

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: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220360 (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]-LED4097-F-BK-L1-UNV
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS,
FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 4000K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

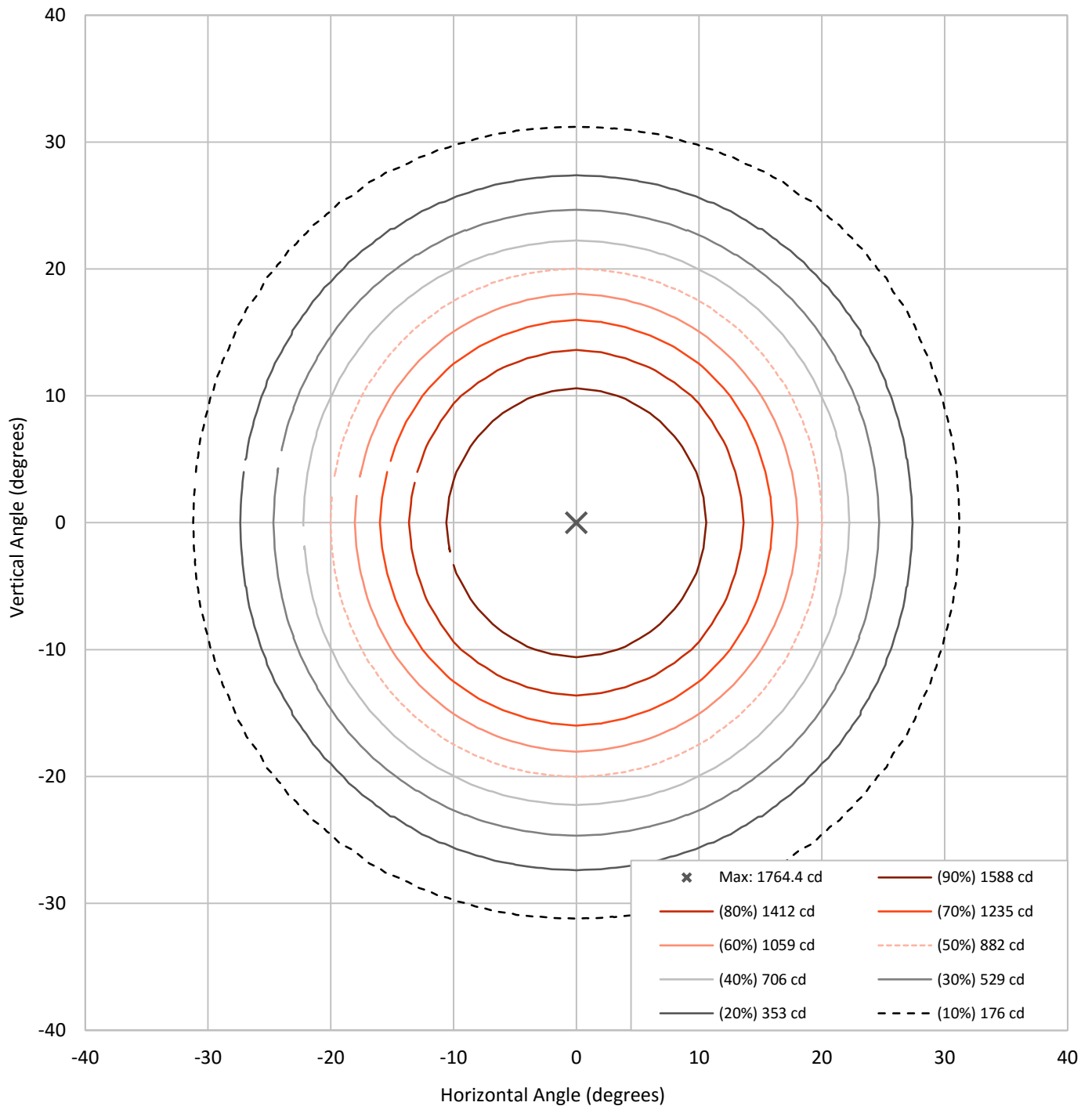
Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	819.8 lumens	Max Intensity:	1764.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	82.0 lumens/watt		
Luminous Opening:	Circular (Dia: 0.17' x H: 0')		
Beam Angle (50%):	40.1°H x 40.1°V	Field Angle (10%):	62.4°H x 62.4°V
Beam Lumens:	526.3 lumens	Field Lumens:	756.5 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: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-F-BK-L1-UNV

Iso-Candela Plot





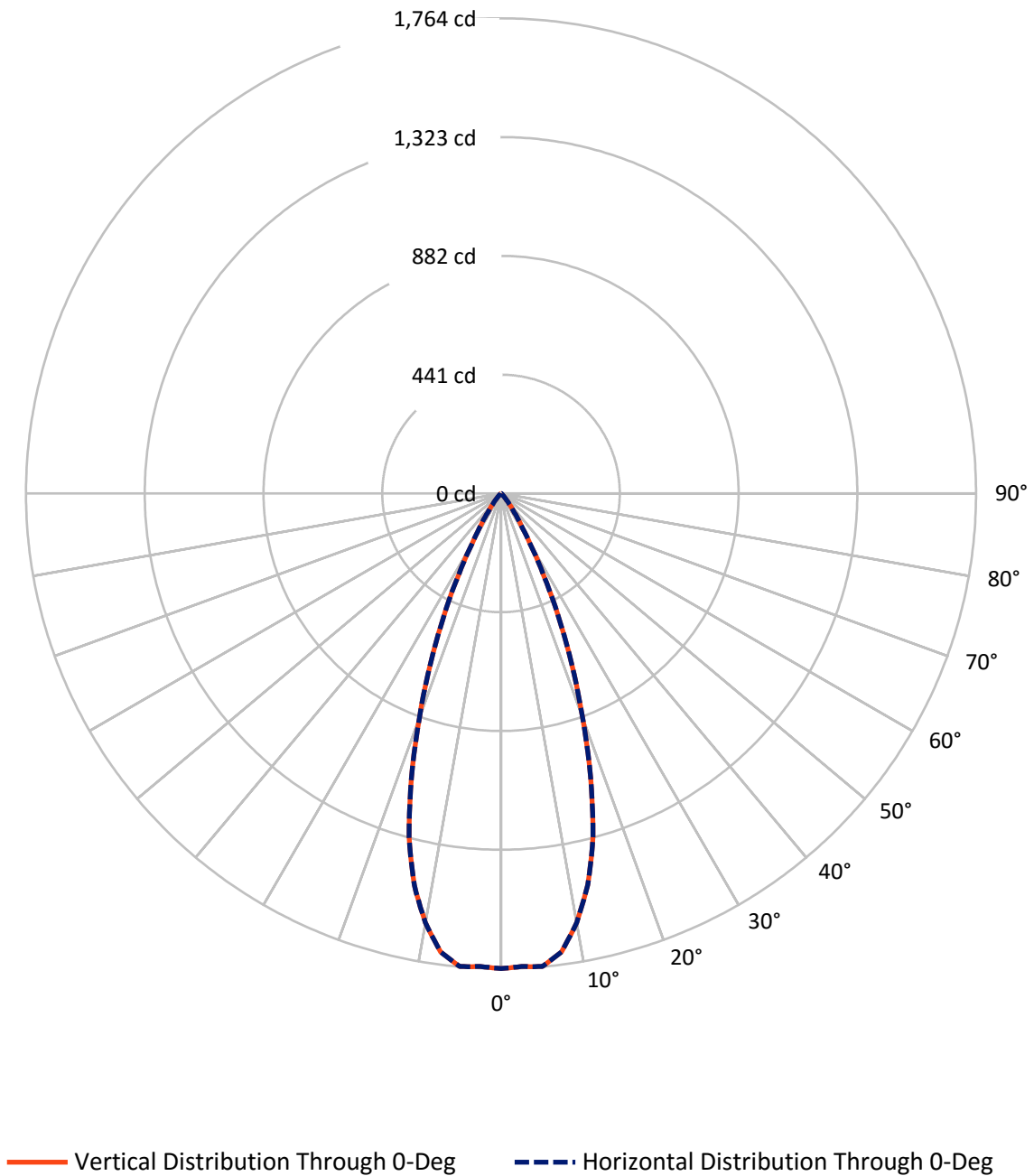
REPORT NUMBER: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-F-BK-L1-UNV

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	0.0	0.0
50	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	0.0	0.0
40		0.0	0.0	0.0	0.2	0.7	1.8	2.8	2.8	1.8	0.7	0.2	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.1	0.6	2.8	8.5	14.5	14.5	8.5	2.8	0.6	0.1	0.0	0.0	0.0	0.0
20		0.0	0.0	0.2	1.5	8.0	23.3	36.7	36.7	23.3	8.0	1.5	0.2	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.3	2.4	13.3	35.7	50.8	50.8	35.7	13.3	2.4	0.3	0.0	0.0	0.0	0.0
0		0.0	0.0	0.3	2.4	13.3	35.7	50.8	50.8	35.7	13.3	2.4	0.3	0.0	0.0	0.0	0.0
-10	0.0	0.0	0.0	0.3	2.4	13.3	35.7	50.8	50.8	35.7	13.3	2.4	0.3	0.0	0.0	0.0	0.0
-20		0.0	0.0	0.2	1.5	8.0	23.3	36.7	36.7	23.3	8.0	1.5	0.2	0.0	0.0	0.0	0.0
-30	0.0	0.0	0.0	0.1	0.6	2.8	8.5	14.5	14.5	8.5	2.8	0.6	0.1	0.0	0.0	0.0	0.0
-40		0.0	0.0	0.0	0.2	0.7	1.8	2.8	2.8	1.8	0.7	0.2	0.0	0.0	0.0	0.0	0.0
-50	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	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	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	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

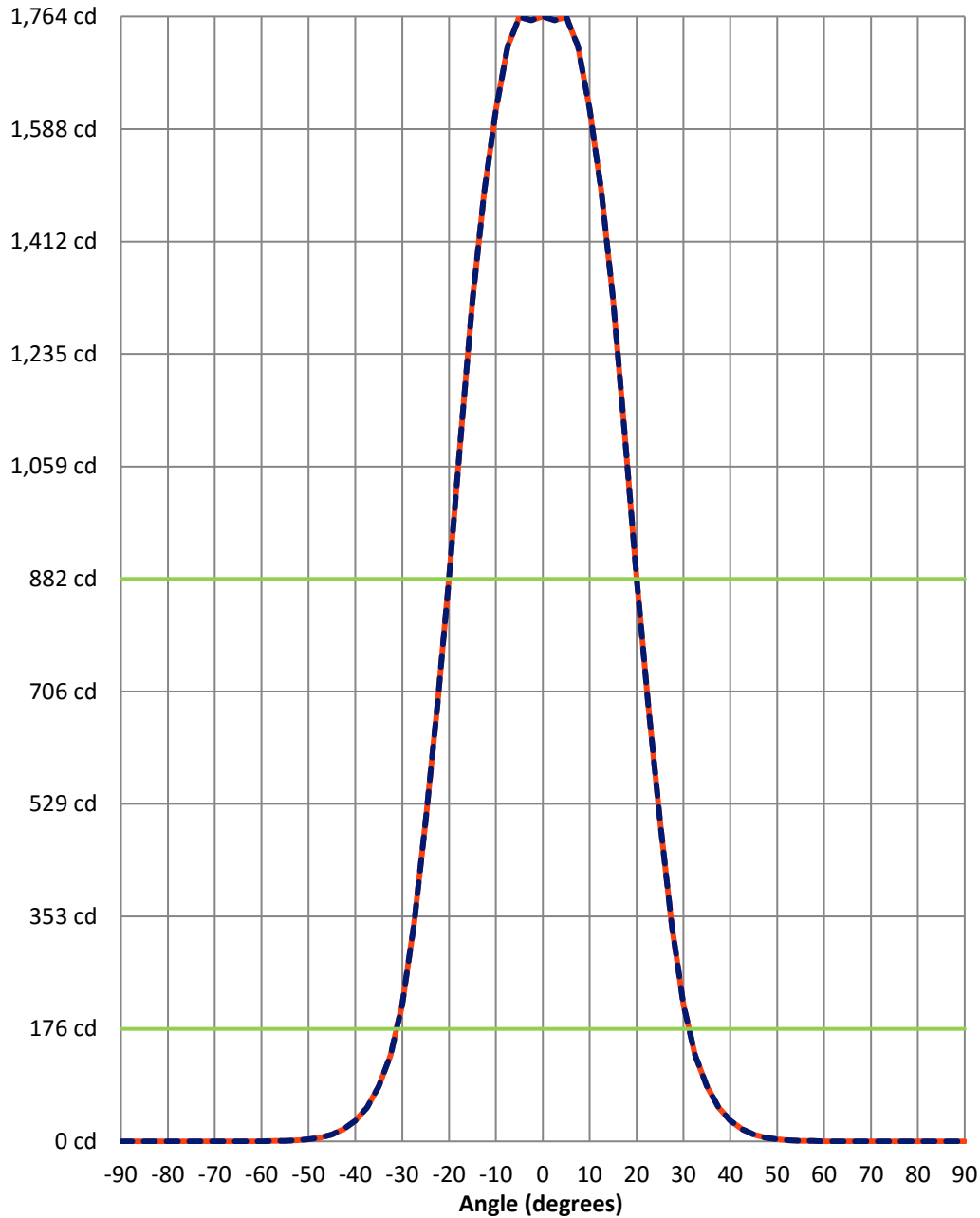
REPORT NUMBER: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-F-BK-L1-UNV

Luminous Intensity Polar Plot



REPORT NUMBER: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-F-BK-L1-UNV

Luminous Intensity Plot



Beam:
 H Angle: 40.1°
 V Angle: 40.1°
 Lumens: 526.3
 Efficiency: 64.2%

Field:
 H Angle: 62.4°
 V Angle: 62.4°
 Lumens: 756.5
 Efficiency: 92.3%

Spill:
 Lumens: 63.3
 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]-LED4097-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: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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	0	1	1
42.5°	0	0	0	0	0	0	0	0	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	5
30°	0	0	0	0	1	1	1	2	3	5	8
27.5°	0	0	0	0	1	1	1	3	4	6	10
25°	0	0	0	0	1	1	2	3	5	9	14
22.5°	0	0	0	1	1	1	2	4	7	11	18
20°	0	0	0	1	1	2	3	5	9	14	23
17.5°	0	0	0	1	1	2	3	6	10	17	28
15°	0	0	0	1	1	2	4	7	12	20	33
12.5°	0	0	1	1	1	3	5	8	14	24	39
10°	0	0	1	1	1	3	5	9	16	27	44
7.5°	0	0	1	1	2	3	5	10	17	29	48
5°	0	0	1	1	2	3	6	10	18	31	51
2.5°	0	0	1	1	2	3	6	11	19	32	53
0°	0	0	1	1	2	3	6	11	19	33	53
-2.5°	0	0	1	1	2	3	6	11	19	32	53
-5°	0	0	1	1	2	3	6	10	18	31	51
-7.5°	0	0	1	1	2	3	5	10	17	29	48
-10°	0	0	1	1	1	3	5	9	16	27	44
-12.5°	0	0	1	1	1	3	5	8	14	24	39
-15°	0	0	0	1	1	2	4	7	12	20	33
-17.5°	0	0	0	1	1	2	3	6	10	17	28
-20°	0	0	0	1	1	2	3	5	9	14	23



REPORT NUMBER: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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	2	4	7	11	18
-25°	0	0	0	0	1	1	2	3	5	9	14
-27.5°	0	0	0	0	1	1	1	3	4	6	10
-30°	0	0	0	0	1	1	1	2	3	5	8
-32.5°	0	0	0	0	0	1	1	1	2	4	5
-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	0	1	1	1
-45°	0	0	0	0	0	0	0	0	0	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: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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	2	3	3	4	5	5
45°	1	1	2	3	3	4	5	6	7	8	9
42.5°	2	2	3	4	5	7	9	10	12	14	16
40°	3	4	5	6	9	11	14	17	20	24	27
37.5°	4	5	8	10	14	18	23	28	33	39	44
35°	5	8	11	16	22	28	35	44	52	61	70
32.5°	8	12	17	24	32	42	53	67	81	95	109
30°	11	17	25	34	47	62	80	100	121	142	168
27.5°	16	24	34	48	67	87	115	144	182	215	253
25°	22	32	47	67	91	123	163	209	263	324	383
22.5°	28	42	62	87	123	170	226	298	382	464	538
20°	35	53	80	115	163	226	310	414	517	615	702
17.5°	44	67	100	144	209	298	414	535	655	773	878
15°	52	81	121	182	263	382	517	655	797	934	1065
12.5°	61	95	142	215	324	464	615	773	934	1097	1241
10°	70	109	168	253	383	538	702	878	1065	1241	1386
7.5°	77	120	188	288	434	600	780	972	1175	1353	1490
5°	82	128	203	315	472	646	837	1046	1255	1431	1561
2.5°	86	133	212	334	495	674	873	1091	1303	1475	1604
0°	87	135	215	340	503	684	885	1107	1320	1489	1619
-2.5°	86	133	212	334	495	674	873	1091	1303	1475	1604
-5°	82	128	203	315	472	646	837	1046	1255	1431	1561
-7.5°	77	120	188	288	434	600	780	972	1175	1353	1490
-10°	70	109	168	253	383	538	702	878	1065	1241	1386
-12.5°	61	95	142	215	324	464	615	773	934	1097	1241
-15°	52	81	121	182	263	382	517	655	797	934	1065
-17.5°	44	67	100	144	209	298	414	535	655	773	878
-20°	35	53	80	115	163	226	310	414	517	615	702



REPORT NUMBER: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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°	28	42	62	87	123	170	226	298	382	464	538
-25°	22	32	47	67	91	123	163	209	263	324	383
-27.5°	16	24	34	48	67	87	115	144	182	215	253
-30°	11	17	25	34	47	62	80	100	121	142	168
-32.5°	8	12	17	24	32	42	53	67	81	95	109
-35°	5	8	11	16	22	28	35	44	52	61	70
-37.5°	4	5	8	10	14	18	23	28	33	39	44
-40°	3	4	5	6	9	11	14	17	20	24	27
-42.5°	2	2	3	4	5	7	9	10	12	14	16
-45°	1	1	2	3	3	4	5	6	7	8	9
-47.5°	1	1	1	1	2	2	3	3	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: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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°	5	6	6	6	6	6	5	5	5	4	3
45°	10	10	11	11	11	10	10	9	8	7	6
42.5°	17	18	19	19	19	18	17	16	14	12	10
40°	29	31	32	33	32	31	29	27	24	20	17
37.5°	48	51	53	53	53	51	48	44	39	33	28
35°	77	82	86	87	86	82	77	70	61	52	44
32.5°	120	128	133	135	133	128	120	109	95	81	67
30°	188	203	212	215	212	203	188	168	142	121	100
27.5°	288	315	334	340	334	315	288	253	215	182	144
25°	434	472	495	503	495	472	434	383	324	263	209
22.5°	600	646	674	684	674	646	600	538	464	382	298
20°	780	837	873	885	873	837	780	702	615	517	414
17.5°	972	1046	1091	1107	1091	1046	972	878	773	655	535
15°	1175	1255	1303	1320	1303	1255	1175	1065	934	797	655
12.5°	1353	1431	1475	1489	1475	1431	1353	1241	1097	934	773
10°	1490	1561	1604	1619	1604	1561	1490	1386	1241	1065	878
7.5°	1590	1663	1704	1717	1704	1663	1590	1490	1353	1175	972
5°	1663	1731	1758	1764	1758	1731	1663	1561	1431	1255	1046
2.5°	1704	1758	1762	1759	1762	1758	1704	1604	1475	1303	1091
0°	1717	1764	1759	1764	1759	1764	1717	1619	1489	1320	1107
-2.5°	1704	1758	1762	1759	1762	1758	1704	1604	1475	1303	1091
-5°	1663	1731	1758	1764	1758	1731	1663	1561	1431	1255	1046
-7.5°	1590	1663	1704	1717	1704	1663	1590	1490	1353	1175	972
-10°	1490	1561	1604	1619	1604	1561	1490	1386	1241	1065	878
-12.5°	1353	1431	1475	1489	1475	1431	1353	1241	1097	934	773
-15°	1175	1255	1303	1320	1303	1255	1175	1065	934	797	655
-17.5°	972	1046	1091	1107	1091	1046	972	878	773	655	535
-20°	780	837	873	885	873	837	780	702	615	517	414



REPORT NUMBER: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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°	600	646	674	684	674	646	600	538	464	382	298
-25°	434	472	495	503	495	472	434	383	324	263	209
-27.5°	288	315	334	340	334	315	288	253	215	182	144
-30°	188	203	212	215	212	203	188	168	142	121	100
-32.5°	120	128	133	135	133	128	120	109	95	81	67
-35°	77	82	86	87	86	82	77	70	61	52	44
-37.5°	48	51	53	53	53	51	48	44	39	33	28
-40°	29	31	32	33	32	31	29	27	24	20	17
-42.5°	17	18	19	19	19	18	17	16	14	12	10
-45°	10	10	11	11	11	10	10	9	8	7	6
-47.5°	5	6	6	6	6	6	5	5	5	4	3
-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: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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	2	2	1	1	1	1	1	0	0	0
45°	5	4	3	3	2	1	1	1	1	0	0
42.5°	9	7	5	4	3	2	2	1	1	1	0
40°	14	11	9	6	5	4	3	2	1	1	1
37.5°	23	18	14	10	8	5	4	3	2	1	1
35°	35	28	22	16	11	8	5	4	3	2	1
32.5°	53	42	32	24	17	12	8	5	4	2	1
30°	80	62	47	34	25	17	11	8	5	3	2
27.5°	115	87	67	48	34	24	16	10	6	4	3
25°	163	123	91	67	47	32	22	14	9	5	3
22.5°	226	170	123	87	62	42	28	18	11	7	4
20°	310	226	163	115	80	53	35	23	14	9	5
17.5°	414	298	209	144	100	67	44	28	17	10	6
15°	517	382	263	182	121	81	52	33	20	12	7
12.5°	615	464	324	215	142	95	61	39	24	14	8
10°	702	538	383	253	168	109	70	44	27	16	9
7.5°	780	600	434	288	188	120	77	48	29	17	10
5°	837	646	472	315	203	128	82	51	31	18	10
2.5°	873	674	495	334	212	133	86	53	32	19	11
0°	885	684	503	340	215	135	87	53	33	19	11
-2.5°	873	674	495	334	212	133	86	53	32	19	11
-5°	837	646	472	315	203	128	82	51	31	18	10
-7.5°	780	600	434	288	188	120	77	48	29	17	10
-10°	702	538	383	253	168	109	70	44	27	16	9
-12.5°	615	464	324	215	142	95	61	39	24	14	8
-15°	517	382	263	182	121	81	52	33	20	12	7
-17.5°	414	298	209	144	100	67	44	28	17	10	6
-20°	310	226	163	115	80	53	35	23	14	9	5



REPORT NUMBER: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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°	226	170	123	87	62	42	28	18	11	7	4
-25°	163	123	91	67	47	32	22	14	9	5	3
-27.5°	115	87	67	48	34	24	16	10	6	4	3
-30°	80	62	47	34	25	17	11	8	5	3	2
-32.5°	53	42	32	24	17	12	8	5	4	2	1
-35°	35	28	22	16	11	8	5	4	3	2	1
-37.5°	23	18	14	10	8	5	4	3	2	1	1
-40°	14	11	9	6	5	4	3	2	1	1	1
-42.5°	9	7	5	4	3	2	2	1	1	1	0
-45°	5	4	3	3	2	1	1	1	1	0	0
-47.5°	3	2	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: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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°	2	1	1	1	0	0	0	0	0	0	0
20°	3	2	1	1	0	0	0	0	0	0	0
17.5°	3	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°	5	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°	5	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°	3	2	1	1	0	0	0	0	0	0	0
-20°	3	2	1	1	0	0	0	0	0	0	0



REPORT NUMBER: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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°	2	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: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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: P220360 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4097-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)