

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: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P29416 (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-W-BK-L1-UNV  
Description: LUMIERE LANTERRA 1002 LED ACCENT/PATH/SIGN LUMINAIRE, RECESSED LENS, WIDE FLOOD OPTIC, BLACK HOUSING.  
Light Source: (1) 4000K CCT, 80 CRI LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

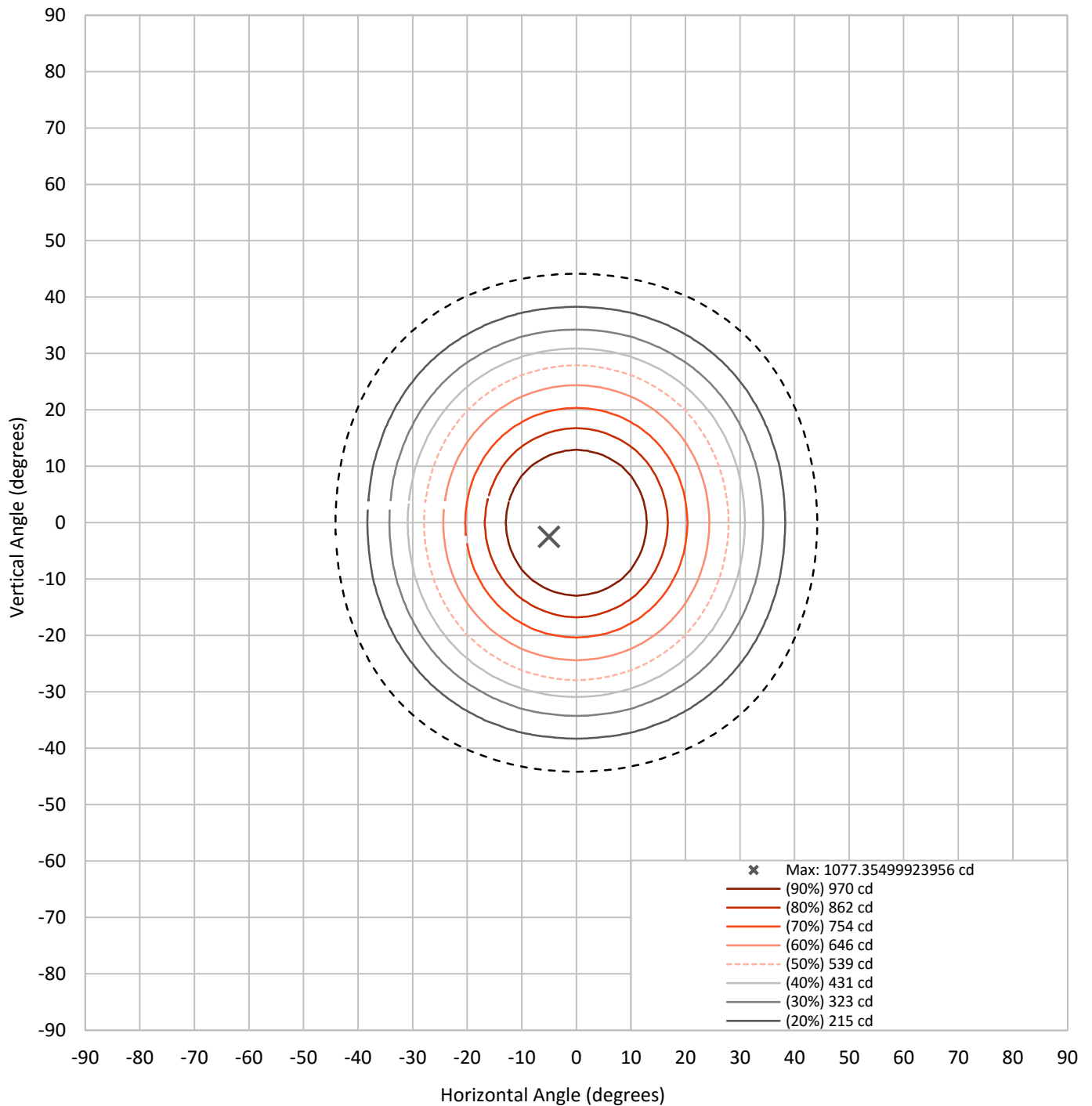
Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	903.4 lumens	Max Intensity:	1077.4 candela
Efficiency:	N/A	Max Intensity Angle:	-5°H x -2.5°V
Efficacy:	90.3 lumens/watt		
Luminous Opening:	Circular (Dia: 0.17' x H: 0')		
Beam Angle (50%):	55.7°H x 55.1°V	Field Angle (10%):	88.2°H x 87.9°V
Beam Lumens:	579.6 lumens	Field Lumens:	871.9 lumens
Beam Efficiency:	64.2%	Field Efficiency:	96.5%

Input Watts (W): 10  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-BK-L1-UNV

### Iso-Candela Plot





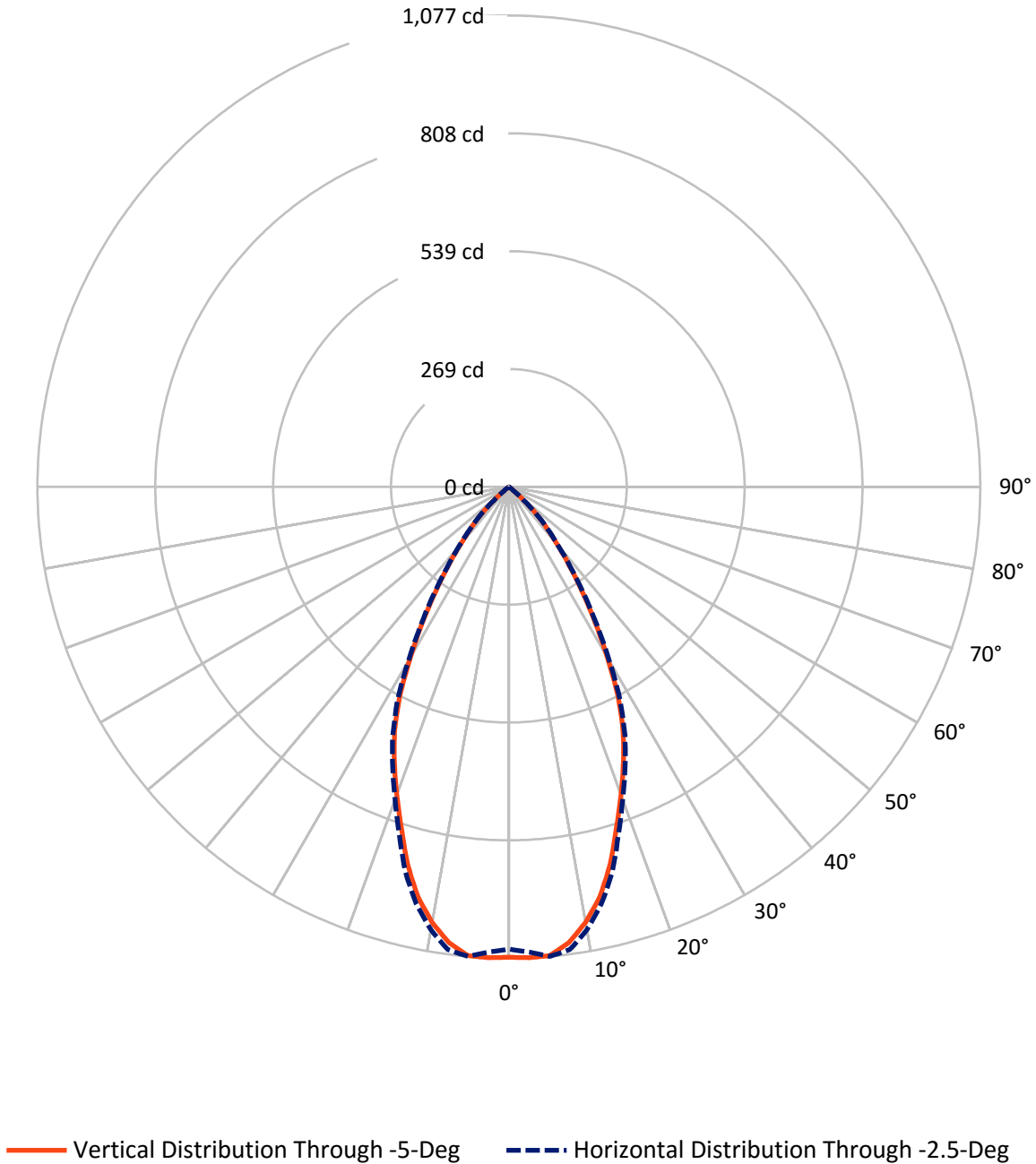
REPORT NUMBER: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-BK-L1-UNV

### Lumen Table

90																			
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				
70																			
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	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0					
40	0.0	0.0	0.0	0.0	0.1	0.8	1.9	2.7	2.7	1.9	0.8	0.1	0.0	0.0	0.0				
30		0.0	0.0	0.1	1.3	4.0	6.9	9.0	9.0	6.9	4.0	1.3	0.1	0.0					
20	0.0	0.0	0.0	0.6	3.6	8.6	14.6	18.3	18.3	14.6	8.6	3.6	0.6	0.0	0.0				
10		0.0	0.0	1.5	5.9	13.7	21.5	26.7	26.7	21.5	13.7	5.9	1.5	0.0					
0	0.0	0.0	0.1	2.0	7.4	16.7	25.9	31.8	31.8	25.9	16.7	7.4	2.0	0.1	0.0				
-10		0.0	0.1	2.0	7.4	16.7	25.9	31.8	31.8	25.9	16.7	7.4	2.0	0.1					
-20	0.0	0.0	0.0	1.5	5.9	13.7	21.5	26.7	26.7	21.5	13.7	5.9	1.5	0.0	0.0				
-30		0.0	0.0	0.6	3.6	8.6	14.6	18.3	18.3	14.6	8.6	3.6	0.6	0.0					
-40	0.0	0.0	0.0	0.1	1.3	4.0	6.9	9.0	9.0	6.9	4.0	1.3	0.1	0.0	0.0				
-50		0.0	0.0	0.0	0.1	0.8	1.9	2.7	2.7	1.9	0.8	0.1	0.0	0.0					
-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	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					
-80																			
-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				
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90

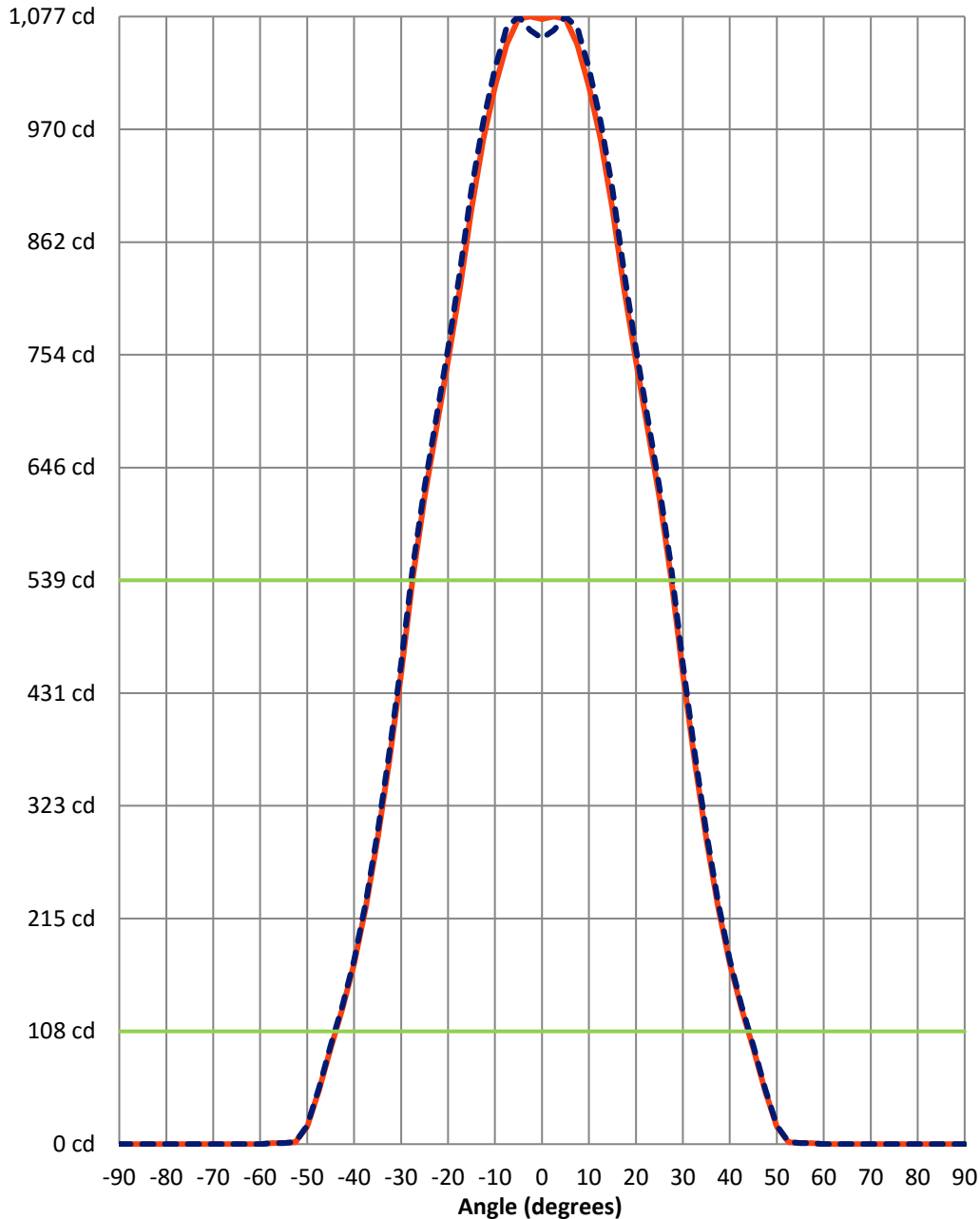
REPORT NUMBER: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-BK-L1-UNV

### Luminous Intensity Polar Plot



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### Luminous Intensity Plot



**Beam:**  
 H Angle: 55.7°  
 V Angle: 55.1°  
 Lumens: 579.6  
 Efficiency: 64.2%

**Field:**  
 H Angle: 88.2°  
 V Angle: 87.9°  
 Lumens: 871.9  
 Efficiency: 96.5%

**Spill:**  
 Lumens: 31.5  
 Efficiency: 3.5%

- Vertical Distribution through -5-Deg
- - Horizontal Distribution through -2.5-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: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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	12
35°	0	0	0	0	0	1	1	1	2	11	26
32.5°	0	0	0	0	0	1	1	2	8	22	47
30°	0	0	0	0	1	1	1	4	16	40	69
27.5°	0	0	0	0	1	1	2	11	30	59	91
25°	0	0	0	1	1	1	4	17	46	78	110
22.5°	0	0	0	1	1	2	9	29	61	96	127
20°	0	0	0	1	1	2	14	42	76	111	145
17.5°	0	0	0	1	1	4	20	53	90	124	162
15°	0	0	1	1	1	8	29	64	101	137	178
12.5°	0	0	1	1	2	11	36	73	111	149	194
10°	0	0	1	1	2	13	43	81	119	159	208
7.5°	0	0	1	1	2	15	48	87	125	167	219
5°	0	0	1	1	2	17	51	91	129	172	227
2.5°	0	0	1	1	2	18	53	94	132	176	231
0°	0	0	1	1	2	18	54	95	133	177	233
-2.5°	0	0	1	1	2	18	53	94	132	176	231
-5°	0	0	1	1	2	17	51	91	129	172	227
-7.5°	0	0	1	1	2	15	48	87	125	167	219
-10°	0	0	1	1	2	13	43	81	119	159	208
-12.5°	0	0	1	1	2	11	36	73	111	149	194
-15°	0	0	1	1	1	8	29	64	101	137	178
-17.5°	0	0	0	1	1	4	20	53	90	124	162
-20°	0	0	0	1	1	2	14	42	76	111	145



REPORT NUMBER: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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	9	29	61	96	127
-25°	0	0	0	1	1	1	4	17	46	78	110
-27.5°	0	0	0	0	1	1	2	11	30	59	91
-30°	0	0	0	0	1	1	1	4	16	40	69
-32.5°	0	0	0	0	0	1	1	2	8	22	47
-35°	0	0	0	0	0	1	1	1	2	11	26
-37.5°	0	0	0	0	0	0	1	1	1	2	12
-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: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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	4	8	11	13
47.5°	1	1	1	2	4	9	14	20	29	36	43
45°	1	2	4	11	17	29	42	53	64	73	81
42.5°	2	8	16	30	46	61	76	90	101	111	119
40°	11	22	40	59	78	96	111	124	137	149	159
37.5°	26	47	69	91	110	127	145	162	178	194	208
35°	49	74	98	119	141	163	184	208	229	249	267
32.5°	74	100	124	149	174	204	231	261	288	313	336
30°	98	124	152	181	215	250	286	321	355	385	412
27.5°	119	149	181	219	260	301	345	386	427	462	494
25°	141	174	215	260	307	357	407	456	503	546	578
22.5°	163	204	250	301	357	414	471	529	577	615	644
20°	184	231	286	345	407	471	538	593	636	672	704
17.5°	208	261	321	386	456	529	593	643	687	727	762
15°	229	288	355	427	503	577	636	687	736	780	823
12.5°	249	313	385	462	546	615	672	727	780	835	888
10°	267	336	412	494	578	644	704	762	823	888	943
7.5°	281	354	433	521	602	667	730	793	863	931	983
5°	292	367	449	541	618	683	749	817	894	960	1010
2.5°	298	374	459	551	628	694	760	832	913	977	1028
0°	300	377	462	555	631	698	764	838	919	982	1034
-2.5°	298	374	459	551	628	694	760	832	913	977	1028
-5°	292	367	449	541	618	683	749	817	894	960	1010
-7.5°	281	354	433	521	602	667	730	793	863	931	983
-10°	267	336	412	494	578	644	704	762	823	888	943
-12.5°	249	313	385	462	546	615	672	727	780	835	888
-15°	229	288	355	427	503	577	636	687	736	780	823
-17.5°	208	261	321	386	456	529	593	643	687	727	762
-20°	184	231	286	345	407	471	538	593	636	672	704



REPORT NUMBER: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-BK-L1-UNV

**CANDELA DISTRIBUTION (continued):**

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	163	204	250	301	357	414	471	529	577	615	644
-25°	141	174	215	260	307	357	407	456	503	546	578
-27.5°	119	149	181	219	260	301	345	386	427	462	494
-30°	98	124	152	181	215	250	286	321	355	385	412
-32.5°	74	100	124	149	174	204	231	261	288	313	336
-35°	49	74	98	119	141	163	184	208	229	249	267
-37.5°	26	47	69	91	110	127	145	162	178	194	208
-40°	11	22	40	59	78	96	111	124	137	149	159
-42.5°	2	8	16	30	46	61	76	90	101	111	119
-45°	1	2	4	11	17	29	42	53	64	73	81
-47.5°	1	1	1	2	4	9	14	20	29	36	43
-50°	1	1	1	1	1	2	2	4	8	11	13
-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: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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°	15	17	18	18	18	17	15	13	11	8	4
47.5°	48	51	53	54	53	51	48	43	36	29	20
45°	87	91	94	95	94	91	87	81	73	64	53
42.5°	125	129	132	133	132	129	125	119	111	101	90
40°	167	172	176	177	176	172	167	159	149	137	124
37.5°	219	227	231	233	231	227	219	208	194	178	162
35°	281	292	298	300	298	292	281	267	249	229	208
32.5°	354	367	374	377	374	367	354	336	313	288	261
30°	433	449	459	462	459	449	433	412	385	355	321
27.5°	521	541	551	555	551	541	521	494	462	427	386
25°	602	618	628	631	628	618	602	578	546	503	456
22.5°	667	683	694	698	694	683	667	644	615	577	529
20°	730	749	760	764	760	749	730	704	672	636	593
17.5°	793	817	832	838	832	817	793	762	727	687	643
15°	863	894	913	919	913	894	863	823	780	736	687
12.5°	931	960	977	982	977	960	931	888	835	780	727
10°	983	1010	1028	1034	1028	1010	983	943	888	823	762
7.5°	1022	1051	1067	1071	1067	1051	1022	983	931	863	793
5°	1051	1075	1077	1075	1077	1075	1051	1010	960	894	817
2.5°	1067	1077	1064	1057	1064	1077	1067	1028	977	913	832
0°	1071	1075	1057	1054	1057	1075	1071	1034	982	919	838
-2.5°	1067	1077	1064	1057	1064	1077	1067	1028	977	913	832
-5°	1051	1075	1077	1075	1077	1075	1051	1010	960	894	817
-7.5°	1022	1051	1067	1071	1067	1051	1022	983	931	863	793
-10°	983	1010	1028	1034	1028	1010	983	943	888	823	762
-12.5°	931	960	977	982	977	960	931	888	835	780	727
-15°	863	894	913	919	913	894	863	823	780	736	687
-17.5°	793	817	832	838	832	817	793	762	727	687	643
-20°	730	749	760	764	760	749	730	704	672	636	593



REPORT NUMBER: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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°	667	683	694	698	694	683	667	644	615	577	529
-25°	602	618	628	631	628	618	602	578	546	503	456
-27.5°	521	541	551	555	551	541	521	494	462	427	386
-30°	433	449	459	462	459	449	433	412	385	355	321
-32.5°	354	367	374	377	374	367	354	336	313	288	261
-35°	281	292	298	300	298	292	281	267	249	229	208
-37.5°	219	227	231	233	231	227	219	208	194	178	162
-40°	167	172	176	177	176	172	167	159	149	137	124
-42.5°	125	129	132	133	132	129	125	119	111	101	90
-45°	87	91	94	95	94	91	87	81	73	64	53
-47.5°	48	51	53	54	53	51	48	43	36	29	20
-50°	15	17	18	18	18	17	15	13	11	8	4
-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: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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°	14	9	4	2	1	1	1	1	0	0	0
45°	42	29	17	11	4	2	1	1	1	1	0
42.5°	76	61	46	30	16	8	2	1	1	1	1
40°	111	96	78	59	40	22	11	2	1	1	1
37.5°	145	127	110	91	69	47	26	12	2	1	1
35°	184	163	141	119	98	74	49	26	11	2	1
32.5°	231	204	174	149	124	100	74	47	22	8	2
30°	286	250	215	181	152	124	98	69	40	16	4
27.5°	345	301	260	219	181	149	119	91	59	30	11
25°	407	357	307	260	215	174	141	110	78	46	17
22.5°	471	414	357	301	250	204	163	127	96	61	29
20°	538	471	407	345	286	231	184	145	111	76	42
17.5°	593	529	456	386	321	261	208	162	124	90	53
15°	636	577	503	427	355	288	229	178	137	101	64
12.5°	672	615	546	462	385	313	249	194	149	111	73
10°	704	644	578	494	412	336	267	208	159	119	81
7.5°	730	667	602	521	433	354	281	219	167	125	87
5°	749	683	618	541	449	367	292	227	172	129	91
2.5°	760	694	628	551	459	374	298	231	176	132	94
0°	764	698	631	555	462	377	300	233	177	133	95
-2.5°	760	694	628	551	459	374	298	231	176	132	94
-5°	749	683	618	541	449	367	292	227	172	129	91
-7.5°	730	667	602	521	433	354	281	219	167	125	87
-10°	704	644	578	494	412	336	267	208	159	119	81
-12.5°	672	615	546	462	385	313	249	194	149	111	73
-15°	636	577	503	427	355	288	229	178	137	101	64
-17.5°	593	529	456	386	321	261	208	162	124	90	53
-20°	538	471	407	345	286	231	184	145	111	76	42



REPORT NUMBER: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-BK-L1-UNV

**CANDELA DISTRIBUTION (continued):**

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
-22.5°	471	414	357	301	250	204	163	127	96	61	29
-25°	407	357	307	260	215	174	141	110	78	46	17
-27.5°	345	301	260	219	181	149	119	91	59	30	11
-30°	286	250	215	181	152	124	98	69	40	16	4
-32.5°	231	204	174	149	124	100	74	47	22	8	2
-35°	184	163	141	119	98	74	49	26	11	2	1
-37.5°	145	127	110	91	69	47	26	12	2	1	1
-40°	111	96	78	59	40	22	11	2	1	1	1
-42.5°	76	61	46	30	16	8	2	1	1	1	1
-45°	42	29	17	11	4	2	1	1	1	1	0
-47.5°	14	9	4	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: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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°	4	1	1	1	0	0	0	0	0	0	0
22.5°	9	2	1	1	0	0	0	0	0	0	0
20°	14	2	1	1	0	0	0	0	0	0	0
17.5°	20	4	1	1	0	0	0	0	0	0	0
15°	29	8	1	1	1	0	0	0	0	0	0
12.5°	36	11	2	1	1	0	0	0	0	0	0
10°	43	13	2	1	1	0	0	0	0	0	0
7.5°	48	15	2	1	1	0	0	0	0	0	0
5°	51	17	2	1	1	0	0	0	0	0	0
2.5°	53	18	2	1	1	0	0	0	0	0	0
0°	54	18	2	1	1	0	0	0	0	0	0
-2.5°	53	18	2	1	1	0	0	0	0	0	0
-5°	51	17	2	1	1	0	0	0	0	0	0
-7.5°	48	15	2	1	1	0	0	0	0	0	0
-10°	43	13	2	1	1	0	0	0	0	0	0
-12.5°	36	11	2	1	1	0	0	0	0	0	0
-15°	29	8	1	1	1	0	0	0	0	0	0
-17.5°	20	4	1	1	0	0	0	0	0	0	0
-20°	14	2	1	1	0	0	0	0	0	0	0



REPORT NUMBER: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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°	9	2	1	1	0	0	0	0	0	0	0
-25°	4	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: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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: P29416 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: 1002-[A1, P1, S1, SU1]-[RW, RI]-LED4080-W-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)