

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: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)

Luminaire Tested: **1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-BK-L1-UNV**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29414)  
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]-LED3090-M-BK-L1-UNV  
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS,  
MEDIUM FLOOD OPTIC, BLACK HOUSING.  
Light Source: (1) 3000K CCT, 90 CRI LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

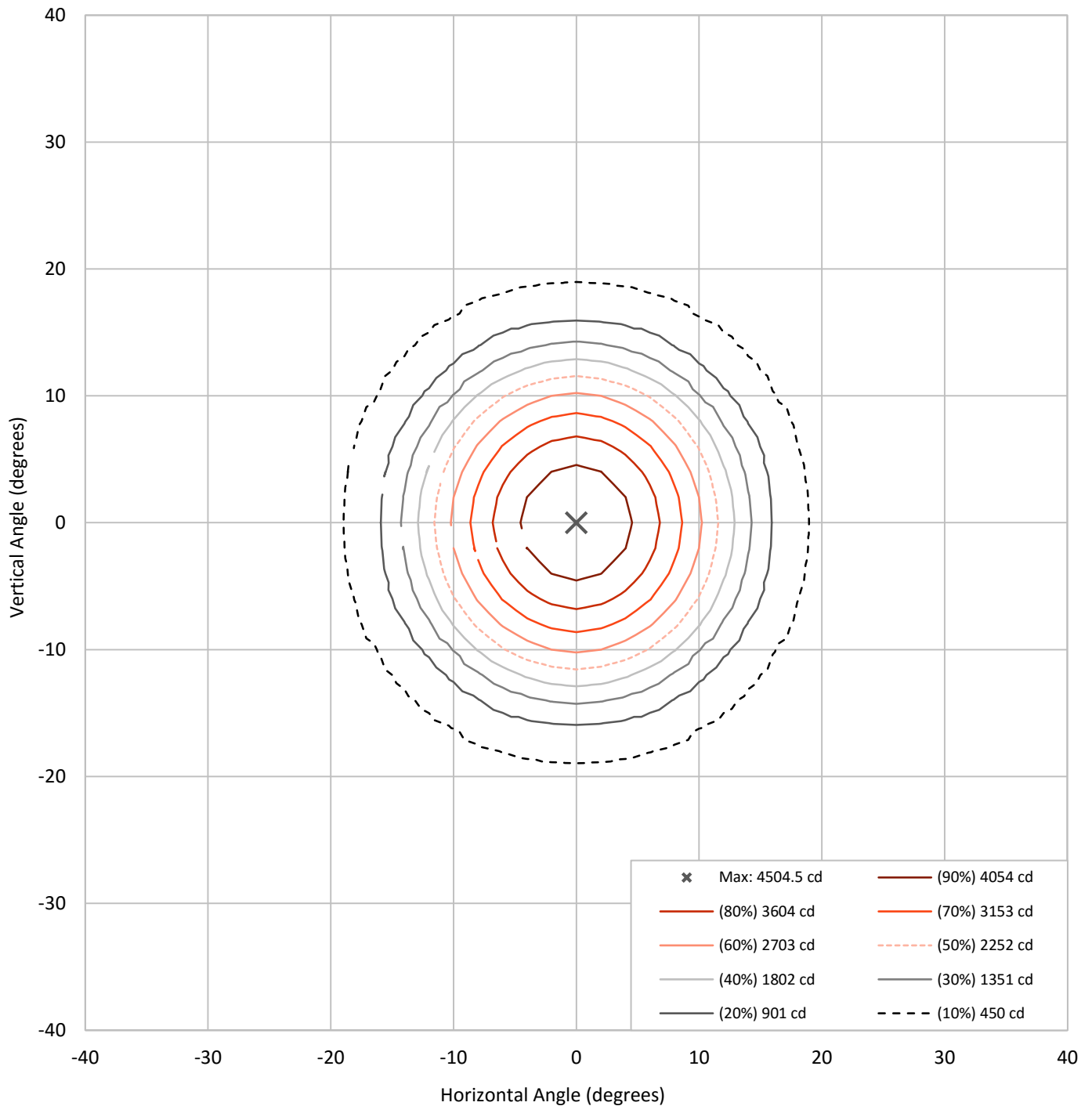
Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	764.9 lumens	Max Intensity:	4504.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	76.5 lumens/watt		
Luminous Opening:	Circular (Dia: 0.17' x H: 0')		
Beam Angle (50%):	23.1°H x 23.1°V	Field Angle (10%):	37.9°H x 37.9°V
Beam Lumens:	420.3 lumens	Field Lumens:	650.3 lumens
Beam Efficiency:	54.9%	Field Efficiency:	85.0%

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: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-BK-L1-UNV

### Iso-Candela Plot





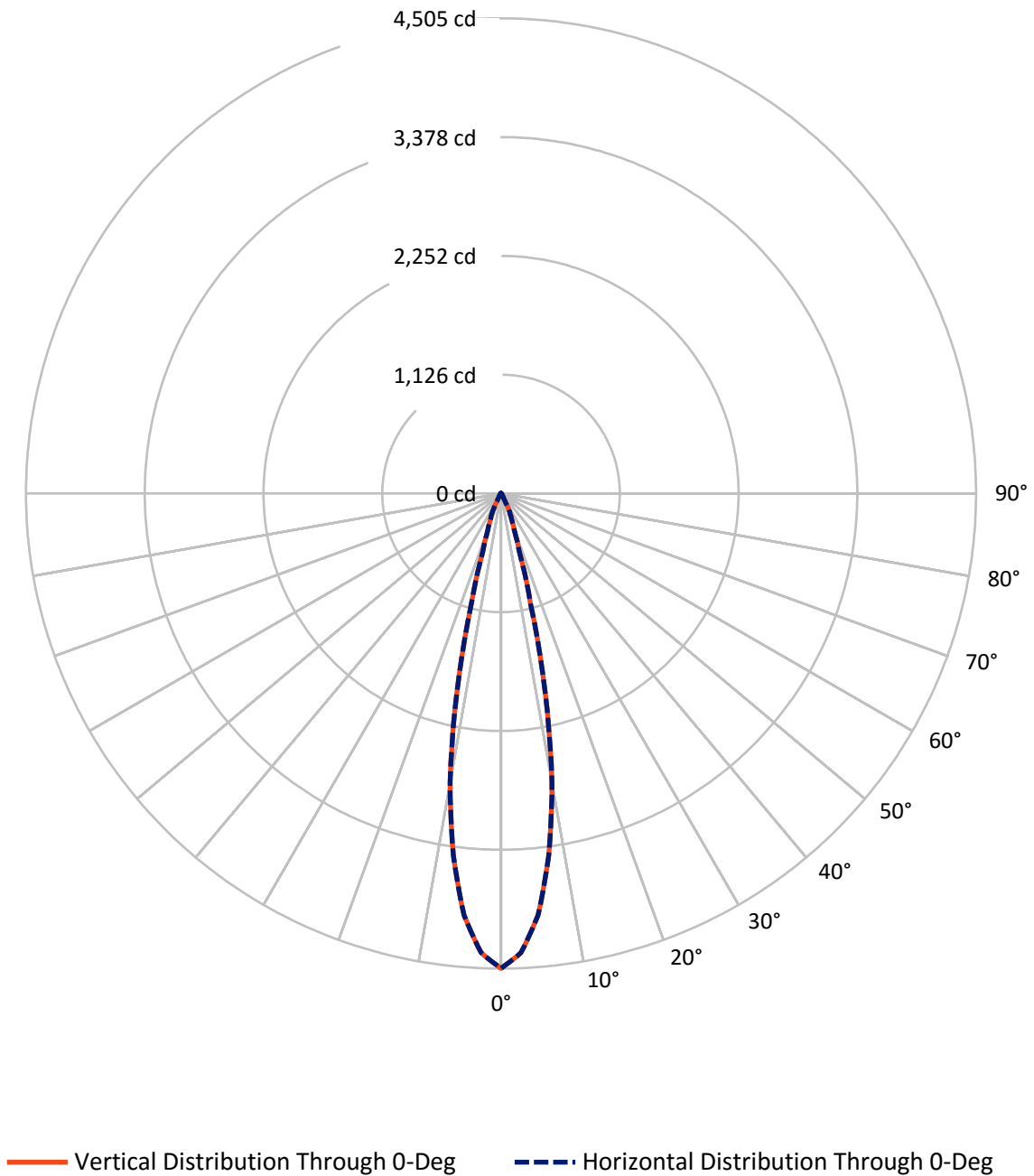
REPORT NUMBER: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-BK-L1-UNV

### 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	
40		0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.5	0.3	0.2	0.1	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.2	0.5	2.3	5.0	5.0	2.3	0.5	0.2	0.0	0.0	0.0	0.0	
20		0.0	0.0	0.1	0.3	2.2	10.8	31.9	31.9	10.8	2.2	0.3	0.1	0.0	0.0		
10	0.0	0.0	0.0	0.1	0.4	4.6	31.1	100.0	100.0	31.1	4.6	0.4	0.1	0.0	0.0	0.0	
0		0.0	0.0	0.1	0.4	4.6	31.1	100.0	100.0	31.1	4.6	0.4	0.1	0.0	0.0		
-10	0.0	0.0	0.0	0.1	0.3	2.2	10.8	31.9	31.9	10.8	2.2	0.3	0.1	0.0	0.0	0.0	
-20		0.0	0.0	0.0	0.2	0.5	2.3	5.0	5.0	2.3	0.5	0.2	0.0	0.0	0.0		
-30	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.5	0.3	0.2	0.1	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		
-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			
-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	

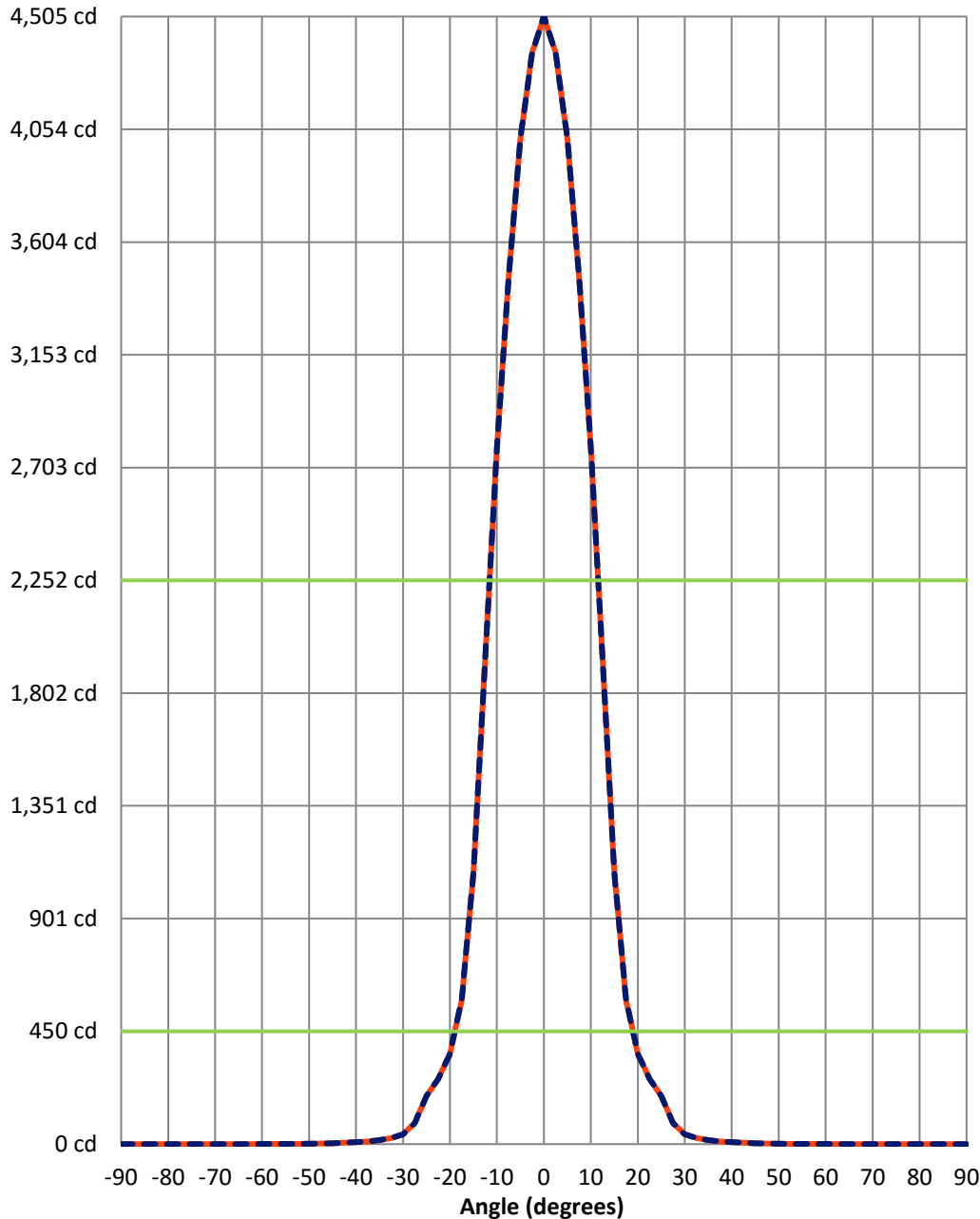
REPORT NUMBER: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-BK-L1-UNV

### Luminous Intensity Polar Plot



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### Luminous Intensity Plot



**Beam:**  
H Angle: 23.1°  
V Angle: 23.1°  
Lumens: 420.3  
Efficiency: 54.9%

**Field:**  
H Angle: 37.9°  
V Angle: 37.9°  
Lumens: 650.3  
Efficiency: 85.0%

**Spill:**  
Lumens: 114.5  
Efficiency: 15.0%

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



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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: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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	1	1
47.5°	0	0	0	0	0	0	0	0	1	1	1
45°	0	0	0	0	0	0	0	1	1	1	1
42.5°	0	0	0	0	0	0	1	1	1	1	1
40°	0	0	0	0	0	1	1	1	1	1	1
37.5°	0	0	0	0	0	1	1	1	1	1	1
35°	0	0	0	0	1	1	1	1	1	1	2
32.5°	0	0	0	0	1	1	1	1	1	2	2
30°	0	0	0	1	1	1	1	1	1	2	3
27.5°	0	0	0	1	1	1	1	1	2	2	3
25°	0	0	1	1	1	1	1	2	2	3	4
22.5°	0	0	1	1	1	1	1	2	3	3	5
20°	0	0	1	1	1	1	1	2	3	4	6
17.5°	0	0	1	1	1	1	2	2	3	5	7
15°	0	0	1	1	1	1	2	3	4	6	8
12.5°	0	1	1	1	1	1	2	3	4	6	9
10°	0	1	1	1	1	1	2	3	5	7	9
7.5°	0	1	1	1	1	1	2	3	5	7	10
5°	0	1	1	1	1	2	2	3	5	8	10
2.5°	0	1	1	1	1	2	2	3	6	8	10
0°	0	1	1	1	1	2	2	3	6	8	10
-2.5°	0	1	1	1	1	2	2	3	6	8	10
-5°	0	1	1	1	1	2	2	3	5	8	10
-7.5°	0	1	1	1	1	1	2	3	5	7	10
-10°	0	1	1	1	1	1	2	3	5	7	9
-12.5°	0	1	1	1	1	1	2	3	4	6	9
-15°	0	0	1	1	1	1	2	3	4	6	8
-17.5°	0	0	1	1	1	1	2	2	3	5	7
-20°	0	0	1	1	1	1	1	2	3	4	6



REPORT NUMBER: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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	1	1	1	1	1	2	3	3	5
-25°	0	0	1	1	1	1	1	2	2	3	4
-27.5°	0	0	0	1	1	1	1	1	2	2	3
-30°	0	0	0	1	1	1	1	1	1	2	3
-32.5°	0	0	0	0	1	1	1	1	1	2	2
-35°	0	0	0	0	1	1	1	1	1	1	2
-37.5°	0	0	0	0	0	1	1	1	1	1	1
-40°	0	0	0	0	0	1	1	1	1	1	1
-42.5°	0	0	0	0	0	0	1	1	1	1	1
-45°	0	0	0	0	0	0	0	1	1	1	1
-47.5°	0	0	0	0	0	0	0	0	1	1	1
-50°	0	0	0	0	0	0	0	0	0	1	1
-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: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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	1	1
57.5°	0	0	0	0	1	1	1	1	1	1	1
55°	0	0	1	1	1	1	1	1	1	1	1
52.5°	1	1	1	1	1	1	1	1	1	1	1
50°	1	1	1	1	1	1	1	1	1	1	1
47.5°	1	1	1	1	1	1	1	2	2	2	2
45°	1	1	1	1	2	2	2	2	3	3	3
42.5°	1	1	1	2	2	3	3	3	4	4	5
40°	1	2	2	2	3	3	4	5	6	6	7
37.5°	2	2	3	3	4	5	6	7	8	9	9
35°	2	3	3	5	6	7	8	9	10	12	13
32.5°	3	4	5	6	8	9	10	13	15	17	20
30°	3	5	7	8	10	12	15	18	22	25	30
27.5°	5	6	8	10	13	16	21	26	33	39	55
25°	6	8	10	13	17	22	30	38	59	79	114
22.5°	7	9	12	16	22	31	44	71	113	167	205
20°	8	10	15	21	30	44	75	134	197	235	270
17.5°	9	13	18	26	38	71	134	204	250	305	358
15°	10	15	22	33	59	113	197	250	317	410	537
12.5°	12	17	25	39	79	167	235	305	410	568	891
10°	13	20	30	55	114	205	270	358	537	891	1370
7.5°	14	22	34	68	147	229	309	448	733	1230	1945
5°	15	23	37	77	172	246	337	518	924	1600	2405
2.5°	16	24	39	82	187	257	355	562	1044	1850	2684
0°	16	24	39	84	192	261	361	577	1086	1937	2780
-2.5°	16	24	39	82	187	257	355	562	1044	1850	2684
-5°	15	23	37	77	172	246	337	518	924	1600	2405
-7.5°	14	22	34	68	147	229	309	448	733	1230	1945
-10°	13	20	30	55	114	205	270	358	537	891	1370
-12.5°	12	17	25	39	79	167	235	305	410	568	891
-15°	10	15	22	33	59	113	197	250	317	410	537
-17.5°	9	13	18	26	38	71	134	204	250	305	358
-20°	8	10	15	21	30	44	75	134	197	235	270



REPORT NUMBER: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-BK-L1-UNV

**CANDELA DISTRIBUTION (continued):**

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	7	9	12	16	22	31	44	71	113	167	205
-25°	6	8	10	13	17	22	30	38	59	79	114
-27.5°	5	6	8	10	13	16	21	26	33	39	55
-30°	3	5	7	8	10	12	15	18	22	25	30
-32.5°	3	4	5	6	8	9	10	13	15	17	20
-35°	2	3	3	5	6	7	8	9	10	12	13
-37.5°	2	2	3	3	4	5	6	7	8	9	9
-40°	1	2	2	2	3	3	4	5	6	6	7
-42.5°	1	1	1	2	2	3	3	3	4	4	5
-45°	1	1	1	1	2	2	2	2	3	3	3
-47.5°	1	1	1	1	1	1	1	2	2	2	2
-50°	1	1	1	1	1	1	1	1	1	1	1
-52.5°	1	1	1	1	1	1	1	1	1	1	1
-55°	0	0	1	1	1	1	1	1	1	1	1
-57.5°	0	0	0	0	1	1	1	1	1	1	1
-60°	0	0	0	0	0	0	0	0	0	1	1
-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: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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°	1	1	1	1	1	1	1	1	1	0	0
57.5°	1	1	1	1	1	1	1	1	1	1	1
55°	1	1	1	1	1	1	1	1	1	1	1
52.5°	1	1	1	1	1	1	1	1	1	1	1
50°	1	2	2	2	2	2	1	1	1	1	1
47.5°	2	2	2	2	2	2	2	2	2	2	2
45°	3	3	3	3	3	3	3	3	3	3	2
42.5°	5	5	6	6	6	5	5	5	4	4	3
40°	7	8	8	8	8	8	7	7	6	6	5
37.5°	10	10	10	10	10	10	10	9	9	8	7
35°	14	15	16	16	16	15	14	13	12	10	9
32.5°	22	23	24	24	24	23	22	20	17	15	13
30°	34	37	39	39	39	37	34	30	25	22	18
27.5°	68	77	82	84	82	77	68	55	39	33	26
25°	147	172	187	192	187	172	147	114	79	59	38
22.5°	229	246	257	261	257	246	229	205	167	113	71
20°	309	337	355	361	355	337	309	270	235	197	134
17.5°	448	518	562	577	562	518	448	358	305	250	204
15°	733	924	1044	1086	1044	924	733	537	410	317	250
12.5°	1230	1600	1850	1937	1850	1600	1230	891	568	410	305
10°	1945	2405	2684	2780	2684	2405	1945	1370	891	537	358
7.5°	2593	3067	3359	3462	3359	3067	2593	1945	1230	733	448
5°	3067	3572	3897	4016	3897	3572	3067	2405	1600	924	518
2.5°	3359	3897	4243	4359	4243	3897	3359	2684	1850	1044	562
0°	3462	4016	4359	4505	4359	4016	3462	2780	1937	1086	577
-2.5°	3359	3897	4243	4359	4243	3897	3359	2684	1850	1044	562
-5°	3067	3572	3897	4016	3897	3572	3067	2405	1600	924	518
-7.5°	2593	3067	3359	3462	3359	3067	2593	1945	1230	733	448
-10°	1945	2405	2684	2780	2684	2405	1945	1370	891	537	358
-12.5°	1230	1600	1850	1937	1850	1600	1230	891	568	410	305
-15°	733	924	1044	1086	1044	924	733	537	410	317	250
-17.5°	448	518	562	577	562	518	448	358	305	250	204
-20°	309	337	355	361	355	337	309	270	235	197	134



REPORT NUMBER: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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°	229	246	257	261	257	246	229	205	167	113	71
-25°	147	172	187	192	187	172	147	114	79	59	38
-27.5°	68	77	82	84	82	77	68	55	39	33	26
-30°	34	37	39	39	39	37	34	30	25	22	18
-32.5°	22	23	24	24	24	23	22	20	17	15	13
-35°	14	15	16	16	16	15	14	13	12	10	9
-37.5°	10	10	10	10	10	10	10	9	9	8	7
-40°	7	8	8	8	8	8	7	7	6	6	5
-42.5°	5	5	6	6	6	5	5	5	4	4	3
-45°	3	3	3	3	3	3	3	3	3	3	2
-47.5°	2	2	2	2	2	2	2	2	2	2	2
-50°	1	2	2	2	2	2	1	1	1	1	1
-52.5°	1	1	1	1	1	1	1	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	1	1
-60°	1	1	1	1	1	1	1	1	1	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: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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°	1	1	1	0	0	0	0	0	0	0	0
55°	1	1	1	1	1	0	0	0	0	0	0
52.5°	1	1	1	1	1	1	1	0	0	0	0
50°	1	1	1	1	1	1	1	1	1	0	0
47.5°	1	1	1	1	1	1	1	1	1	1	0
45°	2	2	2	1	1	1	1	1	1	1	1
42.5°	3	3	2	2	1	1	1	1	1	1	1
40°	4	3	3	2	2	2	1	1	1	1	1
37.5°	6	5	4	3	3	2	2	1	1	1	1
35°	8	7	6	5	3	3	2	2	1	1	1
32.5°	10	9	8	6	5	4	3	2	2	1	1
30°	15	12	10	8	7	5	3	3	2	1	1
27.5°	21	16	13	10	8	6	5	3	2	2	1
25°	30	22	17	13	10	8	6	4	3	2	2
22.5°	44	31	22	16	12	9	7	5	3	3	2
20°	75	44	30	21	15	10	8	6	4	3	2
17.5°	134	71	38	26	18	13	9	7	5	3	2
15°	197	113	59	33	22	15	10	8	6	4	3
12.5°	235	167	79	39	25	17	12	9	6	4	3
10°	270	205	114	55	30	20	13	9	7	5	3
7.5°	309	229	147	68	34	22	14	10	7	5	3
5°	337	246	172	77	37	23	15	10	8	5	3
2.5°	355	257	187	82	39	24	16	10	8	6	3
0°	361	261	192	84	39	24	16	10	8	6	3
-2.5°	355	257	187	82	39	24	16	10	8	6	3
-5°	337	246	172	77	37	23	15	10	8	5	3
-7.5°	309	229	147	68	34	22	14	10	7	5	3
-10°	270	205	114	55	30	20	13	9	7	5	3
-12.5°	235	167	79	39	25	17	12	9	6	4	3
-15°	197	113	59	33	22	15	10	8	6	4	3
-17.5°	134	71	38	26	18	13	9	7	5	3	2
-20°	75	44	30	21	15	10	8	6	4	3	2



REPORT NUMBER: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-BK-L1-UNV

**CANDELA DISTRIBUTION (continued):**

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
-22.5°	44	31	22	16	12	9	7	5	3	3	2
-25°	30	22	17	13	10	8	6	4	3	2	2
-27.5°	21	16	13	10	8	6	5	3	2	2	1
-30°	15	12	10	8	7	5	3	3	2	1	1
-32.5°	10	9	8	6	5	4	3	2	2	1	1
-35°	8	7	6	5	3	3	2	2	1	1	1
-37.5°	6	5	4	3	3	2	2	1	1	1	1
-40°	4	3	3	2	2	2	1	1	1	1	1
-42.5°	3	3	2	2	1	1	1	1	1	1	1
-45°	2	2	2	1	1	1	1	1	1	1	1
-47.5°	1	1	1	1	1	1	1	1	1	1	0
-50°	1	1	1	1	1	1	1	1	1	0	0
-52.5°	1	1	1	1	1	1	1	0	0	0	0
-55°	1	1	1	1	1	0	0	0	0	0	0
-57.5°	1	1	1	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: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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°	1	0	0	0	0	0	0	0	0	0	0
40°	1	1	0	0	0	0	0	0	0	0	0
37.5°	1	1	0	0	0	0	0	0	0	0	0
35°	1	1	1	0	0	0	0	0	0	0	0
32.5°	1	1	1	0	0	0	0	0	0	0	0
30°	1	1	1	1	0	0	0	0	0	0	0
27.5°	1	1	1	1	0	0	0	0	0	0	0
25°	1	1	1	1	1	0	0	0	0	0	0
22.5°	1	1	1	1	1	0	0	0	0	0	0
20°	1	1	1	1	1	0	0	0	0	0	0
17.5°	2	1	1	1	1	0	0	0	0	0	0
15°	2	1	1	1	1	0	0	0	0	0	0
12.5°	2	1	1	1	1	1	0	0	0	0	0
10°	2	1	1	1	1	1	0	0	0	0	0
7.5°	2	1	1	1	1	1	0	0	0	0	0
5°	2	2	1	1	1	1	0	0	0	0	0
2.5°	2	2	1	1	1	1	0	0	0	0	0
0°	2	2	1	1	1	1	0	0	0	0	0
-2.5°	2	2	1	1	1	1	0	0	0	0	0
-5°	2	2	1	1	1	1	0	0	0	0	0
-7.5°	2	1	1	1	1	1	0	0	0	0	0
-10°	2	1	1	1	1	1	0	0	0	0	0
-12.5°	2	1	1	1	1	1	0	0	0	0	0
-15°	2	1	1	1	1	0	0	0	0	0	0
-17.5°	2	1	1	1	1	0	0	0	0	0	0
-20°	1	1	1	1	1	0	0	0	0	0	0



REPORT NUMBER: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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	1	1	1	0	0	0	0	0	0
-25°	1	1	1	1	1	0	0	0	0	0	0
-27.5°	1	1	1	1	0	0	0	0	0	0	0
-30°	1	1	1	1	0	0	0	0	0	0	0
-32.5°	1	1	1	0	0	0	0	0	0	0	0
-35°	1	1	1	0	0	0	0	0	0	0	0
-37.5°	1	1	0	0	0	0	0	0	0	0	0
-40°	1	1	0	0	0	0	0	0	0	0	0
-42.5°	1	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: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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: P220346 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-M-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)