

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: McGRAW-EDISON

Report Number: P23469

Luminaire Tested: **MAQ-B120-7-LED-E1-SN**

Test Date: 03/26/13

**Test Information**

Test Method: LM-79-08  
Report Number: P23469  
Test Lab: INNOVATION CENTER P2  
Test Date: 03/26/13  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: MAQ-B120-7-LED-E1-SN  
Description: MCGRAW-EDISON SIGNLIGHTER FIXTURE STANDARD NARROW OPTIC DIST  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19690.9 lumens  
Efficiency: N/A  
Efficacy: 75.4 lumens/watt  
Luminous Opening: Rectangular (W 1.62' x L: 2' x H: 0')  
IES Classification: Type - Short - Non-Cutoff  
BUG Rating: B0 - U5 - G2

Input Watts (W): 261  
Input Voltage (V): NR  
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

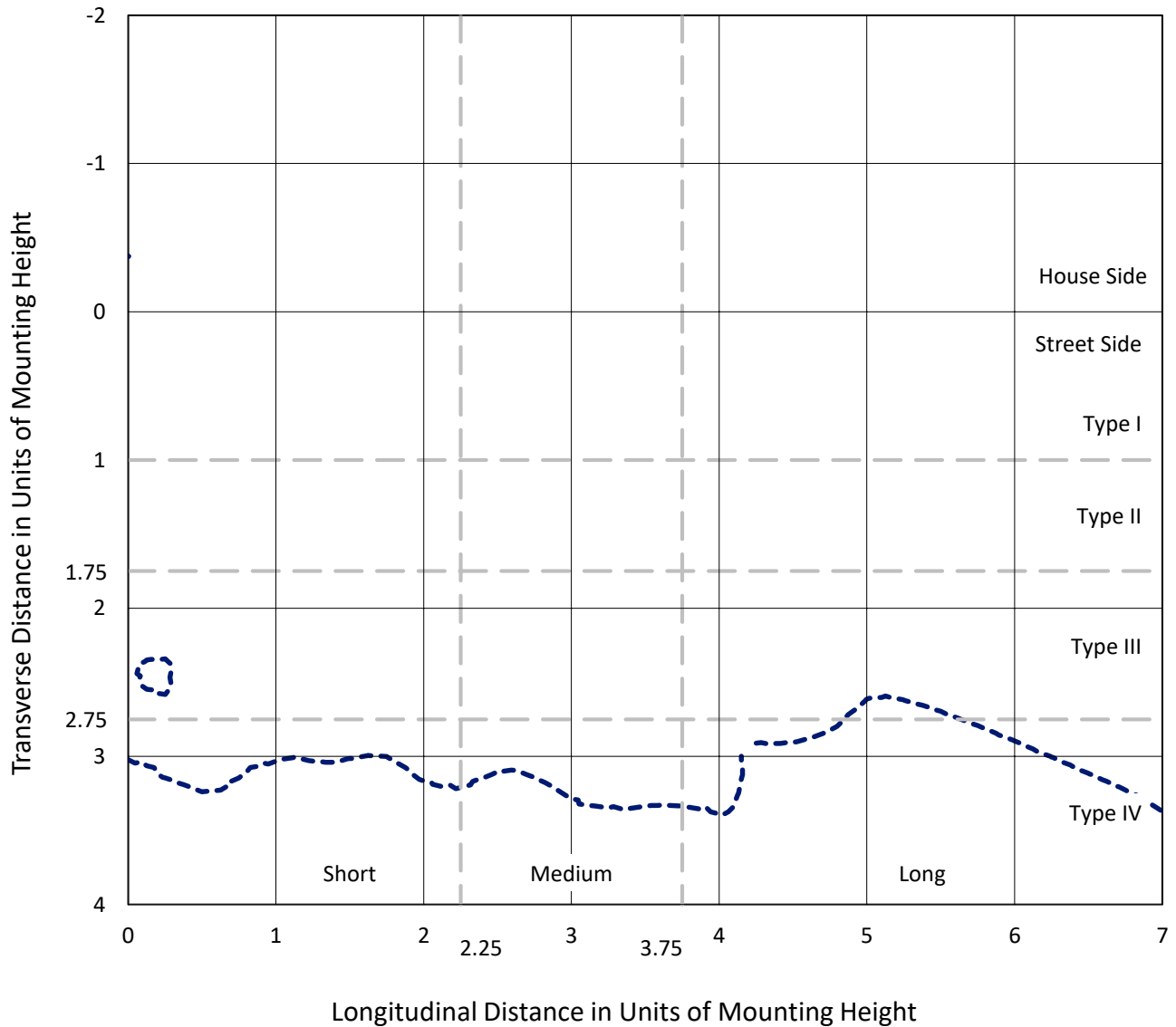


REPORT NUMBER: P23469

CATALOG NUMBER: MAQ-B120-7-LED-E1-SN

### Iso-Footcandle Lines of Horizontal Illumination

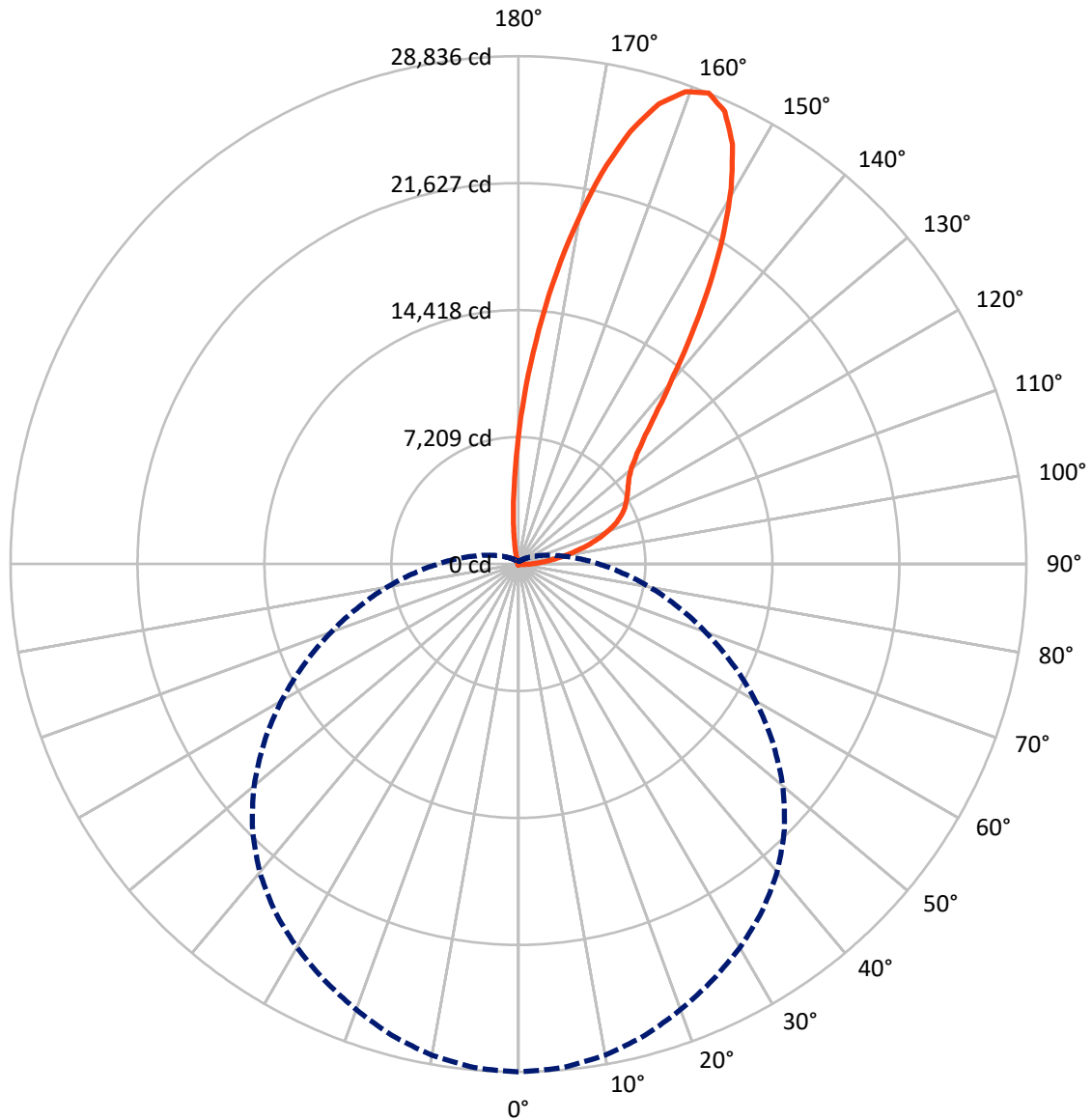
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.1 fc  
 Type - Short - Non-Cutoff

REPORT NUMBER: P23469  
CATALOG NUMBER: MAQ-B120-7-LED-E1-SN

### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral    - - - Horizontal Cone Through 157.5-Deg Vertical

REPORT NUMBER: P23469

CATALOG NUMBER: MAQ-B120-7-LED-E1-SN

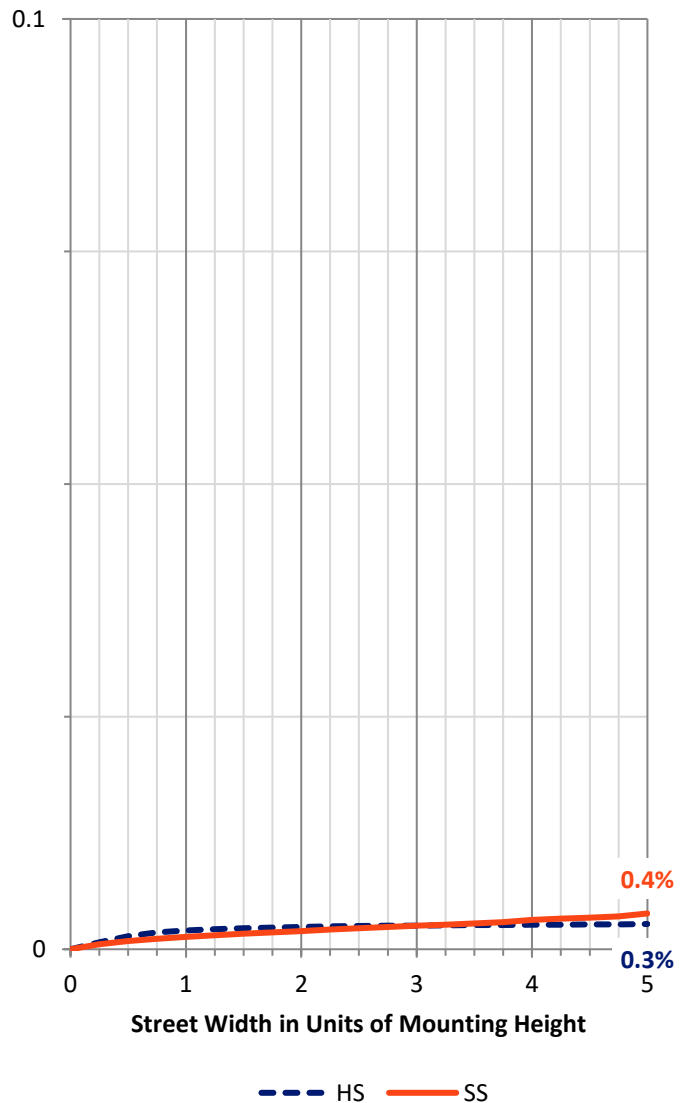
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward  | Total   |
|--------------------|-----------|----------|---------|---------|
| <b>House Side</b>  | Lumens    | 57.3     | 755.9   | 813.2   |
|                    | % Fixture | 0.3      | 3.8     | 4.1     |
| <b>Street Side</b> | Lumens    | 181.4    | 18696.3 | 18877.7 |
|                    | % Fixture | 0.9      | 94.9    | 95.9    |
| <b>Total</b>       | Lumens    | 238.7    | 19452.2 | 19690.9 |
|                    | % Fixture | 1.2      | 98.8    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 2.5     | 0.0       |
| 10°-20°   | 8.5     | 0.0       |
| 20°-30°   | 10.8    | 0.1       |
| 30°-40°   | 12.2    | 0.1       |
| 40°-50°   | 11.0    | 0.1       |
| 50°-60°   | 14.1    | 0.1       |
| 60°-70°   | 20.8    | 0.1       |
| 70°-80°   | 32.5    | 0.2       |
| 80°-90°   | 126.4   | 0.6       |
| 90°-100°  | 466.5   | 2.4       |
| 100°-110° | 1033.3  | 5.2       |
| 110°-120° | 1472.4  | 7.5       |
| 120°-130° | 1776.2  | 9.0       |
| 130°-140° | 2654.3  | 13.5      |
| 140°-150° | 4151.4  | 21.1      |
| 150°-160° | 4438.8  | 22.5      |
| 160°-170° | 2731.4  | 13.9      |
| 170°-180° | 727.9   | 3.7       |
| 0°-90°    | 238.7   | 1.2       |
| 0°-180°   | 19690.9 | 100.0     |



REPORT NUMBER: P23469

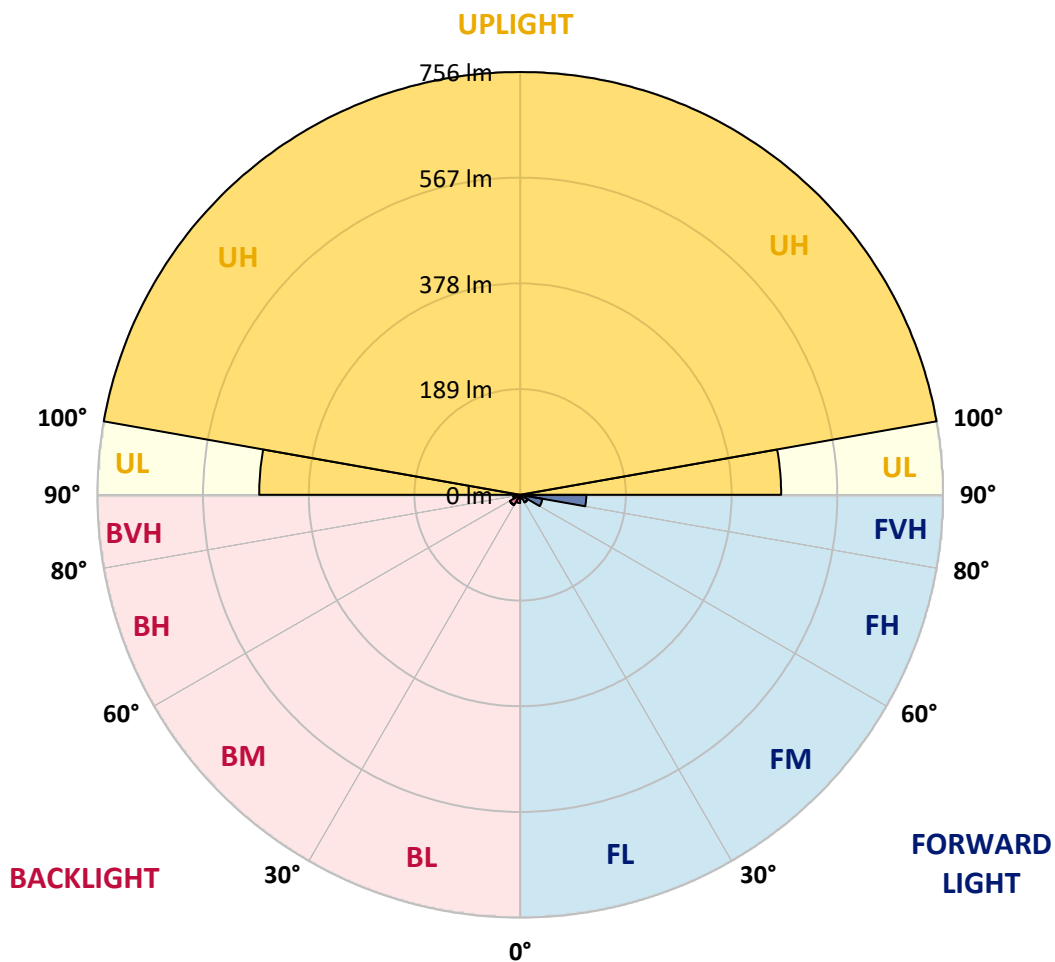
CATALOG NUMBER: MAQ-B120-7-LED-E1-SN

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |         |        |
|----------------|--------|-----------|-------------------------|---------|--------|
|                |        |           | B                       | U       | G      |
| FL (0°-30°)    | 7.1    | 0.0       |                         |         |        |
| FM (30°-60°)   | 15.7   | 0.1       |                         |         |        |
| FH (60°-80°)   | 40.3   | 0.2       |                         |         | G0/660 |
| FVH (80°-90°)  | 118.2  | 0.6       |                         |         | G2/225 |
| BL (0°-30°)    | 14.7   | 0.1       | B0/110                  |         |        |
| BM (30°-60°)   | 21.5   | 0.1       | B0/220                  |         |        |
| BH (60°-80°)   | 12.9   | 0.1       | B0/110                  |         | G0/110 |
| BVH (80°-90°)  | 8.2    | 0.0       |                         |         | G0/10  |
| UL (90°-100°)  | 466.5  | 2.4       |                         | U3/500  |        |
| UH (100°-180°) | 755.9  | 3.8       |                         | U4/1000 |        |

**BUG Rating: B0-U5-G2**

Type Short





REPORT NUMBER: P23469

CATALOG NUMBER: MAQ-B120-7-LED-E1-SN

**CANDELA DISTRIBUTION (FULL):**

|        | 0°   | 5°   | 10°  | 15°  | 20°  | 25°  | 30°  | 35°  | 40°  | 45°  | 50°  |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 0°     | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 19   |
| 2.5°   | 8    | 18   | 8    | 24   | 10   | 16   | 24   | 6    | 16   | 24   | 18   |
| 5°     | 8    | 8    | 4    | 14   | 4    | 16   | 6    | 6    | 28   | 22   | 14   |
| 7.5°   | 4    | 8    | 12   | 8    | 16   | 16   | 26   | 16   | 22   | 22   | 20   |
| 10°    | 0    | 2    | 2    | 10   | 4    | 8    | 16   | 8    | 12   | 14   | 12   |
| 12.5°  | 8    | 0    | 0    | 2    | 2    | 12   | 10   | 12   | 16   | 20   | 10   |
| 15°    | 4    | 4    | 2    | 0    | 0    | 12   | 16   | 4    | 20   | 12   | 12   |
| 17.5°  | 4    | 18   | 12   | 16   | 14   | 16   | 22   | 16   | 26   | 18   | 22   |
| 20°    | 8    | 10   | 6    | 10   | 16   | 14   | 22   | 20   | 18   | 24   | 18   |
| 22.5°  | 12   | 12   | 14   | 16   | 8    | 16   | 8    | 22   | 18   | 32   | 26   |
| 25°    | 0    | 0    | 4    | 0    | 4    | 6    | 12   | 4    | 10   | 18   | 8    |
| 27.5°  | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 4    | 12   | 8    | 4    |
| 30°    | 0    | 10   | 8    | 12   | 4    | 4    | 10   | 12   | 16   | 12   | 12   |
| 32.5°  | 0    | 20   | 8    | 10   | 14   | 12   | 12   | 22   | 18   | 24   | 14   |
| 35°    | 0    | 6    | 6    | 8    | 8    | 8    | 10   | 10   | 22   | 22   | 12   |
| 37.5°  | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 8    | 0    | 2    | 2    |
| 40°    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8    | 0    | 4    | 4    |
| 42.5°  | 0    | 10   | 8    | 4    | 4    | 16   | 12   | 18   | 14   | 20   | 8    |
| 45°    | 4    | 10   | 4    | 8    | 2    | 8    | 12   | 12   | 14   | 16   | 10   |
| 47.5°  | 0    | 4    | 0    | 0    | 2    | 10   | 8    | 8    | 10   | 14   | 6    |
| 50°    | 0    | 2    | 0    | 0    | 0    | 10   | 10   | 4    | 18   | 12   | 2    |
| 52.5°  | 0    | 2    | 0    | 10   | 4    | 4    | 18   | 8    | 16   | 14   | 20   |
| 55°    | 0    | 0    | 0    | 2    | 0    | 10   | 6    | 12   | 14   | 14   | 8    |
| 57.5°  | 8    | 6    | 4    | 14   | 14   | 28   | 14   | 30   | 28   | 22   | 22   |
| 60°    | 0    | 2    | 0    | 16   | 20   | 26   | 26   | 20   | 24   | 20   | 20   |
| 62.5°  | 0    | 2    | 4    | 12   | 12   | 22   | 18   | 18   | 14   | 18   | 8    |
| 65°    | 16   | 38   | 18   | 28   | 26   | 28   | 32   | 34   | 24   | 24   | 24   |
| 67.5°  | 53   | 61   | 41   | 43   | 45   | 43   | 51   | 41   | 43   | 38   | 45   |
| 70°    | 41   | 47   | 43   | 47   | 36   | 36   | 34   | 34   | 28   | 26   | 34   |
| 72.5°  | 57   | 51   | 47   | 49   | 51   | 38   | 41   | 38   | 34   | 20   | 22   |
| 75°    | 61   | 75   | 63   | 83   | 79   | 77   | 61   | 38   | 45   | 41   | 34   |
| 77.5°  | 105  | 99   | 107  | 103  | 105  | 107  | 97   | 85   | 61   | 43   | 38   |
| 80°    | 134  | 150  | 160  | 172  | 170  | 166  | 148  | 118  | 99   | 79   | 57   |
| 82.5°  | 199  | 209  | 229  | 249  | 261  | 249  | 221  | 182  | 140  | 103  | 71   |
| 85°    | 308  | 326  | 353  | 387  | 395  | 381  | 344  | 276  | 211  | 138  | 103  |
| 87.5°  | 494  | 521  | 553  | 598  | 614  | 585  | 517  | 417  | 310  | 221  | 146  |
| 90°    | 750  | 784  | 825  | 891  | 899  | 867  | 772  | 608  | 464  | 314  | 215  |
| 92.5°  | 1090 | 1122 | 1181 | 1262 | 1254 | 1207 | 1090 | 871  | 667  | 460  | 312  |
| 95°    | 1564 | 1594 | 1633 | 1714 | 1700 | 1635 | 1495 | 1224 | 946  | 656  | 427  |
| 97.5°  | 2103 | 2121 | 2160 | 2228 | 2184 | 2095 | 1937 | 1623 | 1270 | 891  | 598  |
| 100°   | 2743 | 2753 | 2751 | 2745 | 2690 | 2575 | 2393 | 2058 | 1641 | 1177 | 786  |
| 102.5° | 3444 | 3438 | 3381 | 3306 | 3189 | 3027 | 2836 | 2510 | 2068 | 1542 | 1029 |
| 105°   | 4177 | 4117 | 3979 | 3801 | 3618 | 3426 | 3209 | 2927 | 2504 | 1951 | 1333 |
| 107.5° | 4862 | 4767 | 4544 | 4264 | 4029 | 3782 | 3535 | 3276 | 2883 | 2324 | 1667 |
| 110°   | 5510 | 5381 | 5071 | 4694 | 4378 | 4096 | 3813 | 3543 | 3173 | 2688 | 2008 |



REPORT NUMBER: P23469

CATALOG NUMBER: MAQ-B120-7-LED-E1-SN

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 6049  | 5920  | 5559  | 5111  | 4747  | 4380  | 4080  | 3760  | 3401  | 2980  | 2346  |
| 115°   | 6495  | 6390  | 6023  | 5529  | 5065  | 4657  | 4309  | 3971  | 3594  | 3217  | 2640  |
| 117.5° | 6860  | 6775  | 6426  | 5907  | 5334  | 4897  | 4518  | 4167  | 3770  | 3408  | 2885  |
| 120°   | 7123  | 7064  | 6777  | 6201  | 5571  | 5085  | 4720  | 4370  | 3957  | 3588  | 3110  |
| 122.5° | 7382  | 7354  | 7099  | 6535  | 5895  | 5393  | 5032  | 4700  | 4275  | 3863  | 3381  |
| 125°   | 7650  | 7648  | 7445  | 6945  | 6329  | 5830  | 5478  | 5125  | 4682  | 4212  | 3715  |
| 127.5° | 7970  | 7994  | 7875  | 7465  | 6941  | 6463  | 6134  | 5764  | 5281  | 4751  | 4196  |
| 130°   | 8444  | 8513  | 8495  | 8191  | 7798  | 7374  | 7103  | 6742  | 6185  | 5553  | 4846  |
| 132.5° | 9218  | 9301  | 9390  | 9238  | 8971  | 8628  | 8428  | 8045  | 7421  | 6649  | 5784  |
| 135°   | 10283 | 10415 | 10603 | 10640 | 10512 | 10245 | 10087 | 9649  | 8965  | 8095  | 7010  |
| 137.5° | 11847 | 12015 | 12232 | 12467 | 12415 | 12293 | 12169 | 11669 | 10895 | 9870  | 8626  |
| 140°   | 13825 | 14015 | 14289 | 14596 | 14765 | 14572 | 14438 | 13891 | 13043 | 11876 | 10429 |
| 142.5° | 16308 | 16444 | 16667 | 16951 | 17013 | 16928 | 16752 | 16177 | 15233 | 13966 | 12332 |
| 145°   | 19092 | 19171 | 19313 | 19450 | 19560 | 19299 | 19039 | 18431 | 17433 | 16037 | 14268 |
| 147.5° | 21912 | 21967 | 21963 | 21971 | 21914 | 21547 | 21219 | 20504 | 19475 | 17953 | 16055 |
| 150°   | 24529 | 24564 | 24406 | 24236 | 24011 | 23500 | 23002 | 22214 | 21069 | 19542 | 17554 |
| 152.5° | 26762 | 26715 | 26460 | 26065 | 25583 | 25003 | 24302 | 23441 | 22208 | 20660 | 18713 |
| 155°   | 28241 | 28105 | 27773 | 27250 | 26634 | 25838 | 25022 | 24067 | 22803 | 21278 | 19404 |
| 157.5° | 28836 | 28701 | 28316 | 27716 | 26924 | 26067 | 25145 | 24096 | 22846 | 21353 | 19594 |
| 160°   | 28447 | 28364 | 27961 | 27315 | 26511 | 25658 | 24625 | 23529 | 22301 | 20903 | 19254 |
| 162.5° | 27321 | 27195 | 26770 | 26164 | 25471 | 24580 | 23547 | 22451 | 21280 | 19949 | 18454 |
| 165°   | 25360 | 25232 | 24817 | 24238 | 23539 | 22872 | 21859 | 20854 | 19777 | 18600 | 17289 |
| 167.5° | 22653 | 22536 | 22157 | 21659 | 21055 | 20536 | 19623 | 18743 | 17826 | 16805 | 15731 |
| 170°   | 19400 | 19345 | 19005 | 18604 | 18101 | 17739 | 16995 | 16286 | 15589 | 14781 | 13912 |
| 172.5° | 16065 | 16008 | 15711 | 15393 | 15006 | 14811 | 14264 | 13729 | 13257 | 12672 | 12036 |
| 175°   | 12654 | 12619 | 12400 | 12176 | 11910 | 11868 | 11485 | 11154 | 10857 | 10496 | 10101 |
| 177.5° | 9509  | 9465  | 9345  | 9187  | 9167  | 9118  | 8877  | 8730  | 8608  | 8438  | 8280  |
| 180°   | 6643  | 6643  | 6643  | 6643  | 6643  | 6643  | 6643  | 6643  | 6643  | 6643  | 6643  |





REPORT NUMBER: P23469

CATALOG NUMBER: MAQ-B120-7-LED-E1-SN

**CANDELA DISTRIBUTION (continued):**

|        | 55°  | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|--------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 0°     | 19   | 19  | 19  | 19  | 19  | 19  | 19  | 19  | 19  | 19   | 19   |
| 2.5°   | 28   | 24  | 28  | 38  | 30  | 34  | 38  | 28  | 36  | 47   | 32   |
| 5°     | 20   | 28  | 24  | 20  | 28  | 30  | 34  | 20  | 32  | 38   | 41   |
| 7.5°   | 32   | 26  | 30  | 43  | 34  | 28  | 43  | 38  | 43  | 49   | 45   |
| 10°    | 20   | 18  | 24  | 30  | 34  | 24  | 34  | 36  | 32  | 41   | 43   |
| 12.5°  | 24   | 30  | 20  | 36  | 32  | 26  | 32  | 34  | 38  | 41   | 34   |
| 15°    | 20   | 22  | 14  | 24  | 26  | 10  | 30  | 32  | 43  | 28   | 32   |
| 17.5°  | 28   | 24  | 28  | 47  | 53  | 32  | 32  | 49  | 47  | 53   | 47   |
| 20°    | 28   | 36  | 26  | 41  | 38  | 36  | 34  | 43  | 43  | 53   | 41   |
| 22.5°  | 30   | 20  | 30  | 36  | 41  | 22  | 30  | 34  | 34  | 47   | 47   |
| 25°    | 12   | 10  | 16  | 24  | 20  | 22  | 18  | 24  | 24  | 28   | 30   |
| 27.5°  | 10   | 12  | 12  | 16  | 16  | 14  | 16  | 20  | 26  | 30   | 20   |
| 30°    | 18   | 18  | 28  | 28  | 24  | 28  | 16  | 30  | 30  | 41   | 34   |
| 32.5°  | 34   | 26  | 24  | 47  | 36  | 32  | 34  | 43  | 45  | 32   | 51   |
| 35°    | 20   | 32  | 28  | 34  | 24  | 24  | 30  | 43  | 28  | 41   | 28   |
| 37.5°  | 2    | 8   | 8   | 8   | 2   | 10  | 12  | 16  | 22  | 10   | 18   |
| 40°    | 0    | 12  | 20  | 6   | 10  | 10  | 18  | 18  | 24  | 12   | 20   |
| 42.5°  | 20   | 22  | 28  | 30  | 22  | 22  | 20  | 26  | 32  | 28   | 36   |
| 45°    | 12   | 16  | 22  | 14  | 14  | 24  | 14  | 18  | 20  | 12   | 22   |
| 47.5°  | 12   | 14  | 14  | 18  | 20  | 12  | 8   | 16  | 16  | 20   | 14   |
| 50°    | 14   | 14  | 28  | 22  | 20  | 14  | 22  | 26  | 20  | 22   | 18   |
| 52.5°  | 10   | 26  | 28  | 28  | 30  | 14  | 16  | 22  | 16  | 26   | 20   |
| 55°    | 14   | 16  | 18  | 18  | 22  | 10  | 16  | 18  | 18  | 24   | 18   |
| 57.5°  | 28   | 26  | 36  | 26  | 28  | 22  | 22  | 30  | 34  | 28   | 32   |
| 60°    | 26   | 26  | 32  | 22  | 32  | 14  | 20  | 24  | 24  | 20   | 26   |
| 62.5°  | 16   | 20  | 14  | 24  | 18  | 8   | 10  | 18  | 18  | 28   | 16   |
| 65°    | 30   | 30  | 22  | 30  | 28  | 12  | 20  | 22  | 22  | 20   | 24   |
| 67.5°  | 32   | 49  | 43  | 43  | 38  | 20  | 32  | 32  | 32  | 38   | 32   |
| 70°    | 26   | 22  | 32  | 30  | 26  | 10  | 14  | 22  | 24  | 16   | 24   |
| 72.5°  | 16   | 26  | 28  | 22  | 18  | 10  | 10  | 12  | 10  | 16   | 16   |
| 75°    | 32   | 38  | 30  | 30  | 22  | 14  | 14  | 16  | 22  | 14   | 4    |
| 77.5°  | 49   | 38  | 47  | 38  | 30  | 24  | 28  | 14  | 22  | 26   | 20   |
| 80°    | 55   | 53  | 51  | 43  | 51  | 26  | 26  | 20  | 24  | 28   | 20   |
| 82.5°  | 65   | 59  | 51  | 41  | 38  | 26  | 30  | 24  | 28  | 24   | 18   |
| 85°    | 79   | 63  | 45  | 41  | 32  | 38  | 22  | 28  | 24  | 28   | 20   |
| 87.5°  | 105  | 69  | 73  | 61  | 59  | 45  | 47  | 32  | 43  | 34   | 32   |
| 90°    | 132  | 95  | 85  | 67  | 63  | 55  | 38  | 38  | 49  | 45   | 30   |
| 92.5°  | 186  | 117 | 87  | 73  | 65  | 45  | 45  | 38  | 47  | 36   | 43   |
| 95°    | 255  | 150 | 111 | 97  | 63  | 49  | 59  | 57  | 45  | 49   | 38   |
| 97.5°  | 355  | 205 | 128 | 93  | 69  | 53  | 47  | 49  | 41  | 51   | 43   |
| 100°   | 472  | 278 | 152 | 107 | 69  | 53  | 43  | 45  | 43  | 43   | 49   |
| 102.5° | 634  | 371 | 209 | 113 | 85  | 69  | 61  | 49  | 65  | 43   | 43   |
| 105°   | 831  | 496 | 280 | 158 | 113 | 83  | 79  | 79  | 59  | 57   | 53   |
| 107.5° | 1041 | 636 | 367 | 199 | 132 | 99  | 85  | 81  | 75  | 77   | 63   |
| 110°   | 1286 | 784 | 458 | 251 | 142 | 99  | 93  | 81  | 77  | 73   | 63   |



REPORT NUMBER: P23469

CATALOG NUMBER: MAQ-B120-7-LED-E1-SN

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°  | 85°  | 90°  | 95°  | 100° | 105° |
|--------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 112.5° | 1554  | 960   | 569   | 314   | 194   | 122  | 93   | 83   | 77   | 81   | 69   |
| 115°   | 1839  | 1153  | 675   | 379   | 219   | 134  | 103  | 83   | 79   | 89   | 63   |
| 117.5° | 2119  | 1355  | 812   | 468   | 265   | 162  | 124  | 105  | 93   | 85   | 85   |
| 120°   | 2370  | 1552  | 914   | 539   | 292   | 168  | 113  | 95   | 87   | 71   | 69   |
| 122.5° | 2656  | 1827  | 1106  | 654   | 385   | 231  | 158  | 136  | 107  | 97   | 85   |
| 125°   | 2964  | 2105  | 1315  | 774   | 460   | 247  | 170  | 136  | 107  | 107  | 83   |
| 127.5° | 3375  | 2443  | 1586  | 936   | 543   | 302  | 182  | 150  | 120  | 103  | 85   |
| 130°   | 3920  | 2921  | 1941  | 1205  | 709   | 403  | 253  | 170  | 138  | 111  | 99   |
| 132.5° | 4662  | 3541  | 2441  | 1556  | 960   | 571  | 342  | 225  | 178  | 150  | 130  |
| 135°   | 5664  | 4307  | 3063  | 2020  | 1270  | 766  | 442  | 278  | 197  | 156  | 128  |
| 137.5° | 7052  | 5442  | 3916  | 2642  | 1756  | 1110 | 669  | 432  | 282  | 215  | 174  |
| 140°   | 8675  | 6835  | 5010  | 3474  | 2338  | 1538 | 972  | 612  | 403  | 271  | 207  |
| 142.5° | 10417 | 8393  | 6353  | 4506  | 3100  | 2052 | 1361 | 875  | 561  | 377  | 267  |
| 145°   | 12163 | 10010 | 7820  | 5751  | 4066  | 2796 | 1858 | 1238 | 829  | 549  | 371  |
| 147.5° | 13873 | 11612 | 9238  | 7105  | 5221  | 3703 | 2502 | 1692 | 1159 | 784  | 531  |
| 150°   | 15354 | 13051 | 10682 | 8403  | 6408  | 4722 | 3286 | 2277 | 1586 | 1088 | 768  |
| 152.5° | 16523 | 14242 | 11857 | 9591  | 7557  | 5768 | 4202 | 2978 | 2111 | 1493 | 1064 |
| 155°   | 17303 | 15079 | 12806 | 10577 | 8537  | 6746 | 5103 | 3778 | 2741 | 1965 | 1438 |
| 157.5° | 17613 | 15543 | 13399 | 11315 | 9351  | 7567 | 5920 | 4560 | 3450 | 2549 | 1906 |
| 160°   | 17463 | 15543 | 13622 | 11708 | 9894  | 8221 | 6623 | 5241 | 4102 | 3134 | 2411 |
| 162.5° | 16865 | 15154 | 13488 | 11815 | 10180 | 8642 | 7170 | 5857 | 4737 | 3740 | 2966 |
| 165°   | 15950 | 14449 | 13022 | 11610 | 10178 | 8847 | 7524 | 6347 | 5296 | 4319 | 3535 |
| 167.5° | 14631 | 13399 | 12210 | 11071 | 9905  | 8768 | 7668 | 6657 | 5699 | 4820 | 4078 |
| 170°   | 13012 | 12097 | 11177 | 10281 | 9347  | 8468 | 7573 | 6775 | 5964 | 5233 | 4572 |
| 172.5° | 11481 | 10735 | 10079 | 9430  | 8756  | 8106 | 7431 | 6823 | 6197 | 5616 | 5093 |
| 175°   | 9785  | 9315  | 8912  | 8527  | 8087  | 7676 | 7212 | 6811 | 6367 | 5938 | 5559 |
| 177.5° | 8164  | 7927  | 7743  | 7597  | 7370  | 7174 | 6943 | 6730 | 6493 | 6266 | 6065 |
| 180°   | 6643  | 6643  | 6643  | 6643  | 6643  | 6643 | 6643 | 6643 | 6643 | 6643 | 6643 |



REPORT NUMBER: P23469

CATALOG NUMBER: MAQ-B120-7-LED-E1-SN

**CANDELA DISTRIBUTION (continued):**

|        | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 0°     | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 19   |
| 2.5°   | 38   | 43   | 32   | 45   | 36   | 22   | 20   | 30   | 22   | 22   | 16   |
| 5°     | 36   | 45   | 30   | 28   | 24   | 32   | 22   | 26   | 16   | 20   | 4    |
| 7.5°   | 45   | 55   | 32   | 55   | 38   | 47   | 32   | 32   | 26   | 32   | 26   |
| 10°    | 36   | 38   | 34   | 45   | 41   | 41   | 32   | 41   | 30   | 20   | 20   |
| 12.5°  | 43   | 36   | 32   | 47   | 36   | 36   | 28   | 36   | 34   | 30   | 34   |
| 15°    | 51   | 43   | 36   | 49   | 38   | 43   | 36   | 45   | 41   | 26   | 34   |
| 17.5°  | 53   | 47   | 45   | 57   | 32   | 45   | 41   | 49   | 45   | 36   | 45   |
| 20°    | 49   | 61   | 45   | 53   | 38   | 51   | 45   | 45   | 47   | 34   | 41   |
| 22.5°  | 57   | 49   | 41   | 49   | 49   | 45   | 41   | 47   | 45   | 43   | 41   |
| 25°    | 34   | 36   | 26   | 30   | 22   | 28   | 20   | 32   | 22   | 22   | 18   |
| 27.5°  | 28   | 26   | 28   | 26   | 22   | 36   | 24   | 24   | 16   | 14   | 12   |
| 30°    | 32   | 38   | 34   | 30   | 30   | 38   | 28   | 32   | 34   | 20   | 22   |
| 32.5°  | 47   | 53   | 43   | 49   | 47   | 47   | 34   | 32   | 43   | 32   | 30   |
| 35°    | 45   | 43   | 28   | 34   | 30   | 36   | 22   | 32   | 30   | 32   | 28   |
| 37.5°  | 18   | 14   | 8    | 20   | 8    | 16   | 10   | 18   | 6    | 8    | 0    |
| 40°    | 20   | 16   | 10   | 22   | 18   | 16   | 8    | 14   | 8    | 6    | 0    |
| 42.5°  | 28   | 36   | 20   | 32   | 30   | 24   | 18   | 26   | 20   | 14   | 6    |
| 45°    | 32   | 26   | 28   | 36   | 24   | 16   | 14   | 20   | 16   | 8    | 6    |
| 47.5°  | 22   | 20   | 16   | 20   | 26   | 14   | 12   | 18   | 4    | 4    | 4    |
| 50°    | 24   | 22   | 18   | 30   | 16   | 16   | 12   | 14   | 12   | 6    | 8    |
| 52.5°  | 24   | 28   | 18   | 28   | 10   | 16   | 12   | 12   | 8    | 6    | 6    |
| 55°    | 14   | 20   | 18   | 20   | 12   | 12   | 12   | 12   | 2    | 4    | 4    |
| 57.5°  | 30   | 26   | 30   | 24   | 16   | 16   | 18   | 18   | 10   | 6    | 10   |
| 60°    | 24   | 24   | 16   | 28   | 18   | 18   | 16   | 20   | 12   | 6    | 6    |
| 62.5°  | 22   | 22   | 10   | 18   | 18   | 4    | 4    | 10   | 4    | 4    | 2    |
| 65°    | 26   | 24   | 16   | 18   | 10   | 2    | 6    | 12   | 8    | 2    | 4    |
| 67.5°  | 34   | 32   | 32   | 32   | 16   | 22   | 16   | 26   | 22   | 10   | 10   |
| 70°    | 16   | 20   | 6    | 20   | 10   | 8    | 8    | 10   | 4    | 8    | 0    |
| 72.5°  | 14   | 14   | 8    | 20   | 8    | 6    | 4    | 8    | 8    | 2    | 0    |
| 75°    | 14   | 14   | 6    | 20   | 10   | 8    | 8    | 4    | 10   | 0    | 6    |
| 77.5°  | 20   | 16   | 10   | 22   | 4    | 8    | 12   | 10   | 10   | 6    | 2    |
| 80°    | 24   | 22   | 18   | 24   | 16   | 10   | 12   | 12   | 8    | 14   | 6    |
| 82.5°  | 24   | 20   | 16   | 24   | 12   | 10   | 12   | 10   | 10   | 10   | 12   |
| 85°    | 28   | 16   | 8    | 16   | 4    | 4    | 8    | 14   | 4    | 4    | 4    |
| 87.5°  | 30   | 24   | 14   | 18   | 12   | 18   | 10   | 8    | 6    | 6    | 12   |
| 90°    | 28   | 26   | 14   | 18   | 16   | 22   | 22   | 12   | 14   | 10   | 14   |
| 92.5°  | 36   | 30   | 28   | 28   | 10   | 22   | 12   | 12   | 22   | 14   | 8    |
| 95°    | 30   | 32   | 20   | 30   | 16   | 20   | 16   | 12   | 18   | 6    | 6    |
| 97.5°  | 32   | 24   | 18   | 24   | 10   | 18   | 8    | 8    | 6    | 12   | 8    |
| 100°   | 32   | 26   | 16   | 20   | 10   | 12   | 2    | 2    | 4    | 0    | 0    |
| 102.5° | 34   | 28   | 12   | 20   | 18   | 18   | 10   | 4    | 2    | 0    | 2    |
| 105°   | 47   | 38   | 32   | 34   | 22   | 22   | 20   | 14   | 4    | 2    | 8    |
| 107.5° | 49   | 43   | 41   | 36   | 24   | 28   | 12   | 18   | 16   | 12   | 8    |
| 110°   | 51   | 49   | 45   | 45   | 24   | 26   | 12   | 12   | 4    | 8    | 8    |



REPORT NUMBER: P23469  
 CATALOG NUMBER: MAQ-B120-7-LED-E1-SN

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

|        | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |        |
|--------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 112.5° | 55   | 51   | 45   | 38   | 18   | 22   | 14   | 16   | 14   | 16   | 4    | 0°     |
| 115°   | 63   | 55   | 45   | 45   | 28   | 30   | 22   | 22   | 16   | 0    | 2    | 2.5°   |
| 117.5° | 69   | 57   | 49   | 47   | 20   | 34   | 26   | 20   | 10   | 10   | 8    | 5°     |
| 120°   | 59   | 47   | 32   | 32   | 24   | 10   | 8    | 8    | 4    | 0    | 0    | 7.5°   |
| 122.5° | 77   | 63   | 57   | 53   | 34   | 32   | 30   | 20   | 16   | 2    | 2    | 10°    |
| 125°   | 79   | 61   | 53   | 53   | 28   | 36   | 22   | 20   | 8    | 4    | 4    | 12.5°  |
| 127.5° | 79   | 69   | 49   | 53   | 32   | 24   | 18   | 8    | 12   | 4    | 0    | 15°    |
| 130°   | 87   | 81   | 53   | 53   | 38   | 45   | 22   | 16   | 16   | 4    | 2    | 17.5°  |
| 132.5° | 120  | 95   | 85   | 79   | 73   | 55   | 47   | 32   | 30   | 30   | 18   | 20°    |
| 135°   | 109  | 85   | 73   | 59   | 53   | 45   | 26   | 24   | 12   | 16   | 6    | 22.5°  |
| 137.5° | 148  | 132  | 111  | 103  | 87   | 81   | 71   | 53   | 51   | 47   | 32   | 25°    |
| 140°   | 164  | 136  | 122  | 113  | 95   | 85   | 79   | 63   | 63   | 59   | 36   | 27.5°  |
| 142.5° | 190  | 158  | 126  | 111  | 95   | 91   | 67   | 71   | 63   | 55   | 43   | 30°    |
| 145°   | 265  | 197  | 158  | 148  | 115  | 111  | 85   | 79   | 79   | 71   | 49   | 32.5°  |
| 147.5° | 369  | 267  | 203  | 190  | 154  | 132  | 124  | 105  | 97   | 93   | 71   | 35°    |
| 150°   | 533  | 373  | 269  | 225  | 182  | 156  | 144  | 130  | 115  | 103  | 97   | 37.5°  |
| 152.5° | 756  | 517  | 375  | 304  | 225  | 203  | 168  | 146  | 138  | 130  | 115  | 40°    |
| 155°   | 1045 | 746  | 539  | 417  | 318  | 271  | 225  | 176  | 168  | 154  | 138  | 42.5°  |
| 157.5° | 1424 | 1051 | 772  | 602  | 472  | 367  | 300  | 257  | 229  | 209  | 178  | 45°    |
| 160°   | 1846 | 1390 | 1055 | 825  | 654  | 508  | 417  | 334  | 290  | 263  | 227  | 47.5°  |
| 162.5° | 2340 | 1815 | 1430 | 1151 | 914  | 739  | 594  | 486  | 409  | 363  | 322  | 50°    |
| 165°   | 2877 | 2322 | 1868 | 1536 | 1278 | 1060 | 879  | 754  | 636  | 561  | 498  | 52.5°  |
| 167.5° | 3422 | 2861 | 2411 | 2064 | 1775 | 1491 | 1301 | 1137 | 999  | 889  | 800  | 55°    |
| 170°   | 3989 | 3446 | 2998 | 2666 | 2348 | 2083 | 1854 | 1686 | 1493 | 1372 | 1266 | 57.5°  |
| 172.5° | 4607 | 4133 | 3730 | 3434 | 3132 | 2869 | 2632 | 2447 | 2255 | 2125 | 2008 | 60°    |
| 175°   | 5202 | 4830 | 4520 | 4295 | 4034 | 3823 | 3614 | 3456 | 3266 | 3160 | 3106 | 62.5°  |
| 177.5° | 5863 | 5654 | 5460 | 5354 | 5198 | 5069 | 4947 | 4848 | 4694 | 4637 | 4619 | 65°    |
| 180°   | 6643 | 6643 | 6643 | 6643 | 6643 | 6643 | 6643 | 6643 | 6643 | 6643 | 6643 | 67.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 70°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 72.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 75°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 77.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 80°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 82.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 85°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 87.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 90°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 92.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 95°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 97.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 100°   |
|        |      |      |      |      |      |      |      |      |      |      |      | 102.5° |
|        |      |      |      |      |      |      |      |      |      |      |      | 105°   |
|        |      |      |      |      |      |      |      |      |      |      |      | 107.5° |
|        |      |      |      |      |      |      |      |      |      |      |      | 110°   |

NUMBER: P23469  
 NUMBER: MAQ-B120-7-LED-E1-SN

REPORT NUMBER: P  
 CATALOG NUMBER:

**DISTRIBUTION (continued):**

| 165° | 170° | 175° | 180° |
|------|------|------|------|
| 19   | 19   | 19   | 19   |
| 10   | 18   | 16   | 24   |
| 18   | 16   | 30   | 12   |
| 32   | 34   | 30   | 32   |
| 18   | 28   | 28   | 41   |
| 30   | 28   | 45   | 36   |
| 24   | 32   | 34   | 45   |
| 41   | 47   | 49   | 45   |
| 47   | 34   | 47   | 53   |
| 41   | 34   | 34   | 49   |
| 30   | 32   | 22   | 32   |
| 10   | 30   | 20   | 24   |
| 24   | 28   | 34   | 36   |
| 34   | 24   | 38   | 36   |
| 22   | 18   | 32   | 36   |
| 2    | 0    | 8    | 4    |
| 0    | 0    | 10   | 4    |
| 0    | 10   | 22   | 28   |
| 8    | 8    | 14   | 16   |
| 0    | 0    | 4    | 8    |
| 12   | 2    | 8    | 12   |
| 8    | 6    | 26   | 12   |
| 0    | 0    | 12   | 4    |
| 14   | 8    | 16   | 4    |
| 6    | 0    | 2    | 8    |
| 8    | 0    | 0    | 0    |
| 0    | 4    | 0    | 12   |
| 12   | 14   | 16   | 20   |
| 8    | 0    | 2    | 0    |
| 0    | 0    | 0    | 8    |
| 0    | 0    | 0    | 8    |
| 2    | 0    | 12   | 16   |
| 6    | 4    | 2    | 16   |
| 2    | 0    | 2    | 0    |
| 2    | 2    | 4    | 0    |
| 12   | 6    | 4    | 12   |
| 4    | 8    | 6    | 16   |
| 6    | 0    | 6    | 8    |
| 10   | 8    | 12   | 4    |
| 2    | 6    | 2    | 0    |
| 2    | 0    | 0    | 0    |
| 0    | 0    | 6    | 0    |
| 0    | 0    | 2    | 0    |
| 8    | 6    | 8    | 8    |
| 4    | 0    | 8    | 8    |

**CANDELA DISTRIBUTION:**

|        | 165° |
|--------|------|
| 112.5° | 4    |
| 115°   | 8    |
| 117.5° | 4    |
| 120°   | 0    |
| 122.5° | 14   |
| 125°   | 2    |
| 127.5° | 4    |
| 130°   | 0    |
| 132.5° | 38   |
| 135°   | 16   |
| 137.5° | 51   |
| 140°   | 43   |
| 142.5° | 38   |
| 145°   | 53   |
| 147.5° | 73   |
| 150°   | 89   |
| 152.5° | 101  |
| 155°   | 136  |
| 157.5° | 176  |
| 160°   | 209  |
| 162.5° | 294  |
| 165°   | 454  |
| 167.5° | 756  |
| 170°   | 1203 |
| 172.5° | 1959 |
| 175°   | 3006 |
| 177.5° | 4538 |
| 180°   | 6643 |

'23469

MAQ-B120-7-LED-E1-SN

**TION (continued):**

| 170° | 175° | 180° |
|------|------|------|
| 2    | 6    | 0    |
| 4    | 4    | 0    |
| 6    | 2    | 12   |
| 0    | 0    | 0    |
| 0    | 0    | 8    |
| 0    | 0    | 0    |
| 0    | 0    | 0    |
| 4    | 0    | 0    |
| 16   | 14   | 12   |
| 10   | 8    | 0    |
| 34   | 36   | 41   |
| 41   | 38   | 41   |
| 34   | 38   | 36   |
| 55   | 53   | 45   |
| 77   | 71   | 81   |
| 89   | 83   | 105  |
| 113  | 103  | 113  |
| 130  | 128  | 142  |
| 174  | 182  | 170  |
| 207  | 205  | 203  |
| 288  | 271  | 267  |
| 454  | 411  | 417  |
| 719  | 697  | 705  |
| 1175 | 1120 | 1126 |
| 1921 | 1835 | 1856 |
| 2982 | 2887 | 2913 |
| 4514 | 4408 | 4477 |
| 6643 | 6643 | 6643 |

(END OF REPORT)