

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: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)

Luminaire Tested: **1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-F-BK-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
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]-LED4080-F-BK-L1-UNV
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS, FLOOD OPTIC, BLACK HOUSING.
Light Source: (1) 4000K CCT, 80 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

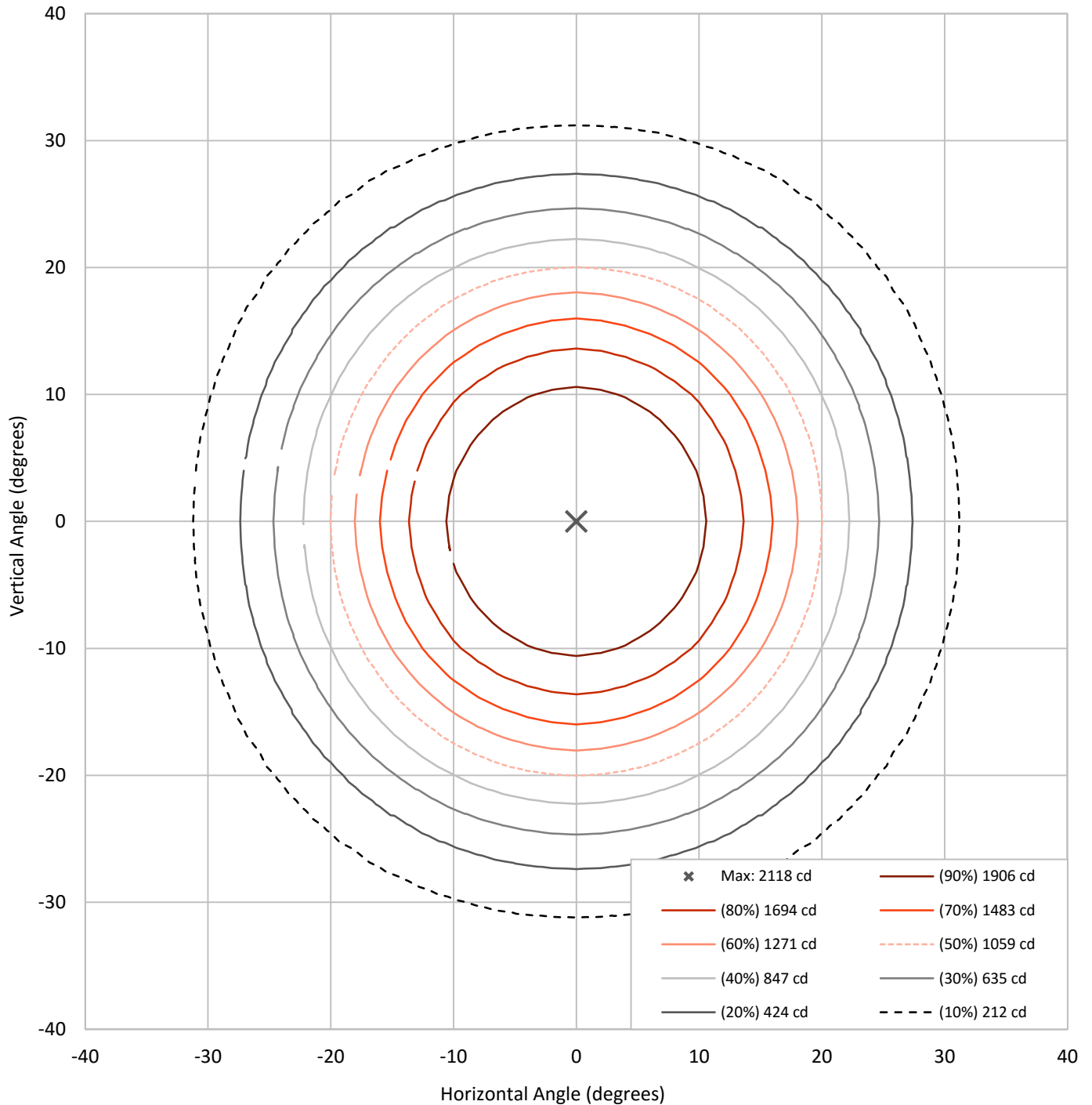
Summary

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	984.1 lumens	Max Intensity:	2118 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	98.4 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:	631.7 lumens	Field Lumens:	908.1 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]-LED4080-F-BK-L1-UNV

Iso-Candela Plot





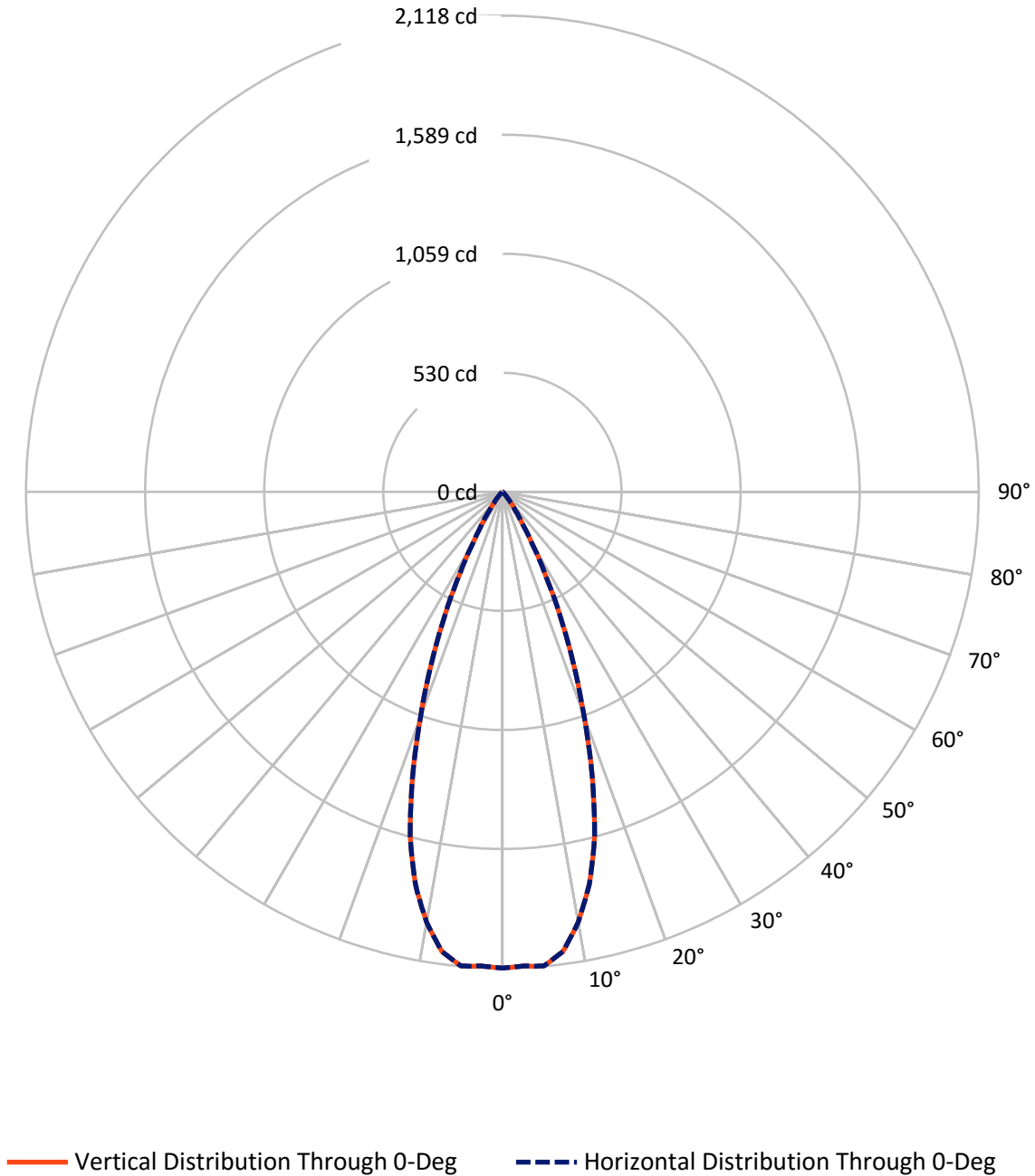
REPORT NUMBER: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-F-BK-L1-UNV

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	
50	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
40		0.0	0.0	0.0	0.2	0.8	2.1	3.4	3.4	2.1	0.8	0.2	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.1	0.7	3.4	10.1	17.4	17.4	10.1	3.4	0.7	0.1	0.0	0.0	0.0	0.0
20		0.0	0.0	0.2	1.8	9.6	28.0	44.1	44.1	28.0	9.6	1.8	0.2	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.3	2.8	16.0	42.8	61.0	61.0	42.8	16.0	2.8	0.3	0.0	0.0	0.0	0.0
0		0.0	0.0	0.3	2.8	16.0	42.8	61.0	61.0	42.8	16.0	2.8	0.3	0.0	0.0	0.0	
-10	0.0	0.0	0.0	0.3	2.8	16.0	42.8	61.0	61.0	42.8	16.0	2.8	0.3	0.0	0.0	0.0	0.0
-20		0.0	0.0	0.2	1.8	9.6	28.0	44.1	44.1	28.0	9.6	1.8	0.2	0.0	0.0	0.0	
-30	0.0	0.0	0.0	0.1	0.7	3.4	10.1	17.4	17.4	10.1	3.4	0.7	0.1	0.0	0.0	0.0	0.0
-40		0.0	0.0	0.0	0.2	0.8	2.1	3.4	3.4	2.1	0.8	0.2	0.0	0.0	0.0	0.0	
-50	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.5	0.3	0.1	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	
-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	
-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

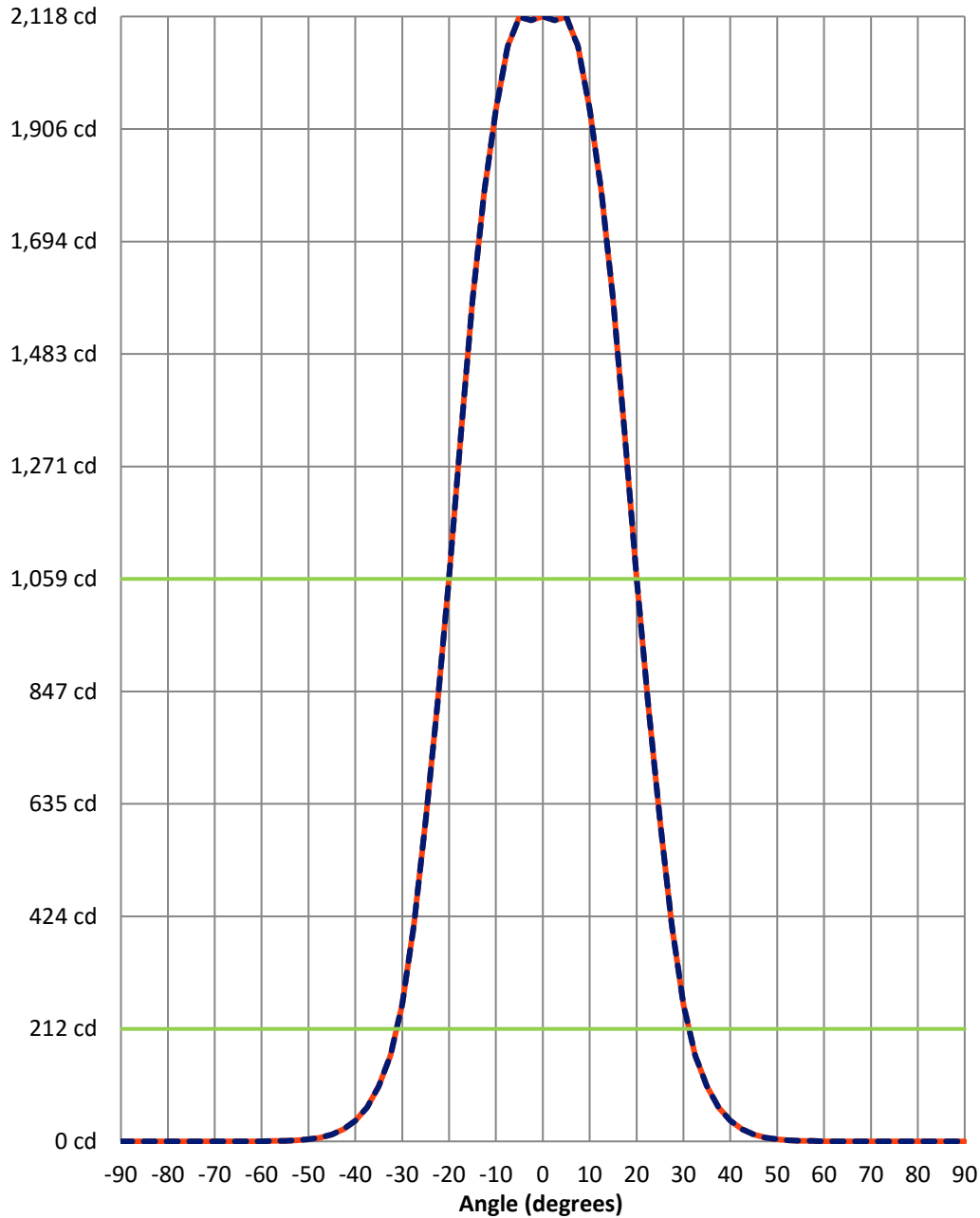
REPORT NUMBER: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-F-BK-L1-UNV

Luminous Intensity Polar Plot



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 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-F-BK-L1-UNV

Luminous Intensity Plot



Beam:
 H Angle: 40.1°
 V Angle: 40.1°
 Lumens: 631.7
 Efficiency: 64.2%

Field:
 H Angle: 62.4°
 V Angle: 62.4°
 Lumens: 908.1
 Efficiency: 92.3%

Spill:
 Lumens: 76
 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: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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	1	1	1
42.5°	0	0	0	0	0	0	0	1	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	5
32.5°	0	0	0	0	0	1	1	2	3	4	6
30°	0	0	0	0	1	1	1	2	4	6	9
27.5°	0	0	0	0	1	1	2	3	5	8	12
25°	0	0	0	1	1	1	2	4	6	11	17
22.5°	0	0	0	1	1	2	3	5	8	13	22
20°	0	0	0	1	1	2	4	6	10	17	27
17.5°	0	0	0	1	1	2	4	7	12	21	34
15°	0	0	1	1	1	3	5	8	15	24	39
12.5°	0	0	1	1	2	3	6	10	17	29	47
10°	0	0	1	1	2	3	6	11	19	32	53
7.5°	0	0	1	1	2	4	6	12	21	35	58
5°	0	0	1	1	2	4	7	12	22	37	61
2.5°	0	0	1	1	2	4	7	13	23	39	63
0°	0	0	1	1	2	4	7	13	23	39	64
-2.5°	0	0	1	1	2	4	7	13	23	39	63
-5°	0	0	1	1	2	4	7	12	22	37	61
-7.5°	0	0	1	1	2	4	6	12	21	35	58
-10°	0	0	1	1	2	3	6	11	19	32	53
-12.5°	0	0	1	1	2	3	6	10	17	29	47
-15°	0	0	1	1	1	3	5	8	15	24	39
-17.5°	0	0	0	1	1	2	4	7	12	21	34
-20°	0	0	0	1	1	2	4	6	10	17	27



REPORT NUMBER: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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	2	3	5	8	13	22
-25°	0	0	0	1	1	1	2	4	6	11	17
-27.5°	0	0	0	0	1	1	2	3	5	8	12
-30°	0	0	0	0	1	1	1	2	4	6	9
-32.5°	0	0	0	0	0	1	1	2	3	4	6
-35°	0	0	0	0	0	1	1	1	2	3	5
-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	1	1	1	1
-45°	0	0	0	0	0	0	0	0	1	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: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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	1	1	1
55°	0	0	0	0	1	1	1	1	1	1	1
52.5°	0	0	1	1	1	1	1	1	1	2	2
50°	1	1	1	1	1	2	2	2	3	3	3
47.5°	1	1	1	2	2	3	4	4	5	6	6
45°	1	2	2	3	4	5	6	7	8	10	11
42.5°	2	3	4	5	6	8	10	12	15	17	19
40°	3	4	6	8	11	13	17	21	24	29	32
37.5°	5	6	9	12	17	22	27	34	39	47	53
35°	7	10	14	19	26	34	42	53	62	74	84
32.5°	10	14	21	29	38	51	63	81	97	114	131
30°	14	21	30	41	56	74	95	120	145	171	201
27.5°	19	29	41	58	80	105	138	173	218	258	303
25°	26	38	56	80	109	147	196	251	316	389	460
22.5°	34	51	74	105	147	204	271	358	458	558	646
20°	42	63	95	138	196	271	373	497	620	739	843
17.5°	53	81	120	173	251	358	497	643	787	928	1055
15°	62	97	145	218	316	458	620	787	957	1121	1279
12.5°	74	114	171	258	389	558	739	928	1121	1317	1490
10°	84	131	201	303	460	646	843	1055	1279	1490	1664
7.5°	93	144	226	346	521	721	936	1167	1410	1624	1789
5°	99	154	244	378	567	776	1005	1256	1506	1717	1874
2.5°	103	160	254	400	595	810	1048	1310	1564	1771	1925
0°	104	162	258	408	604	821	1062	1329	1584	1788	1943
-2.5°	103	160	254	400	595	810	1048	1310	1564	1771	1925
-5°	99	154	244	378	567	776	1005	1256	1506	1717	1874
-7.5°	93	144	226	346	521	721	936	1167	1410	1624	1789
-10°	84	131	201	303	460	646	843	1055	1279	1490	1664
-12.5°	74	114	171	258	389	558	739	928	1121	1317	1490
-15°	62	97	145	218	316	458	620	787	957	1121	1279
-17.5°	53	81	120	173	251	358	497	643	787	928	1055
-20°	42	63	95	138	196	271	373	497	620	739	843



REPORT NUMBER: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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°	34	51	74	105	147	204	271	358	458	558	646
-25°	26	38	56	80	109	147	196	251	316	389	460
-27.5°	19	29	41	58	80	105	138	173	218	258	303
-30°	14	21	30	41	56	74	95	120	145	171	201
-32.5°	10	14	21	29	38	51	63	81	97	114	131
-35°	7	10	14	19	26	34	42	53	62	74	84
-37.5°	5	6	9	12	17	22	27	34	39	47	53
-40°	3	4	6	8	11	13	17	21	24	29	32
-42.5°	2	3	4	5	6	8	10	12	15	17	19
-45°	1	2	2	3	4	5	6	7	8	10	11
-47.5°	1	1	1	2	2	3	4	4	5	6	6
-50°	1	1	1	1	1	2	2	2	3	3	3
-52.5°	0	0	1	1	1	1	1	1	1	2	2
-55°	0	0	0	0	1	1	1	1	1	1	1
-57.5°	0	0	0	0	0	0	0	0	1	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: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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	1	0
55°	1	1	1	1	1	1	1	1	1	1	1
52.5°	2	2	2	2	2	2	2	2	2	1	1
50°	4	4	4	4	4	4	4	3	3	3	2
47.5°	6	7	7	7	7	7	6	6	6	5	4
45°	12	12	13	13	13	12	12	11	10	8	7
42.5°	21	22	23	23	23	22	21	19	17	15	12
40°	35	37	39	39	39	37	35	32	29	24	21
37.5°	58	61	63	64	63	61	58	53	47	39	34
35°	93	99	103	104	103	99	93	84	74	62	53
32.5°	144	154	160	162	160	154	144	131	114	97	81
30°	226	244	254	258	254	244	226	201	171	145	120
27.5°	346	378	400	408	400	378	346	303	258	218	173
25°	521	567	595	604	595	567	521	460	389	316	251
22.5°	721	776	810	821	810	776	721	646	558	458	358
20°	936	1005	1048	1062	1048	1005	936	843	739	620	497
17.5°	1167	1256	1310	1329	1310	1256	1167	1055	928	787	643
15°	1410	1506	1564	1584	1564	1506	1410	1279	1121	957	787
12.5°	1624	1717	1771	1788	1771	1717	1624	1490	1317	1121	928
10°	1789	1874	1925	1943	1925	1874	1789	1664	1490	1279	1055
7.5°	1909	1996	2046	2062	2046	1996	1909	1789	1624	1410	1167
5°	1996	2078	2110	2117	2110	2078	1996	1874	1717	1506	1256
2.5°	2046	2110	2116	2111	2116	2110	2046	1925	1771	1564	1310
0°	2062	2117	2111	2118	2111	2117	2062	1943	1788	1584	1329
-2.5°	2046	2110	2116	2111	2116	2110	2046	1925	1771	1564	1310
-5°	1996	2078	2110	2117	2110	2078	1996	1874	1717	1506	1256
-7.5°	1909	1996	2046	2062	2046	1996	1909	1789	1624	1410	1167
-10°	1789	1874	1925	1943	1925	1874	1789	1664	1490	1279	1055
-12.5°	1624	1717	1771	1788	1771	1717	1624	1490	1317	1121	928
-15°	1410	1506	1564	1584	1564	1506	1410	1279	1121	957	787
-17.5°	1167	1256	1310	1329	1310	1256	1167	1055	928	787	643
-20°	936	1005	1048	1062	1048	1005	936	843	739	620	497



REPORT NUMBER: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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°	721	776	810	821	810	776	721	646	558	458	358
-25°	521	567	595	604	595	567	521	460	389	316	251
-27.5°	346	378	400	408	400	378	346	303	258	218	173
-30°	226	244	254	258	254	244	226	201	171	145	120
-32.5°	144	154	160	162	160	154	144	131	114	97	81
-35°	93	99	103	104	103	99	93	84	74	62	53
-37.5°	58	61	63	64	63	61	58	53	47	39	34
-40°	35	37	39	39	39	37	35	32	29	24	21
-42.5°	21	22	23	23	23	22	21	19	17	15	12
-45°	12	12	13	13	13	12	12	11	10	8	7
-47.5°	6	7	7	7	7	7	6	6	6	5	4
-50°	4	4	4	4	4	4	4	3	3	3	2
-52.5°	2	2	2	2	2	2	2	2	2	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	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: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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	1	0	0	0	0	0	0	0	0
52.5°	1	1	1	1	1	0	0	0	0	0	0
50°	2	2	1	1	1	1	1	0	0	0	0
47.5°	4	3	2	2	1	1	1	1	0	0	0
45°	6	5	4	3	2	2	1	1	1	1	0
42.5°	10	8	6	5	4	3	2	1	1	1	1
40°	17	13	11	8	6	4	3	2	1	1	1
37.5°	27	22	17	12	9	6	5	3	2	1	1
35°	42	34	26	19	14	10	7	5	3	2	1
32.5°	63	51	38	29	21	14	10	6	4	3	2
30°	95	74	56	41	30	21	14	9	6	4	2
27.5°	138	105	80	58	41	29	19	12	8	5	3
25°	196	147	109	80	56	38	26	17	11	6	4
22.5°	271	204	147	105	74	51	34	22	13	8	5
20°	373	271	196	138	95	63	42	27	17	10	6
17.5°	497	358	251	173	120	81	53	34	21	12	7
15°	620	458	316	218	145	97	62	39	24	15	8
12.5°	739	558	389	258	171	114	74	47	29	17	10
10°	843	646	460	303	201	131	84	53	32	19	11
7.5°	936	721	521	346	226	144	93	58	35	21	12
5°	1005	776	567	378	244	154	99	61	37	22	12
2.5°	1048	810	595	400	254	160	103	63	39	23	13
0°	1062	821	604	408	258	162	104	64	39	23	13
-2.5°	1048	810	595	400	254	160	103	63	39	23	13
-5°	1005	776	567	378	244	154	99	61	37	22	12
-7.5°	936	721	521	346	226	144	93	58	35	21	12
-10°	843	646	460	303	201	131	84	53	32	19	11
-12.5°	739	558	389	258	171	114	74	47	29	17	10
-15°	620	458	316	218	145	97	62	39	24	15	8
-17.5°	497	358	251	173	120	81	53	34	21	12	7
-20°	373	271	196	138	95	63	42	27	17	10	6



REPORT NUMBER: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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°	271	204	147	105	74	51	34	22	13	8	5
-25°	196	147	109	80	56	38	26	17	11	6	4
-27.5°	138	105	80	58	41	29	19	12	8	5	3
-30°	95	74	56	41	30	21	14	9	6	4	2
-32.5°	63	51	38	29	21	14	10	6	4	3	2
-35°	42	34	26	19	14	10	7	5	3	2	1
-37.5°	27	22	17	12	9	6	5	3	2	1	1
-40°	17	13	11	8	6	4	3	2	1	1	1
-42.5°	10	8	6	5	4	3	2	1	1	1	1
-45°	6	5	4	3	2	2	1	1	1	1	0
-47.5°	4	3	2	2	1	1	1	1	0	0	0
-50°	2	2	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	1	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: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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°	2	1	1	0	0	0	0	0	0	0	0
25°	2	1	1	1	0	0	0	0	0	0	0
22.5°	3	2	1	1	0	0	0	0	0	0	0
20°	4	2	1	1	0	0	0	0	0	0	0
17.5°	4	2	1	1	0	0	0	0	0	0	0
15°	5	3	1	1	1	0	0	0	0	0	0
12.5°	6	3	2	1	1	0	0	0	0	0	0
10°	6	3	2	1	1	0	0	0	0	0	0
7.5°	6	4	2	1	1	0	0	0	0	0	0
5°	7	4	2	1	1	0	0	0	0	0	0
2.5°	7	4	2	1	1	0	0	0	0	0	0
0°	7	4	2	1	1	0	0	0	0	0	0
-2.5°	7	4	2	1	1	0	0	0	0	0	0
-5°	7	4	2	1	1	0	0	0	0	0	0
-7.5°	6	4	2	1	1	0	0	0	0	0	0
-10°	6	3	2	1	1	0	0	0	0	0	0
-12.5°	6	3	2	1	1	0	0	0	0	0	0
-15°	5	3	1	1	1	0	0	0	0	0	0
-17.5°	4	2	1	1	0	0	0	0	0	0	0
-20°	4	2	1	1	0	0	0	0	0	0	0



REPORT NUMBER: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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°	3	2	1	1	0	0	0	0	0	0	0
-25°	2	1	1	1	0	0	0	0	0	0	0
-27.5°	2	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: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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: P29415 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-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)