

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: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220354 (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]-LED3090-F-BK-L1-UNV
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS,
FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 3000K CCT, 90 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

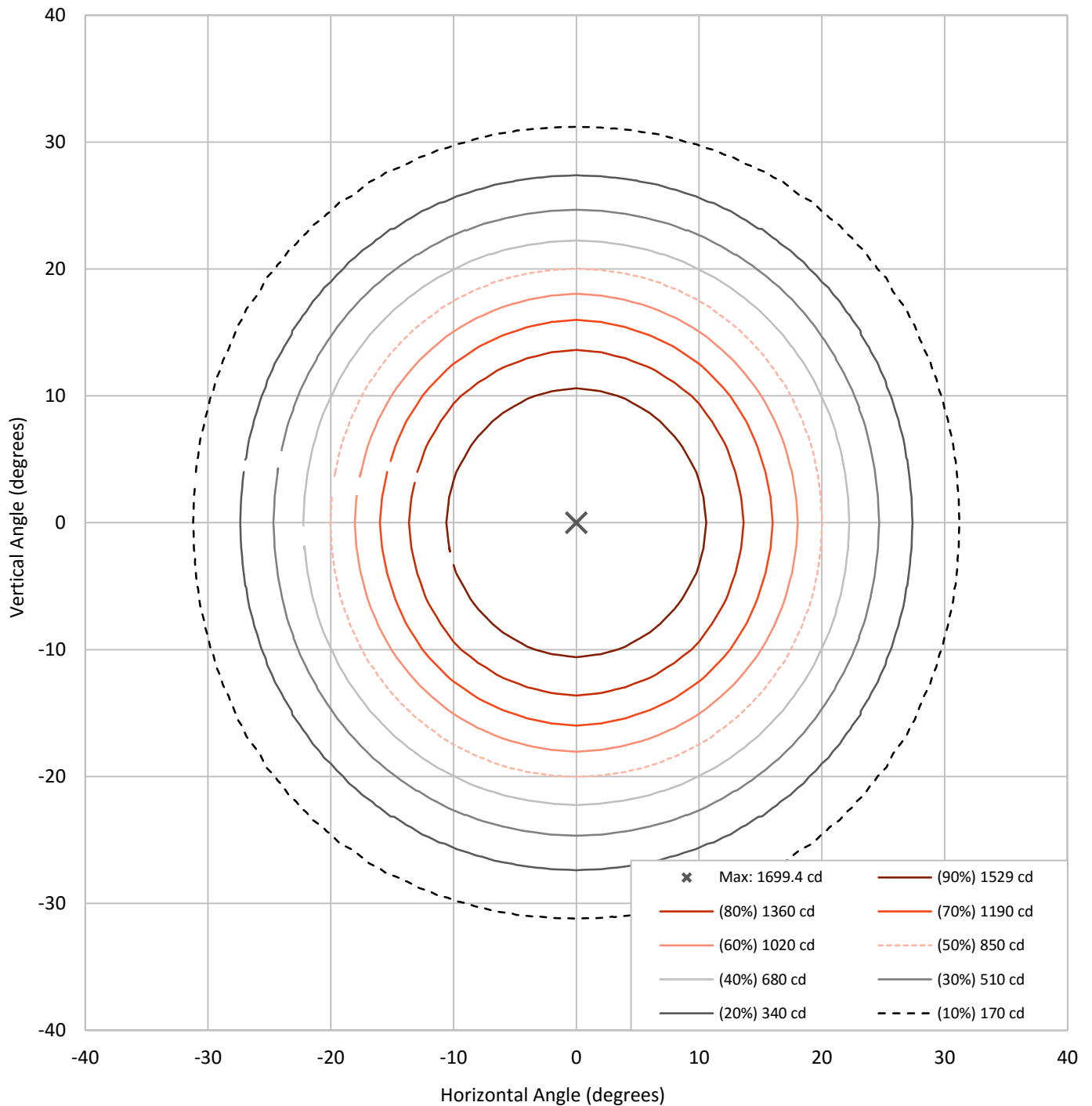
Summary

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	789.6 lumens	Max Intensity:	1699.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	79.0 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:	506.9 lumens	Field Lumens:	728.6 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		



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CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-F-BK-L1-UNV

Iso-Candela Plot



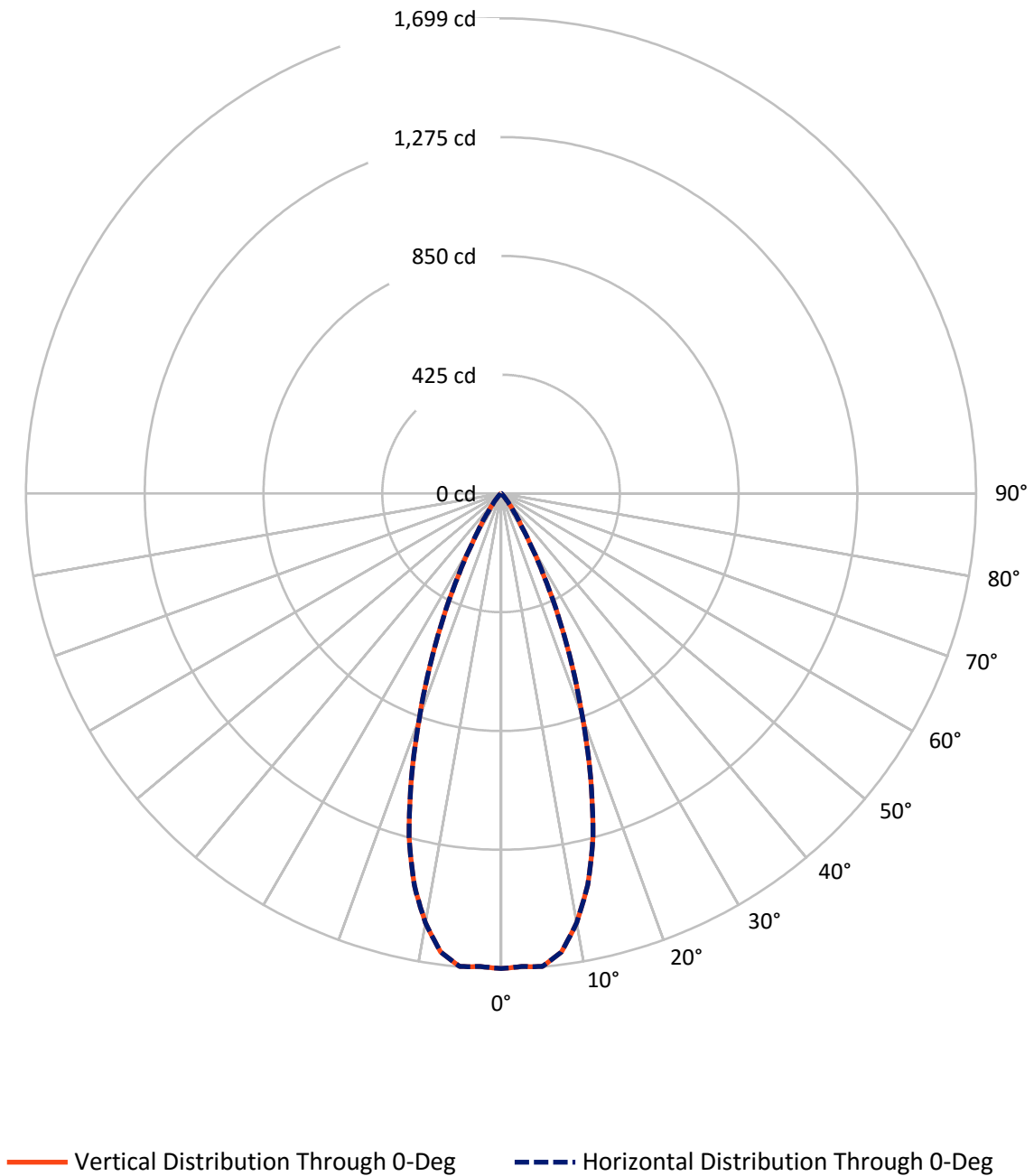
REPORT NUMBER: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-F-BK-L1-UNV

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	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	
40		0.0	0.0	0.0	0.2	0.7	1.7	2.7	2.7	1.7	0.7	0.2	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.1	0.6	2.7	8.1	14.0	14.0	8.1	2.7	0.6	0.1	0.0	0.0	0.0	
20		0.0	0.0	0.2	1.4	7.7	22.5	35.4	35.4	22.5	7.7	1.4	0.2	0.0	0.0		
10	0.0	0.0	0.0	0.3	2.3	12.8	34.3	48.9	48.9	34.3	12.8	2.3	0.3	0.0	0.0	0.0	
0		0.0	0.0	0.3	2.3	12.8	34.3	48.9	48.9	34.3	12.8	2.3	0.3	0.0	0.0		
-10	0.0	0.0	0.0	0.3	2.3	12.8	34.3	48.9	48.9	34.3	12.8	2.3	0.3	0.0	0.0	0.0	
-20		0.0	0.0	0.2	1.4	7.7	22.5	35.4	35.4	22.5	7.7	1.4	0.2	0.0	0.0		
-30	0.0	0.0	0.0	0.1	0.6	2.7	8.1	14.0	14.0	8.1	2.7	0.6	0.1	0.0	0.0	0.0	
-40		0.0	0.0	0.0	0.2	0.7	1.7	2.7	2.7	1.7	0.7	0.2	0.0	0.0	0.0		
-50	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.2	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		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	

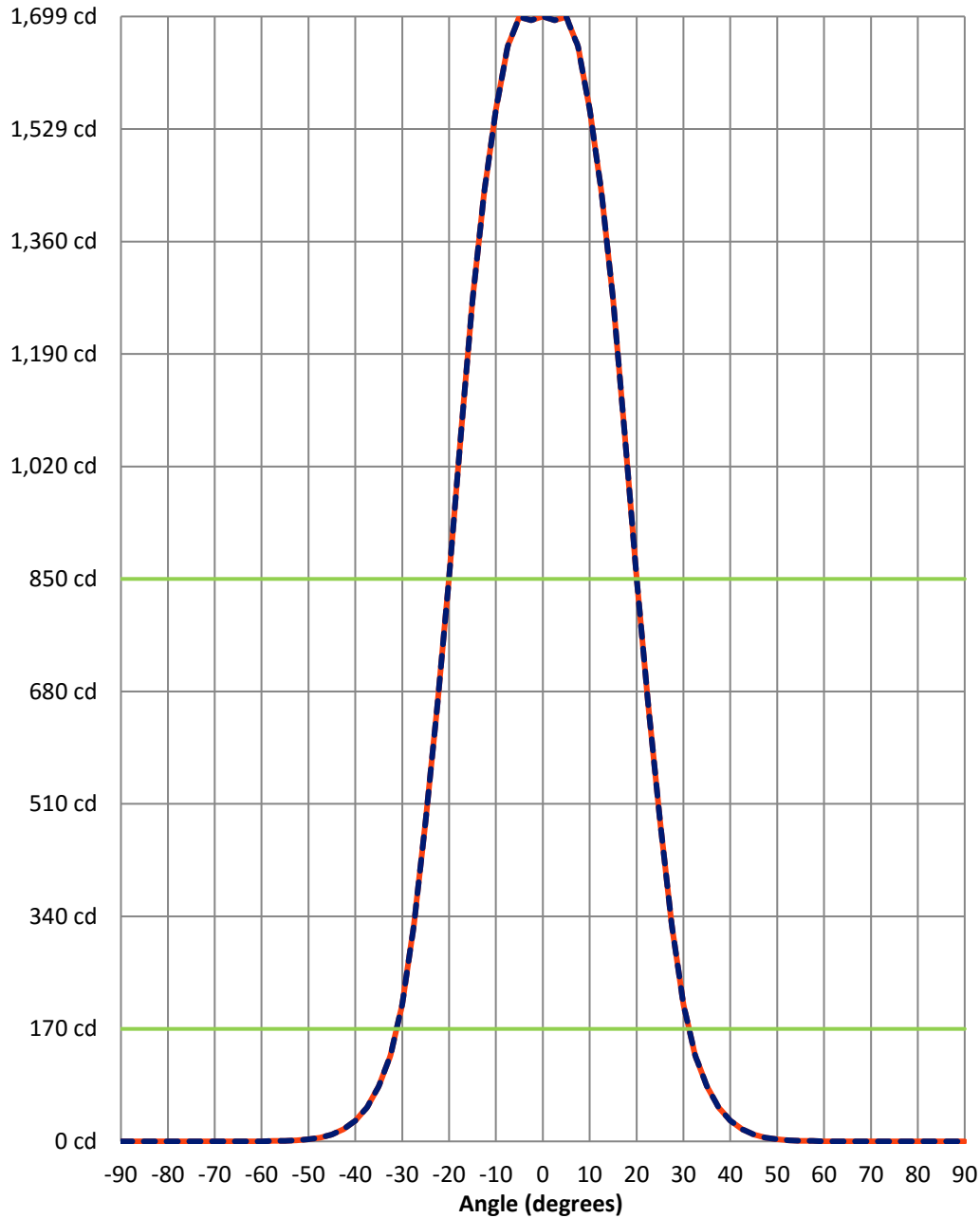
REPORT NUMBER: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-F-BK-L1-UNV

Luminous Intensity Polar Plot



REPORT NUMBER: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-F-BK-L1-UNV

Luminous Intensity Plot



Beam:
 H Angle: 40.1°
 V Angle: 40.1°
 Lumens: 506.9
 Efficiency: 64.2%

Field:
 H Angle: 62.4°
 V Angle: 62.4°
 Lumens: 728.6
 Efficiency: 92.3%

Spill:
 Lumens: 61
 Efficiency: 7.7%

- 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: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	1	2	4
32.5°	0	0	0	0	0	1	1	1	2	3	5
30°	0	0	0	0	1	1	1	2	3	5	7
27.5°	0	0	0	0	1	1	1	2	4	6	10
25°	0	0	0	0	1	1	2	3	5	8	14
22.5°	0	0	0	1	1	1	2	4	6	11	17
20°	0	0	0	1	1	1	3	5	8	14	22
17.5°	0	0	0	1	1	2	3	6	10	17	27
15°	0	0	0	1	1	2	4	7	12	20	31
12.5°	0	0	1	1	1	2	4	8	14	23	37
10°	0	0	1	1	1	3	5	9	15	26	42
7.5°	0	0	1	1	1	3	5	9	17	28	46
5°	0	0	1	1	2	3	5	10	18	30	49
2.5°	0	0	1	1	2	3	6	10	18	31	51
0°	0	0	1	1	2	3	6	10	19	31	51
-2.5°	0	0	1	1	2	3	6	10	18	31	51
-5°	0	0	1	1	2	3	5	10	18	30	49
-7.5°	0	0	1	1	1	3	5	9	17	28	46
-10°	0	0	1	1	1	3	5	9	15	26	42
-12.5°	0	0	1	1	1	2	4	8	14	23	37
-15°	0	0	0	1	1	2	4	7	12	20	31
-17.5°	0	0	0	1	1	2	3	6	10	17	27
-20°	0	0	0	1	1	1	3	5	8	14	22



REPORT NUMBER: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	6	11	17
-25°	0	0	0	0	1	1	2	3	5	8	14
-27.5°	0	0	0	0	1	1	1	2	4	6	10
-30°	0	0	0	0	1	1	1	2	3	5	7
-32.5°	0	0	0	0	0	1	1	1	2	3	5
-35°	0	0	0	0	0	1	1	1	1	2	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: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	1	2	2	2	3
47.5°	1	1	1	1	2	2	3	3	4	4	5
45°	1	1	2	2	3	4	5	6	7	8	9
42.5°	1	2	3	4	5	6	8	10	12	14	15
40°	2	3	5	6	8	11	14	17	20	23	26
37.5°	4	5	7	10	14	17	22	27	31	37	42
35°	5	8	11	16	21	27	34	42	50	59	68
32.5°	8	12	17	23	31	41	51	65	78	91	105
30°	11	17	24	33	45	60	77	96	116	137	162
27.5°	16	23	33	46	64	84	111	138	175	207	243
25°	21	31	45	64	88	118	157	201	253	312	369
22.5°	27	41	60	84	118	164	217	287	368	447	518
20°	34	51	77	111	157	217	299	399	498	593	677
17.5°	42	65	96	138	201	287	399	516	631	744	846
15°	50	78	116	175	253	368	498	631	768	899	1026
12.5°	59	91	137	207	312	447	593	744	899	1057	1196
10°	68	105	162	243	369	518	677	846	1026	1196	1335
7.5°	75	116	181	277	418	578	751	936	1131	1303	1436
5°	79	124	195	303	455	622	806	1007	1209	1378	1504
2.5°	82	128	204	321	477	650	841	1051	1255	1421	1545
0°	83	130	207	327	485	659	852	1066	1271	1434	1559
-2.5°	82	128	204	321	477	650	841	1051	1255	1421	1545
-5°	79	124	195	303	455	622	806	1007	1209	1378	1504
-7.5°	75	116	181	277	418	578	751	936	1131	1303	1436
-10°	68	105	162	243	369	518	677	846	1026	1196	1335
-12.5°	59	91	137	207	312	447	593	744	899	1057	1196
-15°	50	78	116	175	253	368	498	631	768	899	1026
-17.5°	42	65	96	138	201	287	399	516	631	744	846
-20°	34	51	77	111	157	217	299	399	498	593	677



REPORT NUMBER: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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°	27	41	60	84	118	164	217	287	368	447	518
-25°	21	31	45	64	88	118	157	201	253	312	369
-27.5°	16	23	33	46	64	84	111	138	175	207	243
-30°	11	17	24	33	45	60	77	96	116	137	162
-32.5°	8	12	17	23	31	41	51	65	78	91	105
-35°	5	8	11	16	21	27	34	42	50	59	68
-37.5°	4	5	7	10	14	17	22	27	31	37	42
-40°	2	3	5	6	8	11	14	17	20	23	26
-42.5°	1	2	3	4	5	6	8	10	12	14	15
-45°	1	1	2	2	3	4	5	6	7	8	9
-47.5°	1	1	1	1	2	2	3	3	4	4	5
-50°	1	1	1	1	1	1	1	2	2	2	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: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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°	1	2	2	2	2	2	1	1	1	1	1
50°	3	3	3	3	3	3	3	3	2	2	2
47.5°	5	5	6	6	6	5	5	5	4	4	3
45°	9	10	10	10	10	10	9	9	8	7	6
42.5°	17	18	18	19	18	18	17	15	14	12	10
40°	28	30	31	31	31	30	28	26	23	20	17
37.5°	46	49	51	51	51	49	46	42	37	31	27
35°	75	79	82	83	82	79	75	68	59	50	42
32.5°	116	124	128	130	128	124	116	105	91	78	65
30°	181	195	204	207	204	195	181	162	137	116	96
27.5°	277	303	321	327	321	303	277	243	207	175	138
25°	418	455	477	485	477	455	418	369	312	253	201
22.5°	578	622	650	659	650	622	578	518	447	368	287
20°	751	806	841	852	841	806	751	677	593	498	399
17.5°	936	1007	1051	1066	1051	1007	936	846	744	631	516
15°	1131	1209	1255	1271	1255	1209	1131	1026	899	768	631
12.5°	1303	1378	1421	1434	1421	1378	1303	1196	1057	899	744
10°	1436	1504	1545	1559	1545	1504	1436	1335	1196	1026	846
7.5°	1531	1601	1641	1654	1641	1601	1531	1436	1303	1131	936
5°	1601	1668	1693	1699	1693	1668	1601	1504	1378	1209	1007
2.5°	1641	1693	1698	1694	1698	1693	1641	1545	1421	1255	1051
0°	1654	1699	1694	1699	1694	1699	1654	1559	1434	1271	1066
-2.5°	1641	1693	1698	1694	1698	1693	1641	1545	1421	1255	1051
-5°	1601	1668	1693	1699	1693	1668	1601	1504	1378	1209	1007
-7.5°	1531	1601	1641	1654	1641	1601	1531	1436	1303	1131	936
-10°	1436	1504	1545	1559	1545	1504	1436	1335	1196	1026	846
-12.5°	1303	1378	1421	1434	1421	1378	1303	1196	1057	899	744
-15°	1131	1209	1255	1271	1255	1209	1131	1026	899	768	631
-17.5°	936	1007	1051	1066	1051	1007	936	846	744	631	516
-20°	751	806	841	852	841	806	751	677	593	498	399



REPORT NUMBER: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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°	578	622	650	659	650	622	578	518	447	368	287
-25°	418	455	477	485	477	455	418	369	312	253	201
-27.5°	277	303	321	327	321	303	277	243	207	175	138
-30°	181	195	204	207	204	195	181	162	137	116	96
-32.5°	116	124	128	130	128	124	116	105	91	78	65
-35°	75	79	82	83	82	79	75	68	59	50	42
-37.5°	46	49	51	51	51	49	46	42	37	31	27
-40°	28	30	31	31	31	30	28	26	23	20	17
-42.5°	17	18	18	19	18	18	17	15	14	12	10
-45°	9	10	10	10	10	10	9	9	8	7	6
-47.5°	5	5	6	6	6	5	5	5	4	4	3
-50°	3	3	3	3	3	3	3	3	2	2	2
-52.5°	1	2	2	2	2	2	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	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: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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°	1	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	2	2	1	1	1	1	0	0
42.5°	8	6	5	4	3	2	1	1	1	1	0
40°	14	11	8	6	5	3	2	2	1	1	1
37.5°	22	17	14	10	7	5	4	3	2	1	1
35°	34	27	21	16	11	8	5	4	2	1	1
32.5°	51	41	31	23	17	12	8	5	3	2	1
30°	77	60	45	33	24	17	11	7	5	3	2
27.5°	111	84	64	46	33	23	16	10	6	4	2
25°	157	118	88	64	45	31	21	14	8	5	3
22.5°	217	164	118	84	60	41	27	17	11	6	4
20°	299	217	157	111	77	51	34	22	14	8	5
17.5°	399	287	201	138	96	65	42	27	17	10	6
15°	498	368	253	175	116	78	50	31	20	12	7
12.5°	593	447	312	207	137	91	59	37	23	14	8
10°	677	518	369	243	162	105	68	42	26	15	9
7.5°	751	578	418	277	181	116	75	46	28	17	9
5°	806	622	455	303	195	124	79	49	30	18	10
2.5°	841	650	477	321	204	128	82	51	31	18	10
0°	852	659	485	327	207	130	83	51	31	19	10
-2.5°	841	650	477	321	204	128	82	51	31	18	10
-5°	806	622	455	303	195	124	79	49	30	18	10
-7.5°	751	578	418	277	181	116	75	46	28	17	9
-10°	677	518	369	243	162	105	68	42	26	15	9
-12.5°	593	447	312	207	137	91	59	37	23	14	8
-15°	498	368	253	175	116	78	50	31	20	12	7
-17.5°	399	287	201	138	96	65	42	27	17	10	6
-20°	299	217	157	111	77	51	34	22	14	8	5



REPORT NUMBER: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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°	217	164	118	84	60	41	27	17	11	6	4
-25°	157	118	88	64	45	31	21	14	8	5	3
-27.5°	111	84	64	46	33	23	16	10	6	4	2
-30°	77	60	45	33	24	17	11	7	5	3	2
-32.5°	51	41	31	23	17	12	8	5	3	2	1
-35°	34	27	21	16	11	8	5	4	2	1	1
-37.5°	22	17	14	10	7	5	4	3	2	1	1
-40°	14	11	8	6	5	3	2	2	1	1	1
-42.5°	8	6	5	4	3	2	1	1	1	1	0
-45°	5	4	3	2	2	1	1	1	1	0	0
-47.5°	3	2	2	1	1	1	1	1	0	0	0
-50°	1	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: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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	1	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°	4	2	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	1	1	1	0	0	0	0	0	0
5°	5	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°	5	3	2	1	1	0	0	0	0	0	0
-7.5°	5	3	1	1	1	0	0	0	0	0	0
-10°	5	3	1	1	1	0	0	0	0	0	0
-12.5°	4	2	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	1	1	1	0	0	0	0	0	0	0



REPORT NUMBER: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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: P220354 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED3090-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)