

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: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220338 (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]-LED3090-S-BK-L1-UNV
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS, SPOT OPTIC, BLACK HOUSING.
Light Source: (1) 3000K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

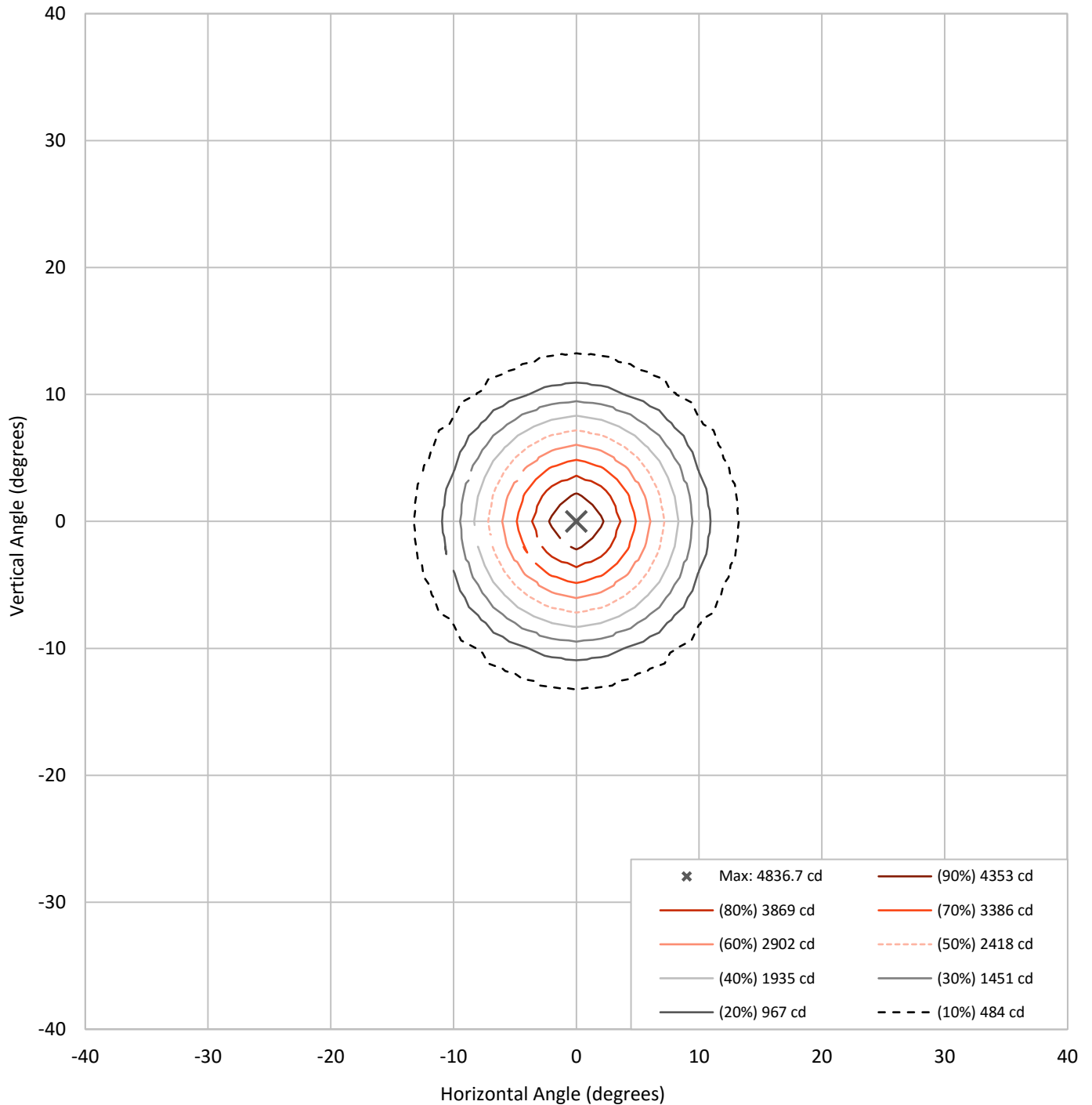
Lumens per Lamp:	N/A	NEMA Type:	2H x 2V
Luminaire Lumens:	378.2 lumens	Max Intensity:	4836.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	37.8 lumens/watt		
Luminous Opening:	Circular (Dia: 0.17' x H: 0')		
Beam Angle (50%):	14.3°H x 14.3°V	Field Angle (10%):	25.9°H x 25.9°V
Beam Lumens:	154.2 lumens	Field Lumens:	300.2 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: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-S-BK-L1-UNV

Iso-Candela Plot





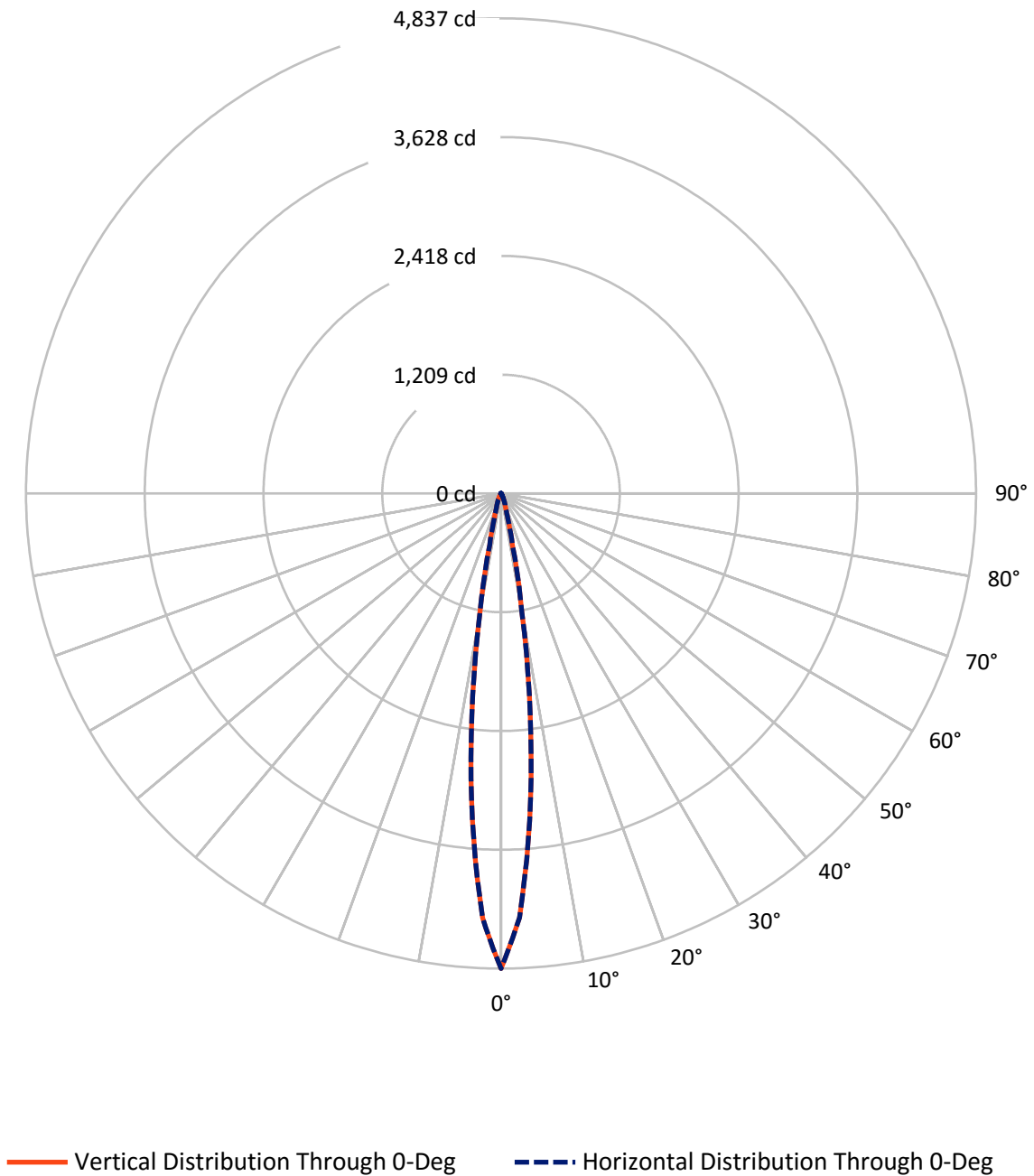
REPORT NUMBER: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-S-BK-L1-UNV

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	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.1	0.2	0.8	1.6	1.6	0.8	0.2	0.1	0.0	0.0	0.0	0.0	0.0
20		0.0	0.0	0.0	0.1	0.7	3.1	9.2	9.2	3.1	0.7	0.1	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.2	1.4	9.0	67.2	67.2	9.0	1.4	0.2	0.0	0.0	0.0	0.0	0.0
0		0.0	0.0	0.0	0.2	1.4	9.0	67.2	67.2	9.0	1.4	0.2	0.0	0.0	0.0		
-10	0.0	0.0	0.0	0.0	0.1	0.7	3.1	9.2	9.2	3.1	0.7	0.1	0.0	0.0	0.0	0.0	0.0
-20		0.0	0.0	0.0	0.1	0.2	0.8	1.6	1.6	0.8	0.2	0.1	0.0	0.0	0.0		
-30	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	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

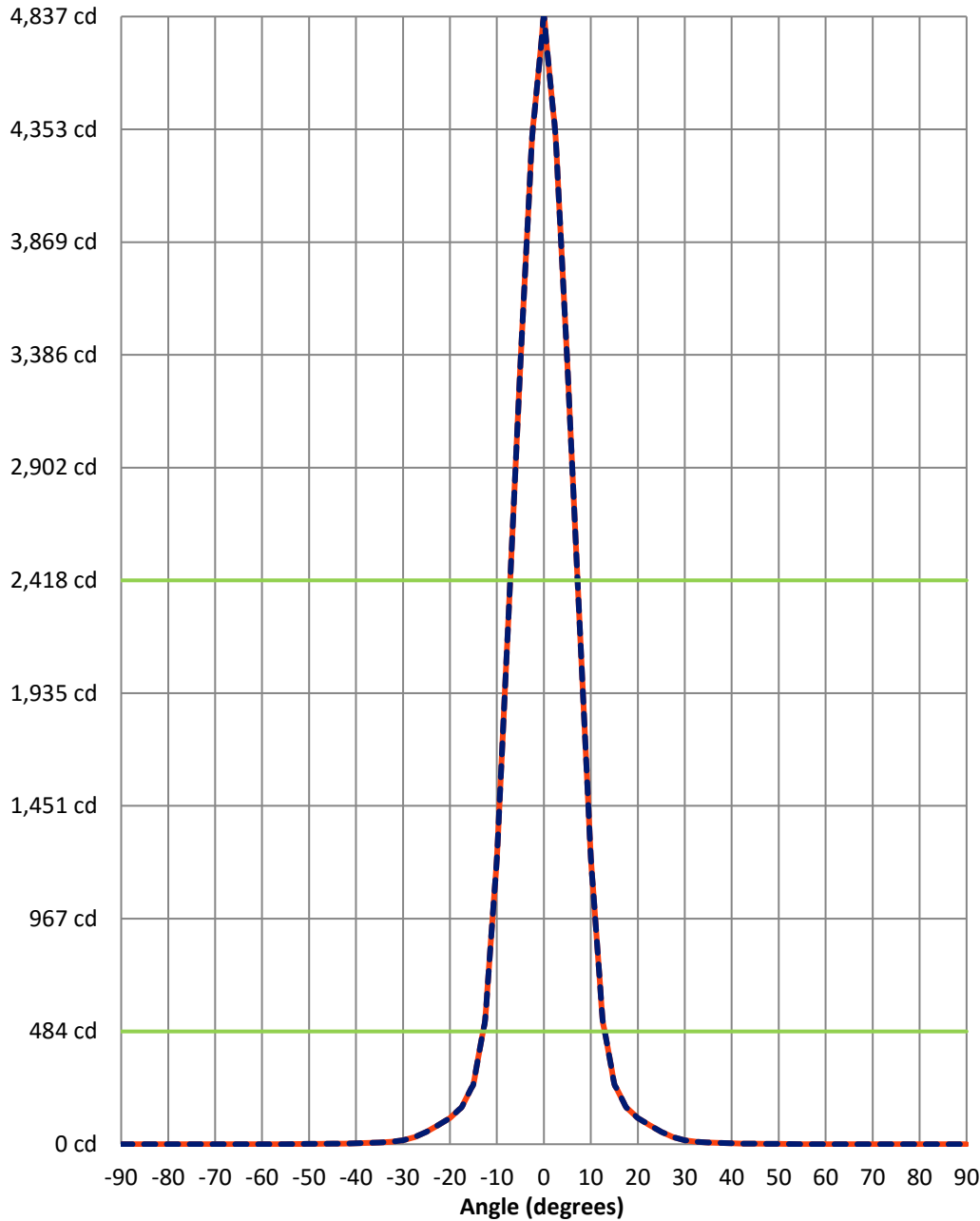
REPORT NUMBER: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-S-BK-L1-UNV

Luminous Intensity Polar Plot



REPORT NUMBER: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-S-BK-L1-UNV

Luminous Intensity Plot



Beam:
 H Angle: 14.3°
 V Angle: 14.3°
 Lumens: 154.2
 Efficiency: 40.8%

Field:
 H Angle: 25.9°
 V Angle: 25.9°
 Lumens: 300.2
 Efficiency: 79.4%

Spill:
 Lumens: 78
 Efficiency: 20.6%

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



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 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	1	2	2
27.5°	0	0	0	0	0	0	1	1	2	2	2
25°	0	0	0	0	0	0	1	2	2	2	2
22.5°	0	0	0	0	0	0	1	2	2	2	2
20°	0	0	0	0	0	1	1	2	2	2	3
17.5°	0	0	0	0	0	1	2	2	2	2	3
15°	0	0	0	0	0	1	2	2	2	3	4
12.5°	0	0	0	0	0	1	2	2	2	3	4
10°	0	0	0	0	1	1	2	2	2	3	5
7.5°	0	0	0	0	1	1	2	2	2	4	5
5°	0	0	0	0	1	2	2	2	2	4	5
2.5°	0	0	0	0	1	2	2	2	2	4	6
0°	0	0	0	0	1	2	2	2	2	4	6
-2.5°	0	0	0	0	1	2	2	2	2	4	6
-5°	0	0	0	0	1	2	2	2	2	4	5
-7.5°	0	0	0	0	1	1	2	2	2	4	5
-10°	0	0	0	0	1	1	2	2	2	3	5
-12.5°	0	0	0	0	0	1	2	2	2	3	4
-15°	0	0	0	0	0	1	2	2	2	3	4
-17.5°	0	0	0	0	0	1	2	2	2	2	3
-20°	0	0	0	0	0	1	1	2	2	2	3



REPORT NUMBER: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	0	1	2	2	2	2
-25°	0	0	0	0	0	0	1	2	2	2	2
-27.5°	0	0	0	0	0	0	1	1	2	2	2
-30°	0	0	0	0	0	0	0	1	1	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: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	0	1
50°	0	0	0	0	0	0	1	1	1	1	1
47.5°	0	0	0	1	1	1	1	2	2	2	2
45°	0	1	1	1	2	2	2	2	2	2	2
42.5°	1	1	1	2	2	2	2	2	2	2	2
40°	1	2	2	2	2	2	2	2	3	3	3
37.5°	2	2	2	2	2	2	3	3	4	4	5
35°	2	2	2	2	3	3	4	5	5	6	6
32.5°	2	2	2	3	4	5	6	6	7	8	9
30°	2	2	3	4	5	6	7	8	9	11	13
27.5°	2	3	4	5	6	7	9	11	14	17	22
25°	3	4	5	6	7	10	13	16	23	29	37
22.5°	3	5	6	7	10	13	18	27	37	48	59
20°	4	6	7	9	13	18	28	41	55	71	85
17.5°	5	6	8	11	16	27	41	58	77	95	111
15°	5	7	9	14	23	37	55	77	99	123	150
12.5°	6	8	11	17	29	48	71	95	123	157	220
10°	6	9	13	22	37	59	85	111	150	220	323
7.5°	7	9	15	25	44	68	96	131	189	291	539
5°	7	10	16	28	49	76	105	146	227	393	843
2.5°	7	10	17	30	52	80	110	156	250	491	1125
0°	7	10	17	31	53	82	112	159	258	535	1228
-2.5°	7	10	17	30	52	80	110	156	250	491	1125
-5°	7	10	16	28	49	76	105	146	227	393	843
-7.5°	7	9	15	25	44	68	96	131	189	291	539
-10°	6	9	13	22	37	59	85	111	150	220	323
-12.5°	6	8	11	17	29	48	71	95	123	157	220
-15°	5	7	9	14	23	37	55	77	99	123	150
-17.5°	5	6	8	11	16	27	41	58	77	95	111
-20°	4	6	7	9	13	18	28	41	55	71	85



REPORT NUMBER: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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°	3	5	6	7	10	13	18	27	37	48	59
-25°	3	4	5	6	7	10	13	16	23	29	37
-27.5°	2	3	4	5	6	7	9	11	14	17	22
-30°	2	2	3	4	5	6	7	8	9	11	13
-32.5°	2	2	2	3	4	5	6	6	7	8	9
-35°	2	2	2	2	3	3	4	5	5	6	6
-37.5°	2	2	2	2	2	2	3	3	4	4	5
-40°	1	2	2	2	2	2	2	2	3	3	3
-42.5°	1	1	1	2	2	2	2	2	2	2	2
-45°	0	1	1	1	2	2	2	2	2	2	2
-47.5°	0	0	0	1	1	1	1	2	2	2	2
-50°	0	0	0	0	0	0	1	1	1	1	1
-52.5°	0	0	0	0	0	0	0	0	0	0	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: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	0	0	0
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°	2	2	2	2	2	2	2	2	2	2	2
42.5°	2	2	2	2	2	2	2	2	2	2	2
40°	4	4	4	4	4	4	4	3	3	3	2
37.5°	5	5	6	6	6	5	5	5	4	4	3
35°	7	7	7	7	7	7	7	6	6	5	5
32.5°	9	10	10	10	10	10	9	9	8	7	6
30°	15	16	17	17	17	16	15	13	11	9	8
27.5°	25	28	30	31	30	28	25	22	17	14	11
25°	44	49	52	53	52	49	44	37	29	23	16
22.5°	68	76	80	82	80	76	68	59	48	37	27
20°	96	105	110	112	110	105	96	85	71	55	41
17.5°	131	146	156	159	156	146	131	111	95	77	58
15°	189	227	250	258	250	227	189	150	123	99	77
12.5°	291	393	491	535	491	393	291	220	157	123	95
10°	539	843	1125	1228	1125	843	539	323	220	150	111
7.5°	1027	1625	2101	2278	2101	1625	1027	539	291	189	131
5°	1625	2469	3100	3346	3100	2469	1625	843	393	227	146
2.5°	2101	3100	3945	4321	3945	3100	2101	1125	491	250	156
0°	2278	3346	4321	4837	4321	3346	2278	1228	535	258	159
-2.5°	2101	3100	3945	4321	3945	3100	2101	1125	491	250	156
-5°	1625	2469	3100	3346	3100	2469	1625	843	393	227	146
-7.5°	1027	1625	2101	2278	2101	1625	1027	539	291	189	131
-10°	539	843	1125	1228	1125	843	539	323	220	150	111
-12.5°	291	393	491	535	491	393	291	220	157	123	95
-15°	189	227	250	258	250	227	189	150	123	99	77
-17.5°	131	146	156	159	156	146	131	111	95	77	58
-20°	96	105	110	112	110	105	96	85	71	55	41



REPORT NUMBER: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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°	68	76	80	82	80	76	68	59	48	37	27
-25°	44	49	52	53	52	49	44	37	29	23	16
-27.5°	25	28	30	31	30	28	25	22	17	14	11
-30°	15	16	17	17	17	16	15	13	11	9	8
-32.5°	9	10	10	10	10	10	9	9	8	7	6
-35°	7	7	7	7	7	7	7	6	6	5	5
-37.5°	5	5	6	6	6	5	5	5	4	4	3
-40°	4	4	4	4	4	4	4	3	3	3	2
-42.5°	2	2	2	2	2	2	2	2	2	2	2
-45°	2	2	2	2	2	2	2	2	2	2	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	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: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	0	0	0	0	0	0	0	0	0	0
47.5°	1	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	1	1	1	0	0	0	0
40°	2	2	2	2	2	2	1	1	0	0	0
37.5°	3	2	2	2	2	2	2	1	1	0	0
35°	4	3	3	2	2	2	2	2	1	1	0
32.5°	6	5	4	3	2	2	2	2	2	1	1
30°	7	6	5	4	3	2	2	2	2	1	1
27.5°	9	7	6	5	4	3	2	2	2	2	1
25°	13	10	7	6	5	4	3	2	2	2	2
22.5°	18	13	10	7	6	5	3	2	2	2	2
20°	28	18	13	9	7	6	4	3	2	2	2
17.5°	41	27	16	11	8	6	5	3	2	2	2
15°	55	37	23	14	9	7	5	4	3	2	2
12.5°	71	48	29	17	11	8	6	4	3	2	2
10°	85	59	37	22	13	9	6	5	3	2	2
7.5°	96	68	44	25	15	9	7	5	4	2	2
5°	105	76	49	28	16	10	7	5	4	2	2
2.5°	110	80	52	30	17	10	7	6	4	2	2
0°	112	82	53	31	17	10	7	6	4	2	2
-2.5°	110	80	52	30	17	10	7	6	4	2	2
-5°	105	76	49	28	16	10	7	5	4	2	2
-7.5°	96	68	44	25	15	9	7	5	4	2	2
-10°	85	59	37	22	13	9	6	5	3	2	2
-12.5°	71	48	29	17	11	8	6	4	3	2	2
-15°	55	37	23	14	9	7	5	4	3	2	2
-17.5°	41	27	16	11	8	6	5	3	2	2	2
-20°	28	18	13	9	7	6	4	3	2	2	2



REPORT NUMBER: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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°	18	13	10	7	6	5	3	2	2	2	2
-25°	13	10	7	6	5	4	3	2	2	2	2
-27.5°	9	7	6	5	4	3	2	2	2	2	1
-30°	7	6	5	4	3	2	2	2	2	1	1
-32.5°	6	5	4	3	2	2	2	2	2	1	1
-35°	4	3	3	2	2	2	2	2	1	1	0
-37.5°	3	2	2	2	2	2	2	1	1	0	0
-40°	2	2	2	2	2	2	1	1	0	0	0
-42.5°	2	2	2	2	1	1	1	0	0	0	0
-45°	2	2	2	1	1	1	0	0	0	0	0
-47.5°	1	1	1	1	0	0	0	0	0	0	0
-50°	1	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: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	0	0	0	0	0	0	0	0	0	0
20°	1	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	0	0	0	0	0	0	0	0	0
10°	2	1	1	0	0	0	0	0	0	0	0
7.5°	2	1	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	1	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	0	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°	1	1	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	0	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: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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: P220338 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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)