2	4.4	4.5	4.7	4.8	4.9	5.0	5.1
-80°	2.8	2.9	3.0	3.1	3.2	3.2	3.3	3.3	3.4	3.4	3.4
-82.5°	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.5	2.6
-85°	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.7	1.7
-87.5°	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	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



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-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	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6
82.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.3
77.5°	5.1	5.2	5.2	5.2	5.2	5.2	5.1	5.1	5.0	4.9	4.8
75°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
72.5°	6.0	6.1	6.1	6.1	6.1	6.1	6.0	6.0	5.9	5.9	5.8
70°	6.8	6.9	6.9	6.9	6.9	6.9	6.8	6.8	6.7	6.7	6.6
67.5°	7.7	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.6	7.5	7.4
65°	8.6	8.7	8.7	8.7	8.7	8.7	8.6	8.6	8.5	8.4	8.3
62.5°	9.5	9.6	9.6	9.6	9.6	9.6	9.5	9.4	9.3	9.2	9.1
60°	10.3	10.4	10.4	10.4	10.4	10.4	10.3	10.2	10.2	10.0	9.9
57.5°	11.2	11.3	11.3	11.3	11.3	11.3	11.2	11.1	11.0	10.9	10.7
55°	12.1	12.1	12.2	12.2	12.2	12.1	12.1	12.0	11.9	11.7	11.5
52.5°	12.9	12.9	13.0	13.0	13.0	12.9	12.9	12.8	12.7	12.5	12.4
50°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
47.5°	13.7	13.8	13.9	13.9	13.9	13.8	13.7	13.6	13.5	13.3	13.0
45°	14.6	14.7	14.8	14.8	14.8	14.7	14.6	14.5	14.3	14.1	13.9
42.5°	15.4	15.5	15.6	15.6	15.6	15.5	15.4	15.3	15.1	14.9	14.7
40°	17.0	17.2	17.4	17.4	17.4	17.2	17.0	16.7	16.3	15.8	15.4
37.5°	19.3	19.7	19.9	20.0	19.9	19.7	19.3	18.8	18.2	17.4	16.8
35°	23.8	24.6	25.0	25.2	25.0	24.6	23.8	22.7	21.3	19.8	18.8
32.5°	30.6	31.9	32.7	33.0	32.7	31.9	30.6	28.8	26.5	24.3	22.2
30°	43.4	46.3	48.0	48.6	48.0	46.3	43.4	39.4	34.4	30.7	27.3
27.5°	70.5	82.3	94.5	98.6	94.5	82.3	70.5	57.8	48.6	42.1	34.7
25°	166.0	189.5	203.7	208.5	203.7	189.5	166.0	127.7	88.0	61.0	47.4
22.5°	248.2	266.9	278.4	282.3	278.4	266.9	248.2	222.8	184.8	126.8	74.6
20°	332.9	363.3	382.0	388.3	382.0	363.3	332.9	292.1	254.3	214.0	150.9
17.5°	456.7	535.2	598.0	622.0	598.0	535.2	456.7	385.0	329.3	270.6	221.7
15°	744.5	945.5	1105.7	1160.5	1105.7	945.5	744.5	557.5	426.7	342.1	270.6
12.5°	1313.3	1708.0	1977.3	2070.9	1977.3	1708.0	1313.3	900.9	607.1	426.7	329.3
10°	2079.7	2569.6	2864.0	2965.6	2864.0	2569.6	2079.7	1461.9	900.9	557.5	385.0
7.5°	2768.3	3271.3	3587.8	3694.4	3587.8	3271.3	2768.3	2079.7	1313.3	744.5	456.7
5°	3271.3	3808.8	4148.4	4271.2	4148.4	3808.8	3271.3	2569.6	1708.0	945.5	535.2
2.5°	3587.8	4148.4	4511.8	4634.3	4511.8	4148.4	3587.8	2864.0	1977.3	1105.7	598.0
0°	3694.4	4271.2	4634.3	4785.4	4634.3	4271.2	3694.4	2965.6	2070.9	1160.5	622.0
-2.5°	3587.8	4148.4	4511.8	4634.3	4511.8	4148.4	3587.8	2864.0	1977.3	1105.7	598.0
-5°	3271.3	3808.8	4148.4	4271.2	4148.4	3808.8	3271.3	2569.6	1708.0	945.5	535.2
-7.5°	2768.3	3271.3	3587.8	3694.4	3587.8	3271.3	2768.3	2079.7	1313.3	744.5	456.7
-10°	2079.7	2569.6	2864.0	2965.6	2864.0	2569.6	2079.7	1461.9	900.9	557.5	385.0
-12.5°	1313.3	1708.0	1977.3	2070.9	1977.3	1708.0	1313.3	900.9	607.1	426.7	329.3
-15°	744.5	945.5	1105.7	1160.5	1105.7	945.5	744.5	557.5	426.7	342.1	270.6
-17.5°	456.7	535.2	598.0	622.0	598.0	535.2	456.7	385.0	329.3	270.6	221.7
-20°	332.9	363.3	382.0	388.3	382.0	363.3	332.9	292.1	254.3	214.0	150.9



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
-22.5°	248.2	266.9	278.4	282.3	278.4	266.9	248.2	222.8	184.8	126.8	74.6
-25°	166.0	189.5	203.7	208.5	203.7	189.5	166.0	127.7	88.0	61.0	47.4
-27.5°	70.5	82.3	94.5	98.6	94.5	82.3	70.5	57.8	48.6	42.1	34.7
-30°	43.4	46.3	48.0	48.6	48.0	46.3	43.4	39.4	34.4	30.7	27.3
-32.5°	30.6	31.9	32.7	33.0	32.7	31.9	30.6	28.8	26.5	24.3	22.2
-35°	23.8	24.6	25.0	25.2	25.0	24.6	23.8	22.7	21.3	19.8	18.8
-37.5°	19.3	19.7	19.9	20.0	19.9	19.7	19.3	18.8	18.2	17.4	16.8
-40°	17.0	17.2	17.4	17.4	17.4	17.2	17.0	16.7	16.3	15.8	15.4
-42.5°	15.4	15.5	15.6	15.6	15.6	15.5	15.4	15.3	15.1	14.9	14.7
-45°	14.6	14.7	14.8	14.8	14.8	14.7	14.6	14.5	14.3	14.1	13.9
-47.5°	13.7	13.8	13.9	13.9	13.9	13.8	13.7	13.6	13.5	13.3	13.0
-50°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
-52.5°	12.9	12.9	13.0	13.0	13.0	12.9	12.9	12.8	12.7	12.5	12.4
-55°	12.1	12.1	12.2	12.2	12.2	12.1	12.1	12.0	11.9	11.7	11.5
-57.5°	11.2	11.3	11.3	11.3	11.3	11.3	11.2	11.1	11.0	10.9	10.7
-60°	10.3	10.4	10.4	10.4	10.4	10.4	10.3	10.2	10.2	10.0	9.9
-62.5°	9.5	9.6	9.6	9.6	9.6	9.6	9.5	9.4	9.3	9.2	9.1
-65°	8.6	8.7	8.7	8.7	8.7	8.7	8.6	8.6	8.5	8.4	8.3
-67.5°	7.7	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.6	7.5	7.4
-70°	6.8	6.9	6.9	6.9	6.9	6.9	6.8	6.8	6.7	6.7	6.6
-72.5°	6.0	6.1	6.1	6.1	6.1	6.1	6.0	6.0	5.9	5.9	5.8
-75°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
-77.5°	5.1	5.2	5.2	5.2	5.2	5.2	5.1	5.1	5.0	4.9	4.8
-80°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.3
-82.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5
-85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6
-87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	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



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-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	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6
85°	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.2
82.5°	2.4	2.4	2.3	2.3	2.2	2.2	2.1	2.0	2.0	1.9	1.8
80°	3.3	3.2	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.5	2.4
77.5°	4.7	4.5	4.4	4.2	4.0	3.9	3.6	3.5	3.3	3.2	3.1
75°	5.2	5.2	5.2	5.2	5.2	5.2	5.0	4.8	4.5	4.2	3.9
72.5°	5.7	5.6	5.5	5.4	5.2	5.2	5.2	5.2	5.2	5.2	5.0
70°	6.5	6.4	6.3	6.2	6.0	5.8	5.7	5.5	5.3	5.2	5.2
67.5°	7.3	7.2	7.0	6.8	6.7	6.5	6.3	6.2	5.9	5.7	5.5
65°	8.1	8.0	7.8	7.6	7.4	7.2	7.0	6.8	6.5	6.3	6.1
62.5°	9.0	8.8	8.6	8.4	8.2	8.0	7.7	7.4	7.2	6.9	6.6
60°	9.8	9.6	9.4	9.2	8.9	8.7	8.4	8.1	7.8	7.5	7.2
57.5°	10.5	10.3	10.1	9.9	9.7	9.4	9.1	8.8	8.4	8.1	7.7
55°	11.3	11.1	10.9	10.6	10.3	10.1	9.8	9.4	9.1	8.7	8.3
52.5°	12.2	11.9	11.7	11.4	11.1	10.7	10.4	10.0	9.7	9.3	8.9
50°	12.9	12.7	12.4	12.1	11.8	11.4	11.0	10.6	10.2	9.9	9.4
47.5°	13.0	13.0	13.0	12.8	12.5	12.1	11.7	11.3	10.8	10.4	9.9
45°	13.6	13.3	13.0	13.0	13.0	12.7	12.3	11.9	11.4	10.9	10.4
42.5°	14.4	14.1	13.7	13.3	13.0	13.0	12.9	12.5	12.0	11.5	10.9
40°	15.1	14.8	14.4	14.0	13.6	13.1	13.0	13.0	12.5	12.0	11.4
37.5°	16.1	15.5	15.1	14.7	14.2	13.7	13.2	13.0	13.0	12.5	11.9
35°	17.7	16.8	15.9	15.3	14.9	14.3	13.8	13.2	13.0	12.9	12.3
32.5°	19.9	18.6	17.3	16.3	15.4	14.9	14.3	13.7	13.1	13.0	12.7
30°	24.1	21.3	19.2	17.6	16.4	15.4	14.9	14.2	13.6	13.0	13.0
27.5°	29.8	25.3	22.1	19.4	17.6	16.3	15.3	14.7	14.0	13.3	13.0
25°	38.6	31.0	25.9	22.1	19.2	17.3	15.9	15.1	14.4	13.7	13.0
22.5°	51.2	39.9	31.0	25.3	21.3	18.6	16.8	15.5	14.8	14.1	13.3
20°	79.4	51.2	38.6	29.8	24.1	19.9	17.7	16.1	15.1	14.4	13.6
17.5°	150.9	74.6	47.4	34.7	27.3	22.2	18.8	16.8	15.4	14.7	13.9
15°	214.0	126.8	61.0	42.1	30.7	24.3	19.8	17.4	15.8	14.9	14.1
12.5°	254.3	184.8	88.0	48.6	34.4	26.5	21.3	18.2	16.3	15.1	14.3
10°	292.1	222.8	127.7	57.8	39.4	28.8	22.7	18.8	16.7	15.3	14.5
7.5°	332.9	248.2	166.0	70.5	43.4	30.6	23.8	19.3	17.0	15.4	14.6
5°	363.3	266.9	189.5	82.3	46.3	31.9	24.6	19.7	17.2	15.5	14.7
2.5°	382.0	278.4	203.7	94.5	48.0	32.7	25.0	19.9	17.4	15.6	14.8
0°	388.3	282.3	208.5	98.6	48.6	33.0	25.2	20.0	17.4	15.6	14.8
-2.5°	382.0	278.4	203.7	94.5	48.0	32.7	25.0	19.9	17.4	15.6	14.8
-5°	363.3	266.9	189.5	82.3	46.3	31.9	24.6	19.7	17.2	15.5	14.7
-7.5°	332.9	248.2	166.0	70.5	43.4	30.6	23.8	19.3	17.0	15.4	14.6
-10°	292.1	222.8	127.7	57.8	39.4	28.8	22.7	18.8	16.7	15.3	14.5
-12.5°	254.3	184.8	88.0	48.6	34.4	26.5	21.3	18.2	16.3	15.1	14.3
-15°	214.0	126.8	61.0	42.1	30.7	24.3	19.8	17.4	15.8	14.9	14.1
-17.5°	150.9	74.6	47.4	34.7	27.3	22.2	18.8	16.8	15.4	14.7	13.9
-20°	79.4	51.2	38.6	29.8	24.1	19.9	17.7	16.1	15.1	14.4	13.6



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
-22.5°	51.2	39.9	31.0	25.3	21.3	18.6	16.8	15.5	14.8	14.1	13.3
-25°	38.6	31.0	25.9	22.1	19.2	17.3	15.9	15.1	14.4	13.7	13.0
-27.5°	29.8	25.3	22.1	19.4	17.6	16.3	15.3	14.7	14.0	13.3	13.0
-30°	24.1	21.3	19.2	17.6	16.4	15.4	14.9	14.2	13.6	13.0	13.0
-32.5°	19.9	18.6	17.3	16.3	15.4	14.9	14.3	13.7	13.1	13.0	12.7
-35°	17.7	16.8	15.9	15.3	14.9	14.3	13.8	13.2	13.0	12.9	12.3
-37.5°	16.1	15.5	15.1	14.7	14.2	13.7	13.2	13.0	13.0	12.5	11.9
-40°	15.1	14.8	14.4	14.0	13.6	13.1	13.0	13.0	12.5	12.0	11.4
-42.5°	14.4	14.1	13.7	13.3	13.0	13.0	12.9	12.5	12.0	11.5	10.9
-45°	13.6	13.3	13.0	13.0	13.0	12.7	12.3	11.9	11.4	10.9	10.4
-47.5°	13.0	13.0	13.0	12.8	12.5	12.1	11.7	11.3	10.8	10.4	9.9
-50°	12.9	12.7	12.4	12.1	11.8	11.4	11.0	10.6	10.2	9.9	9.4
-52.5°	12.2	11.9	11.7	11.4	11.1	10.7	10.4	10.0	9.7	9.3	8.9
-55°	11.3	11.1	10.9	10.6	10.3	10.1	9.8	9.4	9.1	8.7	8.3
-57.5°	10.5	10.3	10.1	9.9	9.7	9.4	9.1	8.8	8.4	8.1	7.7
-60°	9.8	9.6	9.4	9.2	8.9	8.7	8.4	8.1	7.8	7.5	7.2
-62.5°	9.0	8.8	8.6	8.4	8.2	8.0	7.7	7.4	7.2	6.9	6.6
-65°	8.1	8.0	7.8	7.6	7.4	7.2	7.0	6.8	6.5	6.3	6.1
-67.5°	7.3	7.2	7.0	6.8	6.7	6.5	6.3	6.2	5.9	5.7	5.5
-70°	6.5	6.4	6.3	6.2	6.0	5.8	5.7	5.5	5.3	5.2	5.2
-72.5°	5.7	5.6	5.5	5.4	5.2	5.2	5.2	5.2	5.2	5.2	5.0
-75°	5.2	5.2	5.2	5.2	5.2	5.2	5.0	4.8	4.5	4.2	3.9
-77.5°	4.7	4.5	4.4	4.2	4.0	3.9	3.6	3.5	3.3	3.2	3.1
-80°	3.3	3.2	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.5	2.4
-82.5°	2.4	2.4	2.3	2.3	2.2	2.2	2.1	2.0	2.0	1.9	1.8
-85°	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.2
-87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	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



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-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	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3
85°	1.2	1.1	1.1	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.5
82.5°	1.7	1.6	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8
80°	2.3	2.2	2.1	2.0	1.8	1.7	1.6	1.4	1.3	1.2	1.1
77.5°	2.9	2.8	2.6	2.5	2.3	2.1	2.0	1.8	1.6	1.5	1.3
75°	3.5	3.3	3.2	3.0	2.8	2.6	2.4	2.2	1.9	1.7	1.5
72.5°	4.7	4.3	3.9	3.5	3.2	3.0	2.8	2.5	2.3	2.0	1.8
70°	5.2	5.2	4.9	4.4	3.9	3.4	3.2	2.9	2.6	2.3	2.0
67.5°	5.2	5.2	5.2	5.2	4.8	4.2	3.6	3.3	2.9	2.6	2.3
65°	5.8	5.5	5.2	5.2	5.2	5.0	4.4	3.7	3.3	2.9	2.5
62.5°	6.3	6.0	5.7	5.3	5.2	5.2	5.1	4.4	3.6	3.2	2.8
60°	6.8	6.5	6.2	5.8	5.4	5.2	5.2	5.0	4.2	3.4	3.0
57.5°	7.4	7.0	6.6	6.2	5.8	5.4	5.2	5.2	4.8	3.9	3.2
55°	7.9	7.5	7.1	6.6	6.2	5.8	5.3	5.2	5.2	4.4	3.5
52.5°	8.4	8.0	7.5	7.1	6.6	6.2	5.7	5.2	5.2	4.9	3.9
50°	9.0	8.5	8.0	7.5	7.0	6.5	6.0	5.5	5.2	5.2	4.3
47.5°	9.5	9.0	8.4	7.9	7.4	6.8	6.3	5.8	5.2	5.2	4.7
45°	9.9	9.4	8.9	8.3	7.7	7.2	6.6	6.1	5.5	5.2	5.0
42.5°	10.4	9.9	9.3	8.7	8.1	7.5	6.9	6.3	5.7	5.2	5.2
40°	10.8	10.2	9.7	9.1	8.4	7.8	7.2	6.5	5.9	5.3	5.2
37.5°	11.3	10.6	10.0	9.4	8.8	8.1	7.4	6.8	6.2	5.5	5.2
35°	11.7	11.0	10.4	9.8	9.1	8.4	7.7	7.0	6.3	5.7	5.2
32.5°	12.1	11.4	10.7	10.1	9.4	8.7	8.0	7.2	6.5	5.8	5.2
30°	12.5	11.8	11.1	10.3	9.7	8.9	8.2	7.4	6.7	6.0	5.2
27.5°	12.8	12.1	11.4	10.6	9.9	9.2	8.4	7.6	6.8	6.2	5.4
25°	13.0	12.4	11.7	10.9	10.1	9.4	8.6	7.8	7.0	6.3	5.5
22.5°	13.0	12.7	11.9	11.1	10.3	9.6	8.8	8.0	7.2	6.4	5.6
20°	13.0	12.9	12.2	11.3	10.5	9.8	9.0	8.1	7.3	6.5	5.7
17.5°	13.0	13.0	12.4	11.5	10.7	9.9	9.1	8.3	7.4	6.6	5.8
15°	13.3	13.0	12.5	11.7	10.9	10.0	9.2	8.4	7.5	6.7	5.9
12.5°	13.5	13.0	12.7	11.9	11.0	10.2	9.3	8.5	7.6	6.7	5.9
10°	13.6	13.0	12.8	12.0	11.1	10.2	9.4	8.6	7.7	6.8	6.0
7.5°	13.7	13.0	12.9	12.1	11.2	10.3	9.5	8.6	7.7	6.8	6.0
5°	13.8	13.0	12.9	12.1	11.3	10.4	9.6	8.7	7.8	6.9	6.1
2.5°	13.9	13.0	13.0	12.2	11.3	10.4	9.6	8.7	7.8	6.9	6.1
0°	13.9	13.0	13.0	12.2	11.3	10.4	9.6	8.7	7.8	6.9	6.1
-2.5°	13.9	13.0	13.0	12.2	11.3	10.4	9.6	8.7	7.8	6.9	6.1
-5°	13.8	13.0	12.9	12.1	11.3	10.4	9.6	8.7	7.8	6.9	6.1
-7.5°	13.7	13.0	12.9	12.1	11.2	10.3	9.5	8.6	7.7	6.8	6.0
-10°	13.6	13.0	12.8	12.0	11.1	10.2	9.4	8.6	7.7	6.8	6.0
-12.5°	13.5	13.0	12.7	11.9	11.0	10.2	9.3	8.5	7.6	6.7	5.9
-15°	13.3	13.0	12.5	11.7	10.9	10.0	9.2	8.4	7.5	6.7	5.9
-17.5°	13.0	13.0	12.4	11.5	10.7	9.9	9.1	8.3	7.4	6.6	5.8
-20°	13.0	12.9	12.2	11.3	10.5	9.8	9.0	8.1	7.3	6.5	5.7



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
-22.5°	13.0	12.7	11.9	11.1	10.3	9.6	8.8	8.0	7.2	6.4	5.6
-25°	13.0	12.4	11.7	10.9	10.1	9.4	8.6	7.8	7.0	6.3	5.5
-27.5°	12.8	12.1	11.4	10.6	9.9	9.2	8.4	7.6	6.8	6.2	5.4
-30°	12.5	11.8	11.1	10.3	9.7	8.9	8.2	7.4	6.7	6.0	5.2
-32.5°	12.1	11.4	10.7	10.1	9.4	8.7	8.0	7.2	6.5	5.8	5.2
-35°	11.7	11.0	10.4	9.8	9.1	8.4	7.7	7.0	6.3	5.7	5.2
-37.5°	11.3	10.6	10.0	9.4	8.8	8.1	7.4	6.8	6.2	5.5	5.2
-40°	10.8	10.2	9.7	9.1	8.4	7.8	7.2	6.5	5.9	5.3	5.2
-42.5°	10.4	9.9	9.3	8.7	8.1	7.5	6.9	6.3	5.7	5.2	5.2
-45°	9.9	9.4	8.9	8.3	7.7	7.2	6.6	6.1	5.5	5.2	5.0
-47.5°	9.5	9.0	8.4	7.9	7.4	6.8	6.3	5.8	5.2	5.2	4.7
-50°	9.0	8.5	8.0	7.5	7.0	6.5	6.0	5.5	5.2	5.2	4.3
-52.5°	8.4	8.0	7.5	7.1	6.6	6.2	5.7	5.2	5.2	4.9	3.9
-55°	7.9	7.5	7.1	6.6	6.2	5.8	5.3	5.2	5.2	4.4	3.5
-57.5°	7.4	7.0	6.6	6.2	5.8	5.4	5.2	5.2	4.8	3.9	3.2
-60°	6.8	6.5	6.2	5.8	5.4	5.2	5.2	5.0	4.2	3.4	3.0
-62.5°	6.3	6.0	5.7	5.3	5.2	5.2	5.1	4.4	3.6	3.2	2.8
-65°	5.8	5.5	5.2	5.2	5.2	5.0	4.4	3.7	3.3	2.9	2.5
-67.5°	5.2	5.2	5.2	5.2	4.8	4.2	3.6	3.3	2.9	2.6	2.3
-70°	5.2	5.2	4.9	4.4	3.9	3.4	3.2	2.9	2.6	2.3	2.0
-72.5°	4.7	4.3	3.9	3.5	3.2	3.0	2.8	2.5	2.3	2.0	1.8
-75°	3.5	3.3	3.2	3.0	2.8	2.6	2.4	2.2	1.9	1.7	1.5
-77.5°	2.9	2.8	2.6	2.5	2.3	2.1	2.0	1.8	1.6	1.5	1.3
-80°	2.3	2.2	2.1	2.0	1.8	1.7	1.6	1.4	1.3	1.2	1.1
-82.5°	1.7	1.6	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8
-85°	1.2	1.1	1.1	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.5
-87.5°	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.2	0.2	0.1	0.1	0.0	0.0
85°	0.5	0.4	0.3	0.2	0.2	0.1	0.0
82.5°	0.7	0.6	0.5	0.4	0.2	0.1	0.0
80°	0.9	0.8	0.6	0.5	0.3	0.2	0.0
77.5°	1.1	1.0	0.8	0.6	0.4	0.2	0.0
75°	1.3	1.1	0.9	0.7	0.5	0.2	0.0
72.5°	1.5	1.3	1.1	0.8	0.5	0.3	0.0
70°	1.7	1.5	1.2	0.9	0.6	0.3	0.0
67.5°	1.9	1.6	1.3	1.0	0.7	0.3	0.0
65°	2.2	1.8	1.4	1.1	0.8	0.4	0.0
62.5°	2.4	2.0	1.6	1.2	0.8	0.4	0.0
60°	2.6	2.1	1.7	1.3	0.9	0.4	0.0
57.5°	2.8	2.3	1.8	1.4	1.0	0.5	0.0
55°	3.0	2.5	2.0	1.5	1.0	0.5	0.0
52.5°	3.2	2.6	2.1	1.6	1.1	0.5	0.0
50°	3.3	2.8	2.2	1.6	1.1	0.6	0.0
47.5°	3.5	2.9	2.3	1.7	1.2	0.6	0.0
45°	3.9	3.1	2.4	1.8	1.2	0.6	0.0
42.5°	4.2	3.2	2.5	1.9	1.3	0.7	0.0
40°	4.5	3.3	2.7	2.0	1.3	0.7	0.0
37.5°	4.8	3.5	2.8	2.0	1.4	0.7	0.0
35°	5.0	3.6	2.8	2.1	1.4	0.7	0.0
32.5°	5.2	3.9	2.9	2.2	1.4	0.8	0.0
30°	5.2	4.0	3.0	2.2	1.5	0.8	0.0
27.5°	5.2	4.2	3.1	2.3	1.5	0.8	0.0
25°	5.2	4.4	3.2	2.3	1.5	0.8	0.0
22.5°	5.2	4.5	3.2	2.4	1.6	0.8	0.0
20°	5.2	4.7	3.3	2.4	1.6	0.8	0.0
17.5°	5.2	4.8	3.3	2.5	1.6	0.9	0.0
15°	5.2	4.9	3.4	2.5	1.6	0.9	0.0
12.5°	5.2	5.0	3.4	2.5	1.7	0.9	0.0
10°	5.2	5.1	3.4	2.6	1.7	0.9	0.0
7.5°	5.2	5.1	3.5	2.6	1.7	0.9	0.0
5°	5.2	5.2	3.5	2.6	1.7	0.9	0.0
2.5°	5.2	5.2	3.5	2.6	1.7	0.9	0.0
0°	5.2	5.2	3.5	2.6	1.7	0.9	0.0
-2.5°	5.2	5.2	3.5	2.6	1.7	0.9	0.0
-5°	5.2	5.2	3.5	2.6	1.7	0.9	0.0
-7.5°	5.2	5.1	3.5	2.6	1.7	0.9	0.0
-10°	5.2	5.1	3.4	2.6	1.7	0.9	0.0
-12.5°	5.2	5.0	3.4	2.5	1.7	0.9	0.0
-15°	5.2	4.9	3.4	2.5	1.6	0.9	0.0
-17.5°	5.2	4.8	3.3	2.5	1.6	0.9	0.0
-20°	5.2	4.7	3.3	2.4	1.6	0.8	0.0



REPORT NUMBER: P220315 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-M-WT-L1-UNV

CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
-22.5°	5.2	4.5	3.2	2.4	1.6	0.8	0.0
-25°	5.2	4.4	3.2	2.3	1.5	0.8	0.0
-27.5°	5.2	4.2	3.1	2.3	1.5	0.8	0.0
-30°	5.2	4.0	3.0	2.2	1.5	0.8	0.0
-32.5°	5.2	3.9	2.9	2.2	1.4	0.8	0.0
-35°	5.0	3.6	2.8	2.1	1.4	0.7	0.0
-37.5°	4.8	3.5	2.8	2.0	1.4	0.7	0.0
-40°	4.5	3.3	2.7	2.0	1.3	0.7	0.0
-42.5°	4.2	3.2	2.5	1.9	1.3	0.7	0.0
-45°	3.9	3.1	2.4	1.8	1.2	0.6	0.0
-47.5°	3.5	2.9	2.3	1.7	1.2	0.6	0.0
-50°	3.3	2.8	2.2	1.6	1.1	0.6	0.0
-52.5°	3.2	2.6	2.1	1.6	1.1	0.5	0.0
-55°	3.0	2.5	2.0	1.5	1.0	0.5	0.0
-57.5°	2.8	2.3	1.8	1.4	1.0	0.5	0.0
-60°	2.6	2.1	1.7	1.3	0.9	0.4	0.0
-62.5°	2.4	2.0	1.6	1.2	0.8	0.4	0.0
-65°	2.2	1.8	1.4	1.1	0.8	0.4	0.0
-67.5°	1.9	1.6	1.3	1.0	0.7	0.3	0.0
-70°	1.7	1.5	1.2	0.9	0.6	0.3	0.0
-72.5°	1.5	1.3	1.1	0.8	0.5	0.3	0.0
-75°	1.3	1.1	0.9	0.7	0.5	0.2	0.0
-77.5°	1.1	1.0	0.8	0.6	0.4	0.2	0.0
-80°	0.9	0.8	0.6	0.5	0.3	0.2	0.0
-82.5°	0.7	0.6	0.5	0.4	0.2	0.1	0.0
-85°	0.5	0.4	0.3	0.2	0.2	0.1	0.0
-87.5°	0.2	0.2	0.2	0.1	0.1	0.0	0.0
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)