

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: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)

Luminaire Tested: **1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-S-BK-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220344 (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]-LED4097-S-BK-L1-UNV
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS,
SPOT OPTIC, BLACK HOUSING.
Light Source: (1) 4000K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

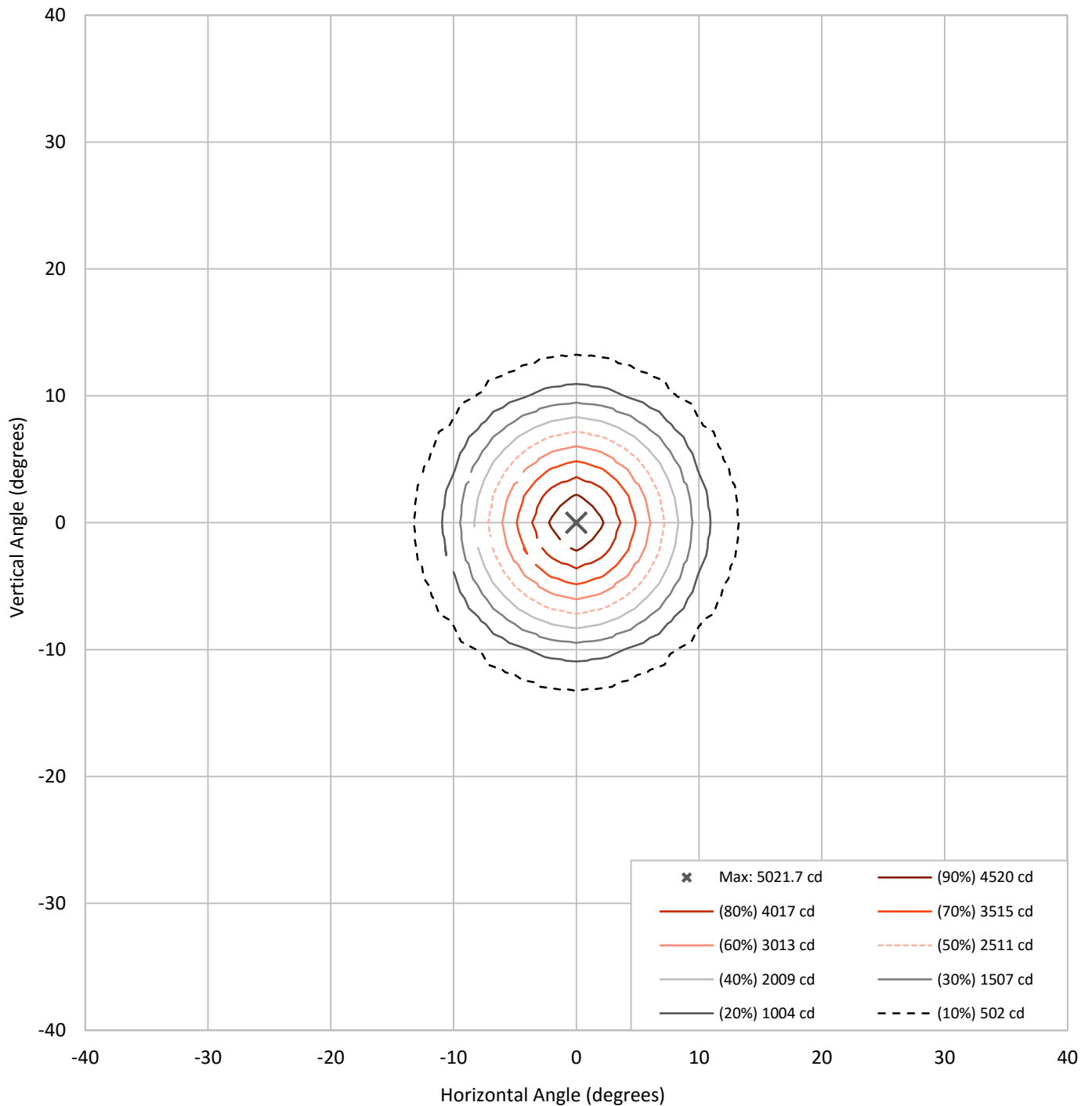
Lumens per Lamp:	N/A	NEMA Type:	2H x 2V
Luminaire Lumens:	392.7 lumens	Max Intensity:	5021.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	39.3 lumens/watt		
Luminous Opening:	Circular (Dia: 0.17' x H: 0')		
Beam Angle (50%):	14.3°H x 14.3°V	Field Angle (10%):	25.9°H x 25.9°V
Beam Lumens:	160.1 lumens	Field Lumens:	311.7 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: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-S-BK-L1-UNV

Iso-Candela Plot





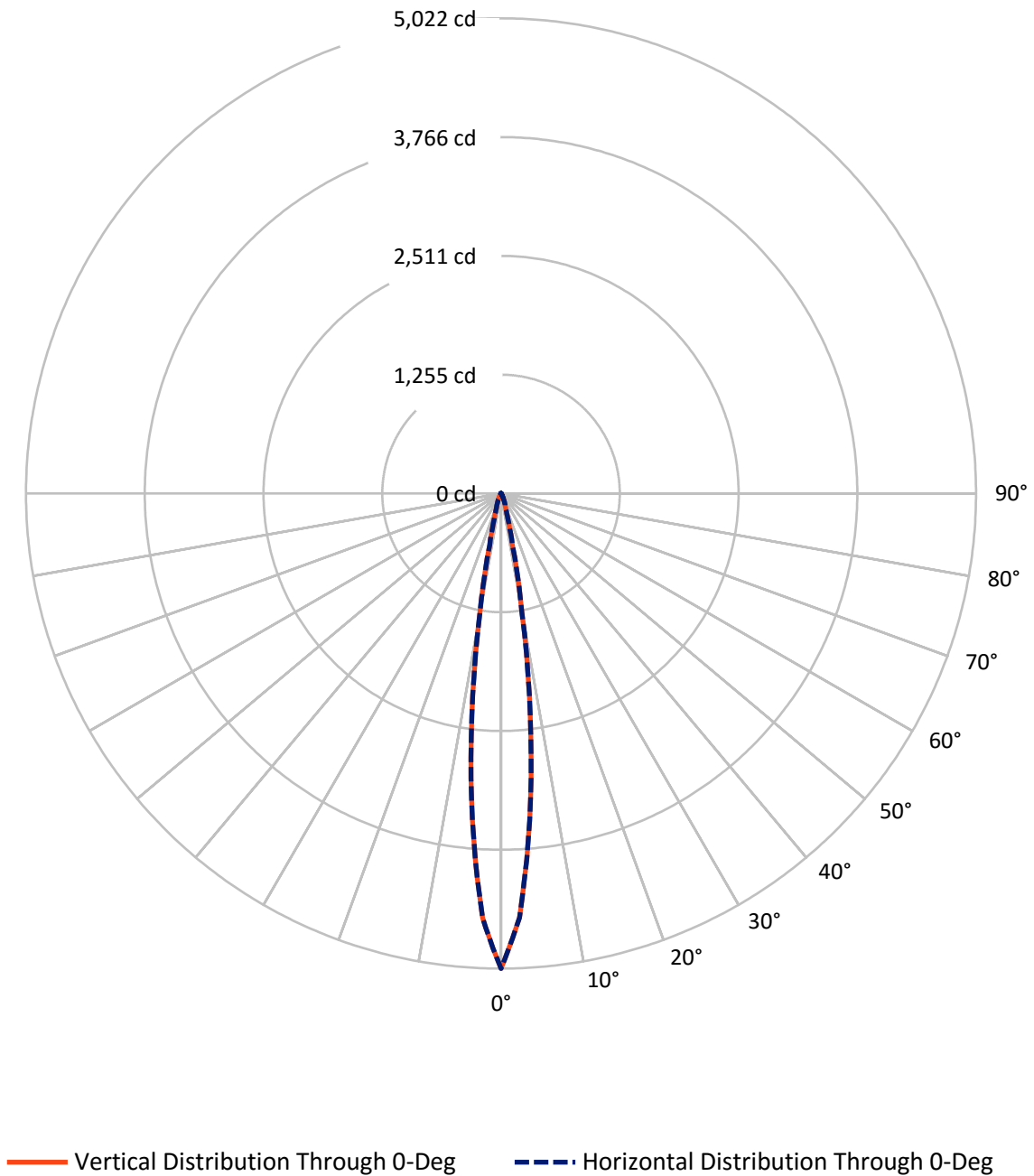
REPORT NUMBER: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-S-BK-L1-UNV

Lumen Table

90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
50	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40		0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.1	0.2	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	0.8	3.2	9.5	9.5	3.2	0.8	0.1	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.1	0.2	1.5	9.3	69.8	69.8	9.3	1.5	0.2	0.1	0.0	0.0	0.0	0.0
0		0.0	0.0	0.1	0.2	1.5	9.3	69.8	69.8	9.3	1.5	0.2	0.1	0.0	0.0		
-10	0.0	0.0	0.0	0.1	0.2	1.5	9.3	69.8	69.8	9.3	1.5	0.2	0.1	0.0	0.0	0.0	0.0
-20		0.0	0.0	0.0	0.1	0.8	3.2	9.5	9.5	3.2	0.8	0.1	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
-40		0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0		
-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

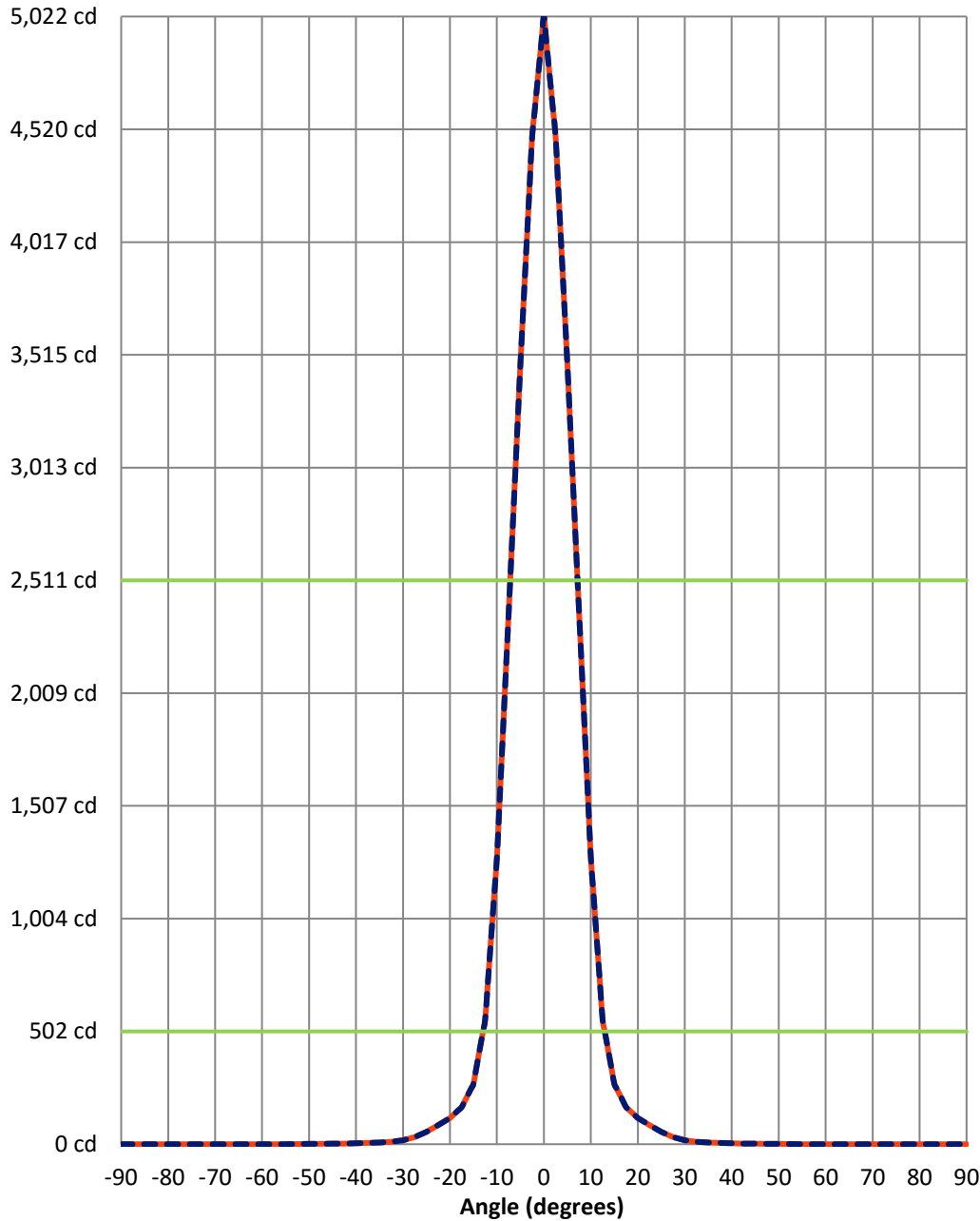
REPORT NUMBER: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-S-BK-L1-UNV

Luminous Intensity Polar Plot



REPORT NUMBER: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-S-BK-L1-UNV

Luminous Intensity Plot



Beam:
H Angle: 14.3°
V Angle: 14.3°
Lumens: 160.1
Efficiency: 40.8%

Field:
H Angle: 25.9°
V Angle: 25.9°
Lumens: 311.7
Efficiency: 79.4%

Spill:
Lumens: 81
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]-LED4097-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: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-S-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
90°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0	0	0	0	0
65°	0	0	0	0	0	0	0	0	0	0	0
62.5°	0	0	0	0	0	0	0	0	0	0	0
60°	0	0	0	0	0	0	0	0	0	0	0
57.5°	0	0	0	0	0	0	0	0	0	0	0
55°	0	0	0	0	0	0	0	0	0	0	0
52.5°	0	0	0	0	0	0	0	0	0	0	0
50°	0	0	0	0	0	0	0	0	0	0	0
47.5°	0	0	0	0	0	0	0	0	0	0	0
45°	0	0	0	0	0	0	0	0	0	0	0
42.5°	0	0	0	0	0	0	0	0	0	0	0
40°	0	0	0	0	0	0	0	0	0	0	1
37.5°	0	0	0	0	0	0	0	0	0	1	1
35°	0	0	0	0	0	0	0	0	1	1	2
32.5°	0	0	0	0	0	0	0	1	1	2	2
30°	0	0	0	0	0	0	0	1	2	2	2
27.5°	0	0	0	0	0	0	1	1	2	2	2
25°	0	0	0	0	0	0	1	2	2	2	3
22.5°	0	0	0	0	0	0	1	2	2	3	3
20°	0	0	0	0	0	1	1	2	2	3	3
17.5°	0	0	0	0	0	1	2	2	2	3	4
15°	0	0	0	0	0	1	2	2	3	3	4
12.5°	0	0	0	0	0	1	2	2	3	3	5
10°	0	0	0	0	1	1	2	2	3	4	5
7.5°	0	0	0	0	1	2	2	2	3	4	5
5°	0	0	0	0	1	2	2	2	3	4	6
2.5°	0	0	0	0	1	2	2	2	3	4	6
0°	0	0	0	0	1	2	2	3	3	4	6
-2.5°	0	0	0	0	1	2	2	2	3	4	6
-5°	0	0	0	0	1	2	2	2	3	4	6
-7.5°	0	0	0	0	1	2	2	2	3	4	5
-10°	0	0	0	0	1	1	2	2	3	4	5
-12.5°	0	0	0	0	0	1	2	2	3	3	5
-15°	0	0	0	0	0	1	2	2	3	3	4
-17.5°	0	0	0	0	0	1	2	2	2	3	4
-20°	0	0	0	0	0	1	1	2	2	3	3



REPORT NUMBER: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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	3	3
-25°	0	0	0	0	0	0	1	2	2	2	3
-27.5°	0	0	0	0	0	0	1	1	2	2	2
-30°	0	0	0	0	0	0	0	1	2	2	2
-32.5°	0	0	0	0	0	0	0	1	1	2	2
-35°	0	0	0	0	0	0	0	0	1	1	2
-37.5°	0	0	0	0	0	0	0	0	0	1	1
-40°	0	0	0	0	0	0	0	0	0	0	1
-42.5°	0	0	0	0	0	0	0	0	0	0	0
-45°	0	0	0	0	0	0	0	0	0	0	0
-47.5°	0	0	0	0	0	0	0	0	0	0	0
-50°	0	0	0	0	0	0	0	0	0	0	0
-52.5°	0	0	0	0	0	0	0	0	0	0	0
-55°	0	0	0	0	0	0	0	0	0	0	0
-57.5°	0	0	0	0	0	0	0	0	0	0	0
-60°	0	0	0	0	0	0	0	0	0	0	0
-62.5°	0	0	0	0	0	0	0	0	0	0	0
-65°	0	0	0	0	0	0	0	0	0	0	0
-67.5°	0	0	0	0	0	0	0	0	0	0	0
-70°	0	0	0	0	0	0	0	0	0	0	0
-72.5°	0	0	0	0	0	0	0	0	0	0	0
-75°	0	0	0	0	0	0	0	0	0	0	0
-77.5°	0	0	0	0	0	0	0	0	0	0	0
-80°	0	0	0	0	0	0	0	0	0	0	0
-82.5°	0	0	0	0	0	0	0	0	0	0	0
-85°	0	0	0	0	0	0	0	0	0	0	0
-87.5°	0	0	0	0	0	0	0	0	0	0	0
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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	2	2	2	2	2	2	3	3	3
40°	1	2	2	2	2	3	3	3	3	3	4
37.5°	2	2	2	2	3	3	3	4	4	5	5
35°	2	2	3	3	3	4	4	5	6	6	7
32.5°	2	3	3	3	4	5	6	7	7	8	9
30°	3	3	3	4	5	6	7	8	10	11	14
27.5°	3	3	4	5	6	8	9	12	15	17	22
25°	3	4	5	6	8	10	13	17	24	30	38
22.5°	4	5	6	8	10	14	19	28	38	50	61
20°	4	6	7	9	13	19	29	43	57	74	88
17.5°	5	7	8	12	17	28	43	60	80	99	116
15°	6	7	10	15	24	38	57	80	103	128	156
12.5°	6	8	11	17	30	50	74	99	128	163	229
10°	7	9	14	22	38	61	88	116	156	229	335
7.5°	7	10	15	26	45	71	100	136	197	302	560
5°	7	10	16	29	51	79	109	152	235	408	875
2.5°	7	11	17	31	54	83	115	162	260	510	1168
0°	8	11	18	32	55	85	117	165	268	555	1275
-2.5°	7	11	17	31	54	83	115	162	260	510	1168
-5°	7	10	16	29	51	79	109	152	235	408	875
-7.5°	7	10	15	26	45	71	100	136	197	302	560
-10°	7	9	14	22	38	61	88	116	156	229	335
-12.5°	6	8	11	17	30	50	74	99	128	163	229
-15°	6	7	10	15	24	38	57	80	103	128	156
-17.5°	5	7	8	12	17	28	43	60	80	99	116
-20°	4	6	7	9	13	19	29	43	57	74	88



REPORT NUMBER: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-S-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	4	5	6	8	10	14	19	28	38	50	61
-25°	3	4	5	6	8	10	13	17	24	30	38
-27.5°	3	3	4	5	6	8	9	12	15	17	22
-30°	3	3	3	4	5	6	7	8	10	11	14
-32.5°	2	3	3	3	4	5	6	7	7	8	9
-35°	2	2	3	3	3	4	4	5	6	6	7
-37.5°	2	2	2	2	3	3	3	4	4	5	5
-40°	1	2	2	2	2	3	3	3	3	3	4
-42.5°	1	1	2	2	2	2	2	2	3	3	3
-45°	0	1	1	1	2	2	2	2	2	2	2
-47.5°	0	0	0	1	1	1	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: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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°	2	2	2	2	2	2	2	1	1	1	1
47.5°	2	2	2	2	2	2	2	2	2	2	2
45°	2	2	2	3	2	2	2	2	2	2	2
42.5°	3	3	3	3	3	3	3	3	3	3	2
40°	4	4	4	4	4	4	4	4	3	3	3
37.5°	5	6	6	6	6	6	5	5	5	4	4
35°	7	7	7	8	7	7	7	7	6	6	5
32.5°	10	10	11	11	11	10	10	9	8	7	7
30°	15	16	17	18	17	16	15	14	11	10	8
27.5°	26	29	31	32	31	29	26	22	17	15	12
25°	45	51	54	55	54	51	45	38	30	24	17
22.5°	71	79	83	85	83	79	71	61	50	38	28
20°	100	109	115	117	115	109	100	88	74	57	43
17.5°	136	152	162	165	162	152	136	116	99	80	60
15°	197	235	260	268	260	235	197	156	128	103	80
12.5°	302	408	510	555	510	408	302	229	163	128	99
10°	560	875	1168	1275	1168	875	560	335	229	156	116
7.5°	1066	1687	2181	2365	2181	1687	1066	560	302	197	136
5°	1687	2563	3218	3474	3218	2563	1687	875	408	235	152
2.5°	2181	3218	4096	4487	4096	3218	2181	1168	510	260	162
0°	2365	3474	4487	5022	4487	3474	2365	1275	555	268	165
-2.5°	2181	3218	4096	4487	4096	3218	2181	1168	510	260	162
-5°	1687	2563	3218	3474	3218	2563	1687	875	408	235	152
-7.5°	1066	1687	2181	2365	2181	1687	1066	560	302	197	136
-10°	560	875	1168	1275	1168	875	560	335	229	156	116
-12.5°	302	408	510	555	510	408	302	229	163	128	99
-15°	197	235	260	268	260	235	197	156	128	103	80
-17.5°	136	152	162	165	162	152	136	116	99	80	60
-20°	100	109	115	117	115	109	100	88	74	57	43



REPORT NUMBER: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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°	71	79	83	85	83	79	71	61	50	38	28
-25°	45	51	54	55	54	51	45	38	30	24	17
-27.5°	26	29	31	32	31	29	26	22	17	15	12
-30°	15	16	17	18	17	16	15	14	11	10	8
-32.5°	10	10	11	11	11	10	10	9	8	7	7
-35°	7	7	7	8	7	7	7	7	6	6	5
-37.5°	5	6	6	6	6	6	5	5	5	4	4
-40°	4	4	4	4	4	4	4	4	3	3	3
-42.5°	3	3	3	3	3	3	3	3	3	3	2
-45°	2	2	2	3	2	2	2	2	2	2	2
-47.5°	2	2	2	2	2	2	2	2	2	2	2
-50°	2	2	2	2	2	2	2	1	1	1	1
-52.5°	1	1	1	1	1	1	1	1	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: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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	2	1	1	0	0	0	0
40°	3	3	2	2	2	2	1	1	0	0	0
37.5°	3	3	3	2	2	2	2	1	1	0	0
35°	4	4	3	3	3	2	2	2	1	1	0
32.5°	6	5	4	3	3	3	2	2	2	1	1
30°	7	6	5	4	3	3	3	2	2	2	1
27.5°	9	8	6	5	4	3	3	2	2	2	1
25°	13	10	8	6	5	4	3	3	2	2	2
22.5°	19	14	10	8	6	5	4	3	3	2	2
20°	29	19	13	9	7	6	4	3	3	2	2
17.5°	43	28	17	12	8	7	5	4	3	2	2
15°	57	38	24	15	10	7	6	4	3	3	2
12.5°	74	50	30	17	11	8	6	5	3	3	2
10°	88	61	38	22	14	9	7	5	4	3	2
7.5°	100	71	45	26	15	10	7	5	4	3	2
5°	109	79	51	29	16	10	7	6	4	3	2
2.5°	115	83	54	31	17	11	7	6	4	3	2
0°	117	85	55	32	18	11	8	6	4	3	3
-2.5°	115	83	54	31	17	11	7	6	4	3	2
-5°	109	79	51	29	16	10	7	6	4	3	2
-7.5°	100	71	45	26	15	10	7	5	4	3	2
-10°	88	61	38	22	14	9	7	5	4	3	2
-12.5°	74	50	30	17	11	8	6	5	3	3	2
-15°	57	38	24	15	10	7	6	4	3	3	2
-17.5°	43	28	17	12	8	7	5	4	3	2	2
-20°	29	19	13	9	7	6	4	3	3	2	2



REPORT NUMBER: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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°	19	14	10	8	6	5	4	3	3	2	2
-25°	13	10	8	6	5	4	3	3	2	2	2
-27.5°	9	8	6	5	4	3	3	2	2	2	1
-30°	7	6	5	4	3	3	3	2	2	2	1
-32.5°	6	5	4	3	3	3	2	2	2	1	1
-35°	4	4	3	3	3	2	2	2	1	1	0
-37.5°	3	3	3	2	2	2	2	1	1	0	0
-40°	3	3	2	2	2	2	1	1	0	0	0
-42.5°	2	2	2	2	2	1	1	0	0	0	0
-45°	2	2	2	1	1	1	0	0	0	0	0
-47.5°	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: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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	2	1	0	0	0	0	0	0	0	0
5°	2	2	1	0	0	0	0	0	0	0	0
2.5°	2	2	1	0	0	0	0	0	0	0	0
0°	2	2	1	0	0	0	0	0	0	0	0
-2.5°	2	2	1	0	0	0	0	0	0	0	0
-5°	2	2	1	0	0	0	0	0	0	0	0
-7.5°	2	2	1	0	0	0	0	0	0	0	0
-10°	2	1	1	0	0	0	0	0	0	0	0
-12.5°	2	1	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: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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: P220344 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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)