

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: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29415)
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-F-BK-L1-UNV
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS,
FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 3500K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

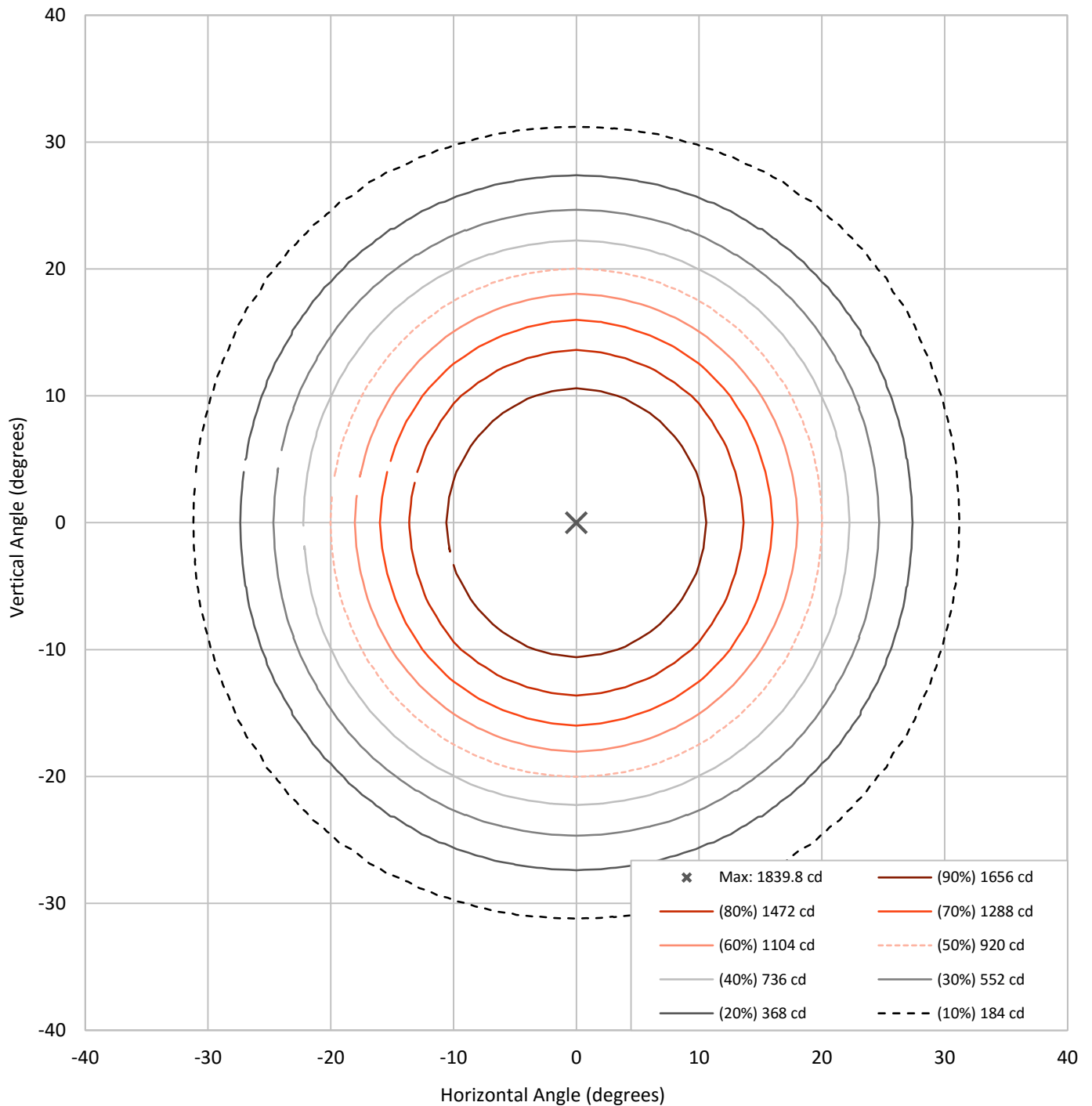
Summary

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	854.8 lumens	Max Intensity:	1839.8 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	85.5 lumens/watt		
Luminous Opening:	Circular (Dia: 0.17' x H: 0')		
Beam Angle (50%):	40.1°H x 40.1°V	Field Angle (10%):	62.4°H x 62.4°V
Beam Lumens:	548.8 lumens	Field Lumens:	788.8 lumens
Beam Efficiency:	64.2%	Field Efficiency:	92.3%
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: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-BK-L1-UNV

Iso-Candela Plot





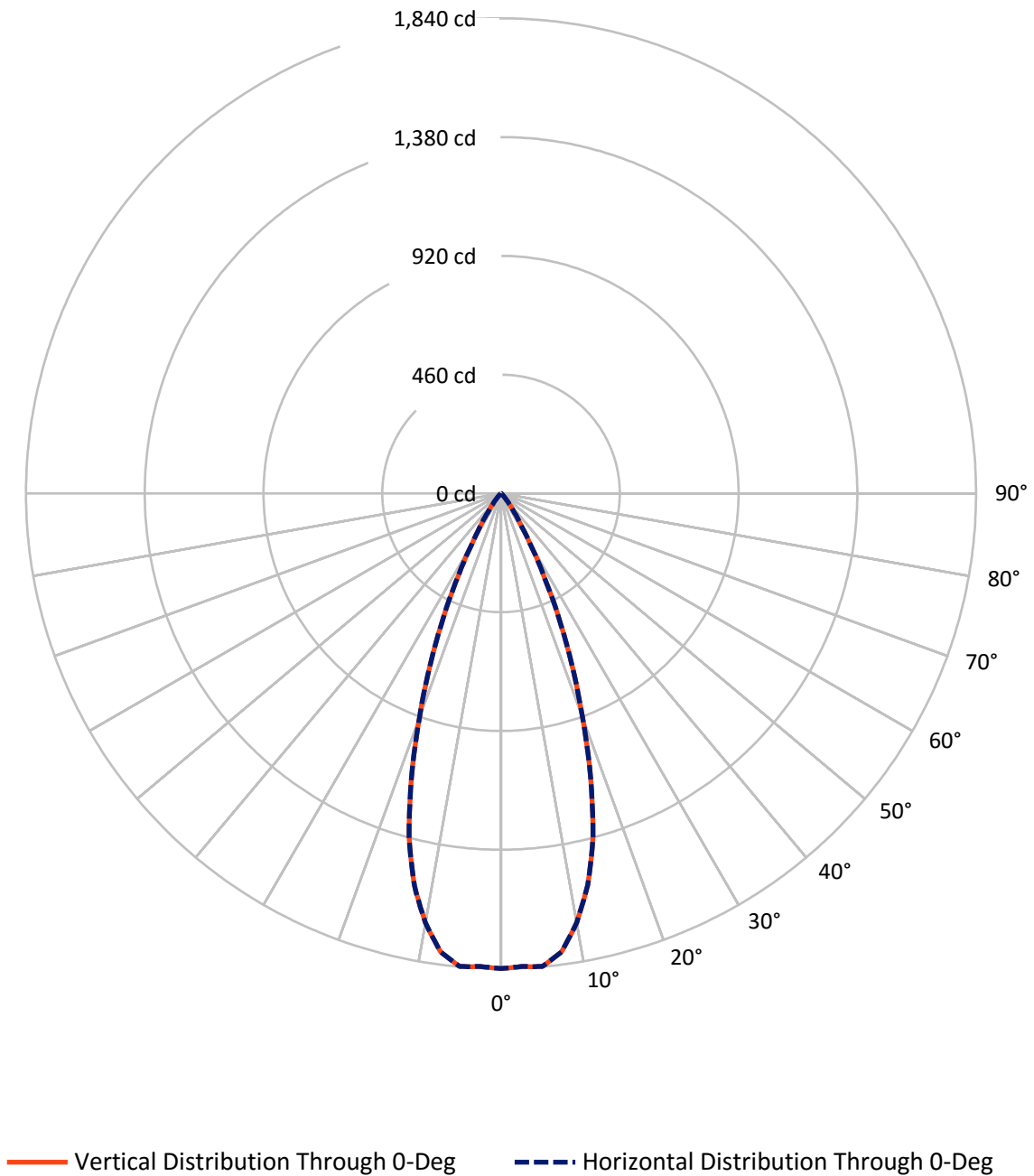
REPORT NUMBER: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-BK-L1-UNV

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	0.1	0.3	0.4	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	
40		0.0	0.0	0.0	0.2	0.7	1.8	2.9	2.9	1.8	0.7	0.2	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.1	0.7	3.0	8.8	15.1	15.1	8.8	3.0	0.7	0.1	0.0	0.0	0.0	
20		0.0	0.0	0.2	1.6	8.3	24.3	38.3	38.3	24.3	8.3	1.6	0.2	0.0	0.0		
10	0.0	0.0	0.0	0.3	2.5	13.9	37.2	53.0	53.0	37.2	13.9	2.5	0.3	0.0	0.0	0.0	
0		0.0	0.0	0.3	2.5	13.9	37.2	53.0	53.0	37.2	13.9	2.5	0.3	0.0	0.0		
-10	0.0	0.0	0.0	0.3	2.5	13.9	37.2	53.0	53.0	37.2	13.9	2.5	0.3	0.0	0.0	0.0	
-20		0.0	0.0	0.2	1.6	8.3	24.3	38.3	38.3	24.3	8.3	1.6	0.2	0.0	0.0		
-30	0.0	0.0	0.0	0.1	0.7	3.0	8.8	15.1	15.1	8.8	3.0	0.7	0.1	0.0	0.0	0.0	
-40		0.0	0.0	0.0	0.2	0.7	1.8	2.9	2.9	1.8	0.7	0.2	0.0	0.0	0.0		
-50	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.4	0.3	0.1	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		
-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			
-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	

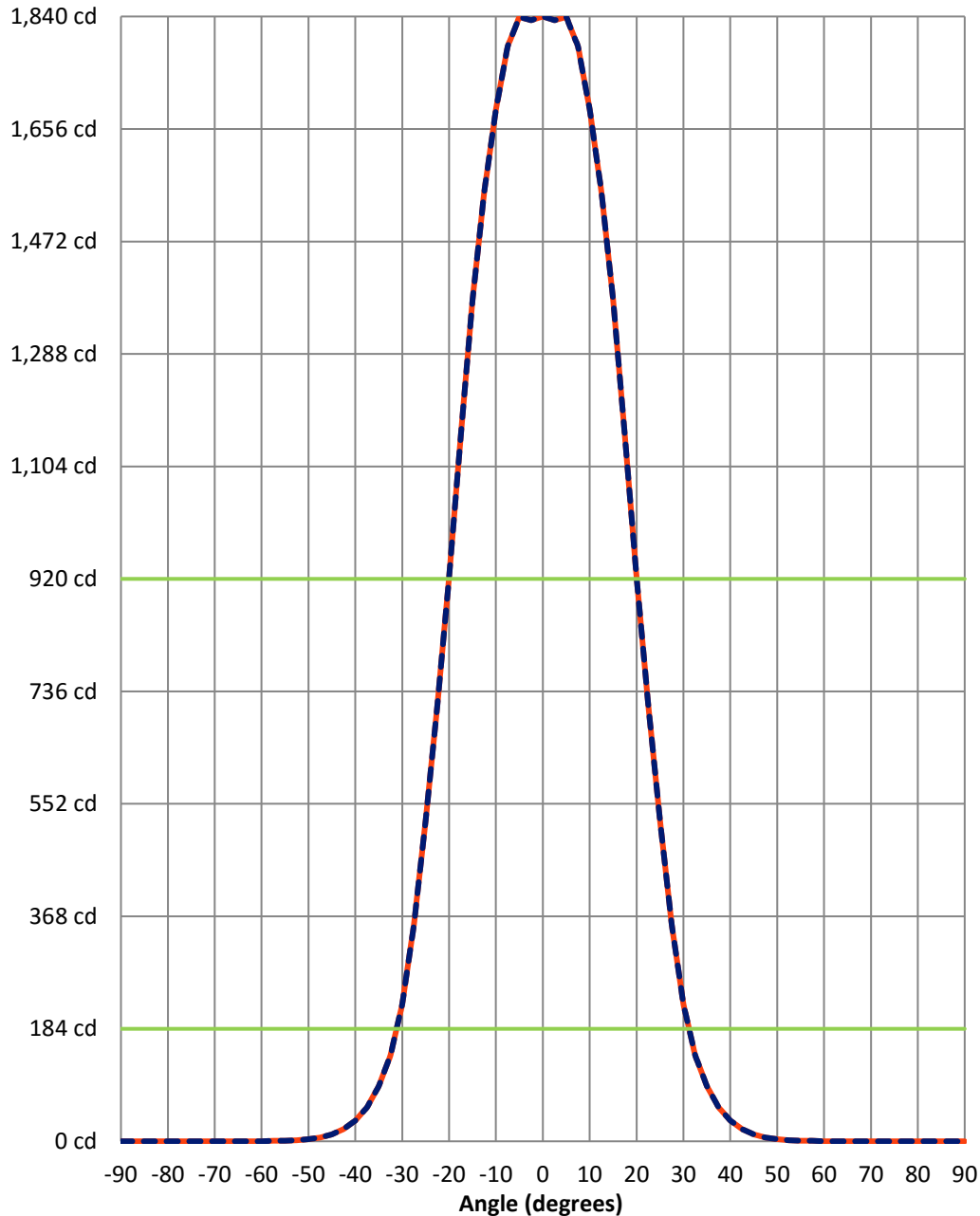
REPORT NUMBER: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-BK-L1-UNV

Luminous Intensity Polar Plot



REPORT NUMBER: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-BK-L1-UNV

Luminous Intensity Plot



Beam:
 H Angle: 40.1°
 V Angle: 40.1°
 Lumens: 548.8
 Efficiency: 64.2%

Field:
 H Angle: 62.4°
 V Angle: 62.4°
 Lumens: 788.8
 Efficiency: 92.3%

Spill:
 Lumens: 66
 Efficiency: 7.7%

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



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 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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	3
35°	0	0	0	0	0	1	1	1	2	3	4
32.5°	0	0	0	0	0	1	1	1	2	4	6
30°	0	0	0	0	1	1	1	2	3	5	8
27.5°	0	0	0	0	1	1	1	3	4	7	11
25°	0	0	0	0	1	1	2	3	6	9	15
22.5°	0	0	0	1	1	1	3	4	7	11	19
20°	0	0	0	1	1	2	3	5	9	15	24
17.5°	0	0	0	1	1	2	4	6	11	18	29
15°	0	0	0	1	1	2	4	7	13	21	34
12.5°	0	0	1	1	1	3	5	9	15	25	41
10°	0	0	1	1	1	3	5	10	17	28	46
7.5°	0	0	1	1	2	3	6	10	18	31	50
5°	0	0	1	1	2	3	6	11	19	32	53
2.5°	0	0	1	1	2	3	6	11	20	34	55
0°	0	0	1	1	2	3	6	11	20	34	56
-2.5°	0	0	1	1	2	3	6	11	20	34	55
-5°	0	0	1	1	2	3	6	11	19	32	53
-7.5°	0	0	1	1	2	3	6	10	18	31	50
-10°	0	0	1	1	1	3	5	10	17	28	46
-12.5°	0	0	1	1	1	3	5	9	15	25	41
-15°	0	0	0	1	1	2	4	7	13	21	34
-17.5°	0	0	0	1	1	2	4	6	11	18	29
-20°	0	0	0	1	1	2	3	5	9	15	24



REPORT NUMBER: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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	3	4	7	11	19
-25°	0	0	0	0	1	1	2	3	6	9	15
-27.5°	0	0	0	0	1	1	1	3	4	7	11
-30°	0	0	0	0	1	1	1	2	3	5	8
-32.5°	0	0	0	0	0	1	1	1	2	4	6
-35°	0	0	0	0	0	1	1	1	2	3	4
-37.5°	0	0	0	0	0	0	1	1	1	2	3
-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: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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	2	2	3	3
47.5°	1	1	1	1	2	3	3	4	4	5	5
45°	1	1	2	3	3	4	5	6	7	9	10
42.5°	2	2	3	4	6	7	9	11	13	15	17
40°	3	4	5	7	9	11	15	18	21	25	28
37.5°	4	6	8	11	15	19	24	29	34	41	46
35°	6	9	12	17	22	29	37	46	54	64	73
32.5°	9	12	18	25	33	44	55	70	84	99	114
30°	12	18	26	36	49	64	83	104	126	148	175
27.5°	17	25	36	50	70	91	120	150	189	224	264
25°	22	33	49	70	95	128	170	218	274	337	399
22.5°	29	44	64	91	128	177	235	311	398	484	561
20°	37	55	83	120	170	235	324	432	539	642	733
17.5°	46	70	104	150	218	311	432	558	683	806	916
15°	54	84	126	189	274	398	539	683	831	974	1111
12.5°	64	99	148	224	337	484	642	806	974	1144	1294
10°	73	114	175	264	399	561	733	916	1111	1294	1445
7.5°	81	125	196	300	453	626	813	1013	1225	1411	1554
5°	86	134	212	328	492	674	873	1091	1308	1492	1628
2.5°	89	139	221	348	517	703	910	1138	1359	1538	1672
0°	90	141	224	354	525	713	923	1154	1376	1553	1688
-2.5°	89	139	221	348	517	703	910	1138	1359	1538	1672
-5°	86	134	212	328	492	674	873	1091	1308	1492	1628
-7.5°	81	125	196	300	453	626	813	1013	1225	1411	1554
-10°	73	114	175	264	399	561	733	916	1111	1294	1445
-12.5°	64	99	148	224	337	484	642	806	974	1144	1294
-15°	54	84	126	189	274	398	539	683	831	974	1111
-17.5°	46	70	104	150	218	311	432	558	683	806	916
-20°	37	55	83	120	170	235	324	432	539	642	733



REPORT NUMBER: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	29	44	64	91	128	177	235	311	398	484	561
-25°	22	33	49	70	95	128	170	218	274	337	399
-27.5°	17	25	36	50	70	91	120	150	189	224	264
-30°	12	18	26	36	49	64	83	104	126	148	175
-32.5°	9	12	18	25	33	44	55	70	84	99	114
-35°	6	9	12	17	22	29	37	46	54	64	73
-37.5°	4	6	8	11	15	19	24	29	34	41	46
-40°	3	4	5	7	9	11	15	18	21	25	28
-42.5°	2	2	3	4	6	7	9	11	13	15	17
-45°	1	1	2	3	3	4	5	6	7	9	10
-47.5°	1	1	1	1	2	3	3	4	4	5	5
-50°	1	1	1	1	1	1	2	2	2	3	3
-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: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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°	3	3	3	3	3	3	3	3	3	2	2
47.5°	6	6	6	6	6	6	6	5	5	4	4
45°	10	11	11	11	11	11	10	10	9	7	6
42.5°	18	19	20	20	20	19	18	17	15	13	11
40°	31	32	34	34	34	32	31	28	25	21	18
37.5°	50	53	55	56	55	53	50	46	41	34	29
35°	81	86	89	90	89	86	81	73	64	54	46
32.5°	125	134	139	141	139	134	125	114	99	84	70
30°	196	212	221	224	221	212	196	175	148	126	104
27.5°	300	328	348	354	348	328	300	264	224	189	150
25°	453	492	517	525	517	492	453	399	337	274	218
22.5°	626	674	703	713	703	674	626	561	484	398	311
20°	813	873	910	923	910	873	813	733	642	539	432
17.5°	1013	1091	1138	1154	1138	1091	1013	916	806	683	558
15°	1225	1308	1359	1376	1359	1308	1225	1111	974	831	683
12.5°	1411	1492	1538	1553	1538	1492	1411	1294	1144	974	806
10°	1554	1628	1672	1688	1672	1628	1554	1445	1294	1111	916
7.5°	1658	1734	1777	1791	1777	1734	1658	1554	1411	1225	1013
5°	1734	1805	1833	1839	1833	1805	1734	1628	1492	1308	1091
2.5°	1777	1833	1838	1834	1838	1833	1777	1672	1538	1359	1138
0°	1791	1839	1834	1840	1834	1839	1791	1688	1553	1376	1154
-2.5°	1777	1833	1838	1834	1838	1833	1777	1672	1538	1359	1138
-5°	1734	1805	1833	1839	1833	1805	1734	1628	1492	1308	1091
-7.5°	1658	1734	1777	1791	1777	1734	1658	1554	1411	1225	1013
-10°	1554	1628	1672	1688	1672	1628	1554	1445	1294	1111	916
-12.5°	1411	1492	1538	1553	1538	1492	1411	1294	1144	974	806
-15°	1225	1308	1359	1376	1359	1308	1225	1111	974	831	683
-17.5°	1013	1091	1138	1154	1138	1091	1013	916	806	683	558
-20°	813	873	910	923	910	873	813	733	642	539	432



REPORT NUMBER: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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°	626	674	703	713	703	674	626	561	484	398	311
-25°	453	492	517	525	517	492	453	399	337	274	218
-27.5°	300	328	348	354	348	328	300	264	224	189	150
-30°	196	212	221	224	221	212	196	175	148	126	104
-32.5°	125	134	139	141	139	134	125	114	99	84	70
-35°	81	86	89	90	89	86	81	73	64	54	46
-37.5°	50	53	55	56	55	53	50	46	41	34	29
-40°	31	32	34	34	34	32	31	28	25	21	18
-42.5°	18	19	20	20	20	19	18	17	15	13	11
-45°	10	11	11	11	11	11	10	10	9	7	6
-47.5°	6	6	6	6	6	6	6	5	5	4	4
-50°	3	3	3	3	3	3	3	3	3	2	2
-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: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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°	3	3	2	1	1	1	1	1	0	0	0
45°	5	4	3	3	2	1	1	1	1	1	0
42.5°	9	7	6	4	3	2	2	1	1	1	1
40°	15	11	9	7	5	4	3	2	1	1	1
37.5°	24	19	15	11	8	6	4	3	2	1	1
35°	37	29	22	17	12	9	6	4	3	2	1
32.5°	55	44	33	25	18	12	9	6	4	2	1
30°	83	64	49	36	26	18	12	8	5	3	2
27.5°	120	91	70	50	36	25	17	11	7	4	3
25°	170	128	95	70	49	33	22	15	9	6	3
22.5°	235	177	128	91	64	44	29	19	11	7	4
20°	324	235	170	120	83	55	37	24	15	9	5
17.5°	432	311	218	150	104	70	46	29	18	11	6
15°	539	398	274	189	126	84	54	34	21	13	7
12.5°	642	484	337	224	148	99	64	41	25	15	9
10°	733	561	399	264	175	114	73	46	28	17	10
7.5°	813	626	453	300	196	125	81	50	31	18	10
5°	873	674	492	328	212	134	86	53	32	19	11
2.5°	910	703	517	348	221	139	89	55	34	20	11
0°	923	713	525	354	224	141	90	56	34	20	11
-2.5°	910	703	517	348	221	139	89	55	34	20	11
-5°	873	674	492	328	212	134	86	53	32	19	11
-7.5°	813	626	453	300	196	125	81	50	31	18	10
-10°	733	561	399	264	175	114	73	46	28	17	10
-12.5°	642	484	337	224	148	99	64	41	25	15	9
-15°	539	398	274	189	126	84	54	34	21	13	7
-17.5°	432	311	218	150	104	70	46	29	18	11	6
-20°	324	235	170	120	83	55	37	24	15	9	5



REPORT NUMBER: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
-22.5°	235	177	128	91	64	44	29	19	11	7	4
-25°	170	128	95	70	49	33	22	15	9	6	3
-27.5°	120	91	70	50	36	25	17	11	7	4	3
-30°	83	64	49	36	26	18	12	8	5	3	2
-32.5°	55	44	33	25	18	12	9	6	4	2	1
-35°	37	29	22	17	12	9	6	4	3	2	1
-37.5°	24	19	15	11	8	6	4	3	2	1	1
-40°	15	11	9	7	5	4	3	2	1	1	1
-42.5°	9	7	6	4	3	2	2	1	1	1	1
-45°	5	4	3	3	2	1	1	1	1	1	0
-47.5°	3	3	2	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: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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°	2	1	1	0	0	0	0	0	0	0	0
22.5°	3	1	1	1	0	0	0	0	0	0	0
20°	3	2	1	1	0	0	0	0	0	0	0
17.5°	4	2	1	1	0	0	0	0	0	0	0
15°	4	2	1	1	0	0	0	0	0	0	0
12.5°	5	3	1	1	1	0	0	0	0	0	0
10°	5	3	1	1	1	0	0	0	0	0	0
7.5°	6	3	2	1	1	0	0	0	0	0	0
5°	6	3	2	1	1	0	0	0	0	0	0
2.5°	6	3	2	1	1	0	0	0	0	0	0
0°	6	3	2	1	1	0	0	0	0	0	0
-2.5°	6	3	2	1	1	0	0	0	0	0	0
-5°	6	3	2	1	1	0	0	0	0	0	0
-7.5°	6	3	2	1	1	0	0	0	0	0	0
-10°	5	3	1	1	1	0	0	0	0	0	0
-12.5°	5	3	1	1	1	0	0	0	0	0	0
-15°	4	2	1	1	0	0	0	0	0	0	0
-17.5°	4	2	1	1	0	0	0	0	0	0	0
-20°	3	2	1	1	0	0	0	0	0	0	0



REPORT NUMBER: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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°	3	1	1	1	0	0	0	0	0	0	0
-25°	2	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: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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: P220355 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3590-F-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)