### Pole / Fixture Summary

<table>
<thead>
<tr>
<th>Pole ID</th>
<th>Pole Height</th>
<th>Mtg Height</th>
<th>Fixture Qty</th>
<th>Luminaire Type</th>
<th>Load</th>
<th>Circuit</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1-F2</td>
<td>70'</td>
<td>70'</td>
<td>8</td>
<td>TLC-LED-1500</td>
<td>11.44 kW</td>
<td>B</td>
</tr>
<tr>
<td>F2-F4</td>
<td>87'</td>
<td>87'</td>
<td>2</td>
<td>TLC-LED-600</td>
<td>0.58 kW</td>
<td>C</td>
</tr>
<tr>
<td>P1</td>
<td>71'</td>
<td>70'</td>
<td>8</td>
<td>TLC-LED-1500</td>
<td>11.44 kW</td>
<td>B</td>
</tr>
<tr>
<td>P2</td>
<td>71'</td>
<td>70'</td>
<td>8</td>
<td>TLC-LED-1500</td>
<td>11.44 kW</td>
<td>B</td>
</tr>
<tr>
<td>P3</td>
<td>71'</td>
<td>70'</td>
<td>8</td>
<td>TLC-LED-1500</td>
<td>11.44 kW</td>
<td>B</td>
</tr>
<tr>
<td>P4</td>
<td>71'</td>
<td>70'</td>
<td>8</td>
<td>TLC-LED-1500</td>
<td>11.44 kW</td>
<td>B</td>
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</table>

### Circuit Summary

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Description</th>
<th>Load</th>
<th>Fixture Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Pool</td>
<td>22.4 kW</td>
<td>14</td>
</tr>
<tr>
<td>B</td>
<td>Football</td>
<td>50.36 kW</td>
<td>40</td>
</tr>
<tr>
<td>C</td>
<td>Egress</td>
<td>2.32 kW</td>
<td>4</td>
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### Fixture Type Summary

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Wattage</th>
<th>Luminous</th>
<th>L90</th>
<th>L80</th>
<th>L70</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>TLC-LED-1500</td>
<td>LED 5700K - 75 CRI</td>
<td>1130W</td>
<td>180,000</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>32</td>
</tr>
<tr>
<td>TLC-BT-575</td>
<td>LED 5700K - 75 CRI</td>
<td>575W</td>
<td>52,000</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>8</td>
</tr>
<tr>
<td>TLC-LED-600</td>
<td>LED 5700K - 75 CRI</td>
<td>580W</td>
<td>52,600</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>4</td>
</tr>
<tr>
<td>SHOWLIGHT</td>
<td>1500W MZ</td>
<td>1600W</td>
<td>150,000</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>14</td>
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</table>

### Light Level Summary

### Calculation Grid Summary

<table>
<thead>
<tr>
<th>Calculation Metric</th>
<th>Calculation Metric</th>
<th>Calculation Metric</th>
<th>Calculation Metric</th>
<th>Calculation Metric</th>
<th>Calculation Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid Name</td>
<td>Illumination</td>
<td>Illumination</td>
<td>Illumination</td>
<td>Illumination</td>
<td>Illumination</td>
</tr>
<tr>
<td>Away Bleachers</td>
<td>Horizontal</td>
<td>0.71</td>
<td>4</td>
<td>27</td>
<td>4.64</td>
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<tr>
<td>Bleachers</td>
<td>Horizontal</td>
<td>9.72</td>
<td>2</td>
<td>14</td>
<td>6.34</td>
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<td>Football</td>
<td>Horizontal</td>
<td>53.39</td>
<td>41</td>
<td>63</td>
<td>1.32</td>
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<tr>
<td>Pool</td>
<td>Horizontal</td>
<td>48.6</td>
<td>22</td>
<td>70</td>
<td>3.15</td>
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<tr>
<td>Property Spill</td>
<td>Horizontal</td>
<td>0.01</td>
<td>0</td>
<td>0.09</td>
<td>106.62</td>
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<tr>
<td>Property Spill</td>
<td>Max Candela (by fixture)</td>
<td>1060</td>
<td>285</td>
<td>88.13</td>
<td>30.03</td>
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<tr>
<td>Property Spill</td>
<td>Max Vertical Illuminance Metric</td>
<td>0.03</td>
<td>0</td>
<td>0.30</td>
<td>103.49</td>
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<td>Track Spill</td>
<td>Horizontal</td>
<td>0</td>
<td>0</td>
<td>0.01</td>
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<tr>
<td>Track Spill</td>
<td>Max Candela Metric</td>
<td>488</td>
<td>4.75</td>
<td>7.84</td>
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<tr>
<td>Track Spill</td>
<td>Max Vertical Illuminance Metric</td>
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<td>0</td>
<td>0.03</td>
<td>0.00</td>
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<td>Track</td>
<td>Horizontal</td>
<td>16</td>
<td>0</td>
<td>50</td>
<td>158.24</td>
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EQUIPMENT LIST FOR AREAS SHOWN

<table>
<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>QTY</th>
<th>SIZE</th>
<th>GRADE</th>
<th>ELEVATION</th>
<th>MOUNTING HEIGHT</th>
<th>LUMINAIRE TYPE</th>
<th>QTY / POLE</th>
<th>THIS GRID</th>
<th>OTHER GRIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>P1, P4</td>
<td>2</td>
<td>50'</td>
<td>10'</td>
<td>60'</td>
<td>STL MZ 1500W MZ 5</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>P2-P3</td>
<td>P2-P3</td>
<td>2</td>
<td>70'</td>
<td>10'</td>
<td>80'</td>
<td>STL MZ 1500W MZ 5</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

TOTALS

4

2

ILEUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Scan Average: 48.57
Maximum: 70
Minimum: 22
Avg / Min: 2.19
Max / Min: 3.15
UG (adjacent pts): 1.44
No. of Points: 150

LUMINAIRE INFORMATION

Applied Circuits: A
No. of Luminaires: 14
Total Load: 22.4 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

NOTES:

Estimated original HID lighting for Pool.
**EQUIPMENT LIST FOR AREAS SHOWN**

<table>
<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>Min</th>
<th>Max</th>
<th>Elevation</th>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Height 1</th>
<th>Height 2</th>
<th>Luminaires</th>
<th>QTY</th>
<th>Pole Type</th>
<th>QTY / Pole</th>
<th>Pole 1</th>
<th>Pole 2</th>
<th>Other Grids 1</th>
<th>Other Grids 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F1-F2</td>
<td>70'</td>
<td>80'</td>
<td>10'</td>
<td>25.5'</td>
<td>70'</td>
<td>80'</td>
<td>10'</td>
<td>TLC-BT-575</td>
<td>1</td>
<td>TLC-LED-600</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>F3-F4</td>
<td>80'</td>
<td>-</td>
<td>15.5'</td>
<td>60'</td>
<td>80'</td>
<td>80'</td>
<td>15.5'</td>
<td>TLC-BT-575</td>
<td>1</td>
<td>TLC-LED-600</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**GRID SUMMARY**

- **Name**: Football
- **Size**: 360' x 160'
- **Spacing**: 30.0' x 30.0'
- **Height**: 3.0' above grade

**ILLUMINATION SUMMARY**

- **Guaranteed Average**: 50
- **Scan Average**: 52.88
- **Maximum**: 63
- **Minimum**: 41
- **Avg / Min**: 1.29
- **Guaranteed Max / Min**: 2
- **Max / Min**: 1.53
- **No. of Points**: 72

**LUMINAIRE INFORMATION**

- **Applied Circuits**: B
- **No. of Luminaires**: 40
- **Total Load**: 50.36 kW

**Guaranteed Performance**: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements**: Individual field measurements may vary and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements**: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements**: Results assume ±3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design location.
EQUIPMENT LIST FOR AREAS SHOWN

| Pole Location | Grade | Height | Mounting Height | Luminaires | QTY
|---------------|-------|--------|-----------------|------------|-----
| F1-F2         | 70'   | 25.52' | 70'             | TLC-BT-575 | 2   |
|               |       |        |                 | TLC-LED-600| 1   |
|               |       |        |                 | TLC-LED-1500| 1   |
| F3-F4         | 80'   | 15.52' | 60'             | TLC-BT-575 | 2   |
|               |       |        |                 | TLC-LED-600| 2   |
|               |       |        |                 | TLC-LED-1500| 2   |

**GRID SUMMARY**

- **Name:** Carmel Pool Retro
- **Location:** Carmel, CA
- **Size:** Irregular
- **Spacing:** 30.0' x 30.0'
- **Height:** 3.0' above grade

**ILLUMINATION SUMMARY**

- **Scan Average:** 15.99
- **Maximum:** 52
- **Minimum:** 0
- **Avg / Min:** 38.25
- **Max / Min:** 125.24
- **UG (adjacent pts):** 0.00
- **No. of Points:** 45

- **Applied Circuits:** B
- **No. of Luminaires:** 40
- **Total Load:** 50.36 kW

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
**EQUIPMENT LIST FOR AREAS SHOWN**

<table>
<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>Dim</th>
<th>Elevation</th>
<th>Grade</th>
<th>Elevation</th>
<th>Mounting</th>
<th>Height</th>
<th>Luminaire Type</th>
<th>QTY / Pole</th>
<th>Other Grids</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1-F2</td>
<td>30° 70'</td>
<td>0°</td>
<td>30° 70'</td>
<td>0°</td>
<td>30° 70'</td>
<td>0°</td>
<td>TLC-BT-575</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>F1-F2</td>
<td>30° 70'</td>
<td>0°</td>
<td>30° 70'</td>
<td>0°</td>
<td>30° 70'</td>
<td>0°</td>
<td>TLC-LED-600</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>F1-F2</td>
<td>30° 70'</td>
<td>0°</td>
<td>30° 70'</td>
<td>0°</td>
<td>30° 70'</td>
<td>0°</td>
<td>TLC-LED-1500</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>F3-F4</td>
<td>30° 60'</td>
<td>0°</td>
<td>30° 60'</td>
<td>0°</td>
<td>30° 60'</td>
<td>0°</td>
<td>TLC-BT-575</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>F3-F4</td>
<td>30° 60'</td>
<td>0°</td>
<td>30° 60'</td>
<td>0°</td>
<td>30° 60'</td>
<td>0°</td>
<td>TLC-LED-600</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>F3-F4</td>
<td>30° 60'</td>
<td>0°</td>
<td>30° 60'</td>
<td>0°</td>
<td>30° 60'</td>
<td>0°</td>
<td>TLC-LED-1500</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**GRID SUMMARY**

- **Name:** Bleachers
- **Size:** Irregular
- **Spacing:** 10° x 10°

**ILLUMINATION SUMMARY**

- **Maintained Horizontal Footcandles**
  - **Scan Average:** 9.12
  - **Maximum:** 14
  - **Minimum:** 2
  - **Avg/Min:** 4.00
  - **Max/Min:** 6.34
  - **UG (adjacent pts):** 2.17
  - **No. of Points:** 66
  - **Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

- **Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

- **Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

- **Installation Requirements:** Results assume ±3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
**EQUIPMENT LIST FOR AREAS SHOWN**

<table>
<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>MIN</th>
<th>LOC</th>
<th>ELEVATION</th>
<th>TYPE</th>
<th>MOUNTING</th>
<th>QTY</th>
<th>POLE</th>
<th>THIS GRID</th>
<th>OTHER GRIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F1-F2</td>
<td>60</td>
<td>60</td>
<td>70</td>
<td>TLC-BT-575</td>
<td>26'</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>F3-F4</td>
<td>80</td>
<td>60</td>
<td>60</td>
<td>TLC-BT-575</td>
<td>26'</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**GRID SUMMARY**

- **Name:** Away Bleachers
- **Size:** Irregular
- **Spacing:** 10.0' x 10.0'

**ILLUMINATION SUMMARY**

**MAINTAINED HORIZONTAL FOOTCANDLES**

- **Scan Average:** 10.87
- **Maximum:** 21
- **Minimum:** 4
- **Avg / Min:** 2.40
- **Max / Min:** 4.64
- **UG (adjacent pts):** 1.56
- **No. of Points:** 12

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ±3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
EQUIPMENT LIST FOR AREAS SHOWN

<table>
<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>Min</th>
<th>Max</th>
<th>Elevation</th>
<th>Grade</th>
<th>Elevation</th>
<th>Mounting</th>
<th>Height</th>
<th>Luminaires</th>
<th>QTY</th>
<th>Pole Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>P1-P2</td>
<td>50'</td>
<td>70'</td>
<td>20'</td>
<td>10'</td>
<td>25.5'</td>
<td>TLC-BT-575</td>
<td>70'</td>
<td>TLC-LED-600</td>
<td>1</td>
<td>P1-P2</td>
</tr>
<tr>
<td>2</td>
<td>P3-P4</td>
<td>50'</td>
<td>70'</td>
<td>20'</td>
<td>10'</td>
<td>25.5'</td>
<td>TLC-BT-575</td>
<td>70'</td>
<td>TLC-LED-600</td>
<td>1</td>
<td>P3-P4</td>
</tr>
<tr>
<td>3</td>
<td>P1, P4</td>
<td>50'</td>
<td>70'</td>
<td>20'</td>
<td>10'</td>
<td>25.5'</td>
<td>STL MZ 1500W MZ 5</td>
<td>70'</td>
<td>STL MZ 1500W MZ 5</td>
<td>3</td>
<td>P1, P4</td>
</tr>
<tr>
<td>4</td>
<td>P2-P3</td>
<td>50'</td>
<td>70'</td>
<td>20'</td>
<td>10'</td>
<td>25.5'</td>
<td>STL MZ 1500W MZ 5</td>
<td>70'</td>
<td>STL MZ 1500W MZ 5</td>
<td>4</td>
<td>P2-P3</td>
</tr>
</tbody>
</table>

GRID SUMMARY

Name: Carmel Pool Retrofit
City: Carmel, CA

ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

Scan Average: 0.0111
Maximum: 0.09
Minimum: 0.00
No. of Points: 102

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ±3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
**EQUIPMENT LIST FOR AREAS SHOWN**

<table>
<thead>
<tr>
<th>Pole Location</th>
<th>Pole Luminaires</th>
<th>Location</th>
<th>Elevation</th>
<th>Height</th>
<th>Luminaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1-F2</td>
<td>TLC-BT-575</td>
<td>70'</td>
<td>25.5'</td>
<td>70'</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TLC-LED-600</td>
<td>80'</td>
<td>25.5'</td>
<td>80'</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TLC-LED-1500</td>
<td>80'</td>
<td>25.5'</td>
<td>80'</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25.5'</td>
<td>25.5'</td>
<td>25.5'</td>
<td>2</td>
</tr>
<tr>
<td>F3-F4</td>
<td>TLC-BT-575</td>
<td>80'</td>
<td>-</td>
<td>60'</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TLC-LED-600</td>
<td>80'</td>
<td>-</td>
<td>60'</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>TLC-LED-1500</td>
<td>80'</td>
<td>-</td>
<td>80'</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.5'</td>
<td>15.5'</td>
<td>15.5'</td>
<td>2</td>
</tr>
<tr>
<td>P1, P4</td>
<td>STL-MZ 1500W</td>
<td>50'</td>
<td>60'</td>
<td>60'</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MZ 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2-P3</td>
<td>STL-MZ 1500W</td>
<td>70'</td>
<td>80'</td>
<td>80'</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MZ 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GRID SUMMARY**

- **Name:** Property Spill
- **Spacing:** 30.0' F30
- **Height:** 23.0' above grade

**ILLUMINATION SUMMARY**

- **MAX VERTICAL FOOTCANDLES**
  - Entire Grid:
    - Scan Average: 0.0324
    - Maximum: 0.20
    - Minimum: 0.00
    - No. of Points: 102

- **LUMINAIRE INFORMATION**
  - Applied Circuits: A, B
  - No. of Luminaires: 54
  - Total Load: 72.76 kW

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ±3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
EQUIPMENT LIST FOR AREAS SHOWN

<table>
<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>Elevation</th>
<th>Grade</th>
<th>Elevation</th>
<th>Mounting Height</th>
<th>Luminante Type</th>
<th>QTY / Pole</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1-P2</td>
<td>F2</td>
<td>70'</td>
<td>70'</td>
<td>25.5'</td>
<td>70' TLC-BT-575</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>P3-P4</td>
<td>F2</td>
<td>80'</td>
<td>60'</td>
<td>15.5'</td>
<td>60' TLC-BT-575</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>P1-P2</td>
<td>P1, P4</td>
<td>50'</td>
<td>10'</td>
<td>60'</td>
<td>60' STL  MZ 1500W MZ 5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>P2-P3</td>
<td>P2, P3</td>
<td>70'</td>
<td>10'</td>
<td>80'</td>
<td>80' STL  MZ 1500W MZ 5</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTALS: 58 / 54 / 4

GRID SUMMARY

Name: Property Spill
Spacing: 30.0'
Height: 23.0' above grade

ILLUMINATION SUMMARY

CANDIDA (PER FIXTURE)

Scan Average: 1560.4885
Maximum: 8613.19
Minimum: 286.39
No. of Points: 102

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
Pole Location(s): Pole locations are relative to the reference points.

Dimensions are relative to the reference points.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

Scan Average: 0.0036
Maximum: 0.01
Minimum: 0.00
No. of Points: 80

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
**ILLUMINATION SUMMARY**

- **Name:** Track Spill
- **Spacing:** 30.0’
- **Height:** 3.0’ above grade

**MAX VERTICAL FOOTCANDLES**
- **Scan Average:** 0.0110
- **Maximum:** 0.03
- **Minimum:** 0.00
- **No. of Points:** 80

**EQUIPMENT LIST FOR AREAS SHOWN**

<table>
<thead>
<tr>
<th>Pole</th>
<th>QTY</th>
<th>LOCATION</th>
<th>MIN ELEVATION</th>
<th>MAX ELEVATION</th>
<th>TYPE</th>
<th>GRADE</th>
<th>ELEVATION</th>
<th>MOUNTING HEIGHT</th>
<th>LUMINAIRE TYPE</th>
<th>QTY / POLE</th>
<th>THIS GRID</th>
<th>OTHER GRIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>F1-F2</td>
<td>70</td>
<td>10</td>
<td>TLC-LED-600</td>
<td>80</td>
<td>25.52</td>
<td>70</td>
<td>0</td>
<td>TLC-BT-575</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>F3-F4</td>
<td>60</td>
<td>0</td>
<td>TLC-LED-600</td>
<td>80</td>
<td>15.52</td>
<td>60</td>
<td>0</td>
<td>TLC-BT-575</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**SCALE IN FEET 1: 100**

---

**GRID SUMMARY**

- **Name:** Carmel
- **Dimension(s):** [Grid Details]

**ILLUMINATION SUMMARY**

- **Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document.
- **Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.
- **Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.
- **Installation Requirements:** Results assume ±3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
Carmel Pool Retrofit
Carmel, CA

GRID SUMMARY
Name: Track Spill
Spacing: 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY
CANDIDA (PER FIXTURE)
Scan Average: 467.0515
Maximum: 1263.52
Minimum: 4.79
No. of Points: 80

SUMMARY INFORMATION
Applied Circuits: B
No. of Luminaires: 40
Total load: 50.36 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Pole located(s): - Dimensions are relative to (0,0) reference point(s)

Carmel Pool Retro

EQUIPMENT LIST FOR AREAS SHOWN

<table>
<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>Min</th>
<th>Max</th>
<th>Grade</th>
<th>Elevation</th>
<th>Mounting Height</th>
<th>Luminaires</th>
<th>QTY / Pole</th>
<th>THIS GRID</th>
<th>OTHER GRIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>F1-F2</td>
<td>70'</td>
<td>0'</td>
<td>10'</td>
<td>25.52'</td>
<td>70'</td>
<td>TLC-BT-575</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
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<td>TLC-LED-600</td>
<td>2</td>
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<td>0</td>
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<tr>
<td></td>
<td>P2</td>
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<td>50'</td>
<td>80'</td>
<td>TLC-LED-575</td>
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<td>1</td>
<td>0</td>
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<tr>
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<td></td>
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<td>TLC-LED-600</td>
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<td></td>
<td>TLC-LED-1500</td>
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<td>0</td>
</tr>
<tr>
<td>P3</td>
<td>F3-F4</td>
<td>80'</td>
<td>0'</td>
<td>0'</td>
<td>15.52'</td>
<td>60'</td>
<td>TLC-BT-575</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
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</table>

SCALE IN FEET 1:100
**Carmel Pool Retrofit**
**Carmel, CA**

**EQUIPMENT LAYOUT**

- **Includes:**
  - Football
  - Pool
  - Track

- **Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

- **Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

---

**EQUIPMENT LIST FOR AREAS SHOWN**

<table>
<thead>
<tr>
<th>SET</th>
<th>LOCATION</th>
<th>QTY</th>
<th>GRADE</th>
<th>ELEVATION</th>
<th>MOUNTING HEIGHT</th>
<th>LUMINAIRE TYPE</th>
<th>QTY / POLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F1-F2</td>
<td>2</td>
<td>70'</td>
<td>10'</td>
<td>25.5'</td>
<td>TLC-BT-575</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TLC-LED-600</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>TLC-LED-1500</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>F3-F4</td>
<td>2</td>
<td>80'</td>
<td>-</td>
<td>15.5'</td>
<td>TLC-BT-575</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TLC-LED-600</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>TLC-LED-1500</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>P1, P4</td>
<td>2</td>
<td>50'</td>
<td>10'</td>
<td>60'</td>
<td>STL MZ 1500W</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>P2-P3</td>
<td>2</td>
<td>70'</td>
<td>10'</td>
<td>80'</td>
<td>STL MZ 1500W</td>
<td>4</td>
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</tbody>
</table>

**TOTALS**

- **58**

---

**SINGLE LUMINAIRE AMPERAGE DRAW CHART**

<table>
<thead>
<tr>
<th>Ballast Specifications (Minimum power factor)</th>
<th>Line Amperage Per Luminaire (max draw)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Phase Voltage</td>
<td></td>
</tr>
<tr>
<td>208 V (60)</td>
<td></td>
</tr>
<tr>
<td>220 V (60)</td>
<td></td>
</tr>
<tr>
<td>240 V (60)</td>
<td></td>
</tr>
<tr>
<td>277 V (60)</td>
<td></td>
</tr>
<tr>
<td>347 V (60)</td>
<td></td>
</tr>
<tr>
<td>380 V (60)</td>
<td></td>
</tr>
<tr>
<td>480 V (60)</td>
<td></td>
</tr>
<tr>
<td>TLC-LED-1500</td>
<td>8.5  8.1  7.4  6.4  5.1  4.7  3.7</td>
</tr>
<tr>
<td>TLC-BT-575</td>
<td>3.4  3.2  2.9  2.5  2.0  1.8  1.5</td>
</tr>
<tr>
<td>TLC-LED-600</td>
<td>3.4  3.2  3.0  2.6  2.0  1.9  1.5</td>
</tr>
</tbody>
</table>

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### Lighting System

#### Pole Fixture Summary

<table>
<thead>
<tr>
<th>Pole No</th>
<th>Pole Target</th>
<th>Mtg Height</th>
<th>Pole Qty</th>
<th>Luminaire Type</th>
<th>Load</th>
<th>Circuit</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1-F2</td>
<td>70'</td>
<td>70'</td>
<td>8</td>
<td>TLC-LED-1500</td>
<td>11.44 kW</td>
<td>B</td>
</tr>
<tr>
<td>F2-F4</td>
<td>67'</td>
<td>1</td>
<td>2</td>
<td>TLC-LED-600</td>
<td>0.58 kW</td>
<td>C</td>
</tr>
<tr>
<td>F3-F4</td>
<td>67'</td>
<td>2</td>
<td>2</td>
<td>TLC-LED-1500</td>
<td>11.44 kW</td>
<td>B</td>
</tr>
<tr>
<td>F1</td>
<td>57'</td>
<td>1</td>
<td>1</td>
<td>TLC-LED-600</td>
<td>0.58 kW</td>
<td>C</td>
</tr>
<tr>
<td>P1</td>
<td>57'</td>
<td>2</td>
<td>3</td>
<td>TLC-LED-900</td>
<td>2.67 kW</td>
<td>A</td>
</tr>
<tr>
<td>P2</td>
<td>57'</td>
<td>2</td>
<td>2</td>
<td>TLC-LED-600</td>
<td>0.58 kW</td>
<td>C</td>
</tr>
</tbody>
</table>

#### Circuit Summary

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Description</th>
<th>Load</th>
<th>Fixture Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Pool</td>
<td>9.79 kW</td>
<td>11</td>
</tr>
<tr>
<td>B</td>
<td>Football</td>
<td>50.36 kW</td>
<td>40</td>
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<tr>
<td>C</td>
<td>Egress</td>
<td>2.32 kW</td>
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</table>

#### Fixture Type Summary

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Wattage</th>
<th>Lumen</th>
<th>L90</th>
<th>L80</th>
<th>L70</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLC-LED-1500</td>
<td>LED-1500K - 75 CRI</td>
<td>1430W</td>
<td>160,000</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>32</td>
</tr>
<tr>
<td>TLC-LED-900</td>
<td>LED-1500K - 75 CRI</td>
<td>580W</td>
<td>65,600</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>14</td>
</tr>
<tr>
<td>TLC-BT-575</td>
<td>LED-1500K - 75 CRI</td>
<td>575W</td>
<td>52,000</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
<td>&gt;120,000</td>
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</tr>
</tbody>
</table>

#### Light Level Summary

<table>
<thead>
<tr>
<th>Calculation Grid Summary</th>
<th>Calculation Metric</th>
<th>Calculation Metric</th>
<th>Calculation Metric</th>
<th>Calculation Metric</th>
<th>Calculation Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid Name</td>
<td>Description</td>
<td>10.7</td>
<td>4</td>
<td>4.6</td>
<td>2.67</td>
</tr>
<tr>
<td>Football</td>
<td>Horizontal</td>
<td>9.12</td>
<td>2</td>
<td>14</td>
<td>6.34</td>
</tr>
<tr>
<td>North Bleachers</td>
<td>Horizontal</td>
<td>52.5</td>
<td>35</td>
<td>62</td>
<td>1.75</td>
</tr>
<tr>
<td>South Bleachers</td>
<td>Horizontal</td>
<td>27.3</td>
<td>22</td>
<td>34</td>
<td>1.56</td>
</tr>
<tr>
<td>Pool</td>
<td>Horizontal</td>
<td>41.1</td>
<td>26</td>
<td>52</td>
<td>1.87</td>
</tr>
<tr>
<td>Property Spill</td>
<td>Horizontal</td>
<td>0</td>
<td>0</td>
<td>0.02</td>
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</tr>
<tr>
<td>Property Spill</td>
<td>Max Candela (by Fixture)</td>
<td>4*56</td>
<td>0</td>
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<td>0.00</td>
</tr>
<tr>
<td>Property Spill</td>
<td>Max Vertical Lumens</td>
<td>0.01</td>
<td>0</td>
<td>0.04</td>
<td>0.00</td>
</tr>
<tr>
<td>South Bleachers</td>
<td>34.6</td>
<td>33</td>
<td>36</td>
<td>1.07</td>
<td>1.05</td>
</tr>
<tr>
<td>Track Spill</td>
<td>Horizontal</td>
<td>0</td>
<td>0</td>
<td>0.01</td>
<td>0.00</td>
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<tr>
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<td>Max Candela Metric</td>
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<td>14.4</td>
<td>1364</td>
<td>37.87</td>
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<tr>
<td>Track Spill</td>
<td>Max Vertical Lumens</td>
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<td>0</td>
<td>0.03</td>
<td>306.20</td>
</tr>
<tr>
<td>Track Spill</td>
<td>16.3</td>
<td>0</td>
<td>58</td>
<td>152.22</td>
<td>1.24</td>
</tr>
</tbody>
</table>

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**EQUIPMENT LIST FOR AREAS SHOWN**

<table>
<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>Size</th>
<th>Grade</th>
<th>Elevation</th>
<th>Mounting</th>
<th>Height</th>
<th>Luminaires</th>
<th>QTY</th>
<th>This Grid</th>
<th>Other Grids</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>P1</td>
<td>50'</td>
<td>10'</td>
<td>60'</td>
<td>TLC-LED-900</td>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>P2</td>
<td>50'</td>
<td>10'</td>
<td>60'</td>
<td>TLC-LED-900</td>
<td>3</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>P3-P4</td>
<td>70'</td>
<td>-10'</td>
<td>60'</td>
<td>TLC-LED-900</td>
<td>3</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
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</tbody>
</table>

**GRID SUMMARY**

Name: Pool
Size: 162' x 110'
Spacing: 10.0' x 10.0'
Height: 3.0' above grade

**ILLUMINATION SUMMARY**

**Maintained Horizontal Footcandles**

Guaranteed Average: 40
Scan Average: 41.13
Maximum: 52
Minimum: 26
Avg / Min: 1.57

Guaranteed Max / Min: 2
Max / Min: 1.97
No. of Points: 150

**UG (adjacent pts):** 1.38

**No. of Luminaire:** 11
**Total Load:** 9.79 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

---

**ILLUMINATION SUMMARY**

**Enlighten Your World.**
We Make It Happen.

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**EQUIPMENT LIST FOR AREAS SHOWN**

<table>
<thead>
<tr>
<th>Pole</th>
<th>QTY</th>
<th>LOCATION</th>
<th>SIZE</th>
<th>GRADE</th>
<th>ELEVATION</th>
<th>MOUNTING HEIGHT</th>
<th>LUMINAIRE TYPE</th>
<th>QTY / POLE</th>
<th>THIS GRID</th>
<th>OTHER GRIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>1</td>
<td></td>
<td>50'</td>
<td>10'</td>
<td>60'</td>
<td>6.0' above grade</td>
<td>TLC-LED-900</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>P2</td>
<td>2</td>
<td></td>
<td>50'</td>
<td>10'</td>
<td>60'</td>
<td>6.0' above grade</td>
<td>TLC-LED-900</td>
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<tr>
<td>P3-P4</td>
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<td></td>
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<td>6.0' above grade</td>
<td>TLC-LED-900</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**GRID SUMMARY**

**Name:** North Bleachers  
**Size:** 162' x 110'  
**Spacing:** 10.0' x 10.0'  
**Height:** 6.0' above grade

**ILLUMINATION SUMMARY**

**MAINTAINED HORIZONTAL FOOTCANDLES**

**Scan Average:** 27.34  
**Maximum:** 34  
**Minimum:** 22  
**Avg / Min:** 1.26  
**Max / Min:** 1.58  
**UG (adjacent pts):** 0.00  
**No. of Points:** 6

**LUMINAIRE INFORMATION**

**Applied Circuits:** A  
**No. of Luminaires:** 11  
**Total Load:** 9.79 kW

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
**ENGINEERED DESIGN**

By: Bryce Miles · File #216273B · Pool LED and Football LED · 25-Jan-22

---

### EQUIPMENT LIST FOR AREAS SHOWN

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<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>Size</th>
<th>Grade</th>
<th>Elevation</th>
<th>Mounting</th>
<th>Height</th>
<th>Luminaires</th>
<th>QTY</th>
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<th>OTHER GRIDS</th>
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<tbody>
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<td>TLC-LED-900</td>
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</tr>
<tr>
<td>P2</td>
<td></td>
<td>50'</td>
<td>10'</td>
<td>60'</td>
<td>TLC-LED-900</td>
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<tr>
<td>P3-P4</td>
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<th>Grade</th>
<th>Elevation</th>
<th>Mounting</th>
<th>Height</th>
<th>Luminaires</th>
<th>QTY</th>
<th>THIS GRID</th>
<th>OTHER GRIDS</th>
</tr>
</thead>
</table>

---

**SCALE IN FEET 1: 30**

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**GRID SUMMARY**

Name: South Bleachers
Size: 30' x 110'
Spacing: 10' x 10'
Height: 5.0' above grade

---

**ILLUMINATION SUMMARY**

**MAINTAINED HORIZONTAL FOOTCANDLES**

Scan Average: 34.56
Minimum: 30
Maximum: 36
Avg / Min: 1.03
Max / Min: 1.07
UG (adjacent pts): 0.00
No. of Points: 6

**LUMINAIRE INFORMATION**

Applied Circuits: A
No. of Luminaires: 11
Total Load: 9.79 kW

---

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperages, Draw Chart and/or the “Musco Control System Summary” for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
EQUIPMENT LIST FOR AREAS SHOWN

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<th>Location</th>
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<th>DESIGN</th>
<th>MOUNT HEIGHT</th>
<th>LUMINAIRE TYPE</th>
<th>TOTAL QTY / POLE</th>
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<tbody>
<tr>
<td>1</td>
<td>F1-F2</td>
<td>70'</td>
<td>60'</td>
<td>TLC-BT-575</td>
<td>2</td>
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<tr>
<td>2</td>
<td>F3-F4</td>
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<td>TLC-BT-575</td>
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<td>TLC-LED-600</td>
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<td>0</td>
<td>1</td>
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</tbody>
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GRID SUMMARY

Name: Football
Size: 360' x 160'
Spacing: 30.0' x 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

Guaranteed Average: 50
Scan Average: 52.46
Maximum: 62
Minimum: 35
Avg / Min: 1.48

UG (adjacent pts): 1.37
No. of Points: 72

LUMINAIRE INFORMATION

Applied Circuits: B
No. of Luminaires: 40
Total Load: 50.36 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% normal voltage at line side of the driver and structures located within 3 feet (1m) of design location.
EQUIPMENT LIST FOR AREAS SHOWN

<table>
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<tr>
<th>Pole</th>
<th>Location</th>
<th>Size</th>
<th>Grade</th>
<th>Elevation</th>
<th>Mounting</th>
<th>Height</th>
<th>Luminaire Type</th>
<th>QTY</th>
<th>POLE</th>
<th>THIS</th>
<th>OTHER</th>
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</thead>
<tbody>
<tr>
<td>F1</td>
<td>F1-F2</td>
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<td>10'</td>
<td>25.52'</td>
<td>70&quot;</td>
<td>80'</td>
<td>TLC-BT-575</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F2</td>
<td>F1-F2</td>
<td>70&quot;</td>
<td>0'</td>
<td>15.52'</td>
<td>60'</td>
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<td>TLC-LED-600</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
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<td>80'</td>
<td>TLC-LED-600</td>
<td>2</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

GRID SUMMARY

Name: Track
Size: Irregular
Spacing: 30.0' x 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

Ensemble Scan Average: 16.29
Maximum: 55
Minimum: 0
Avg / Min: 48.46
Max / Min: 162.22
UG (adjacent pts): 0.00
No. of Points: 45

LUMINAIRE INFORMATION

Applied Circuits: B
No. of Luminaires: 40
Total Load: 50.36 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ±3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
**GRID SUMMARY**

- **Name:** Bleachers
- **Size:** Irregular
- **Spacing:** 10.0' x 10.0'

**ILLUMINATION SUMMARY**

- **Maintained Horizontal Footcandles**
  - **Scan Average:** 9.32
  - **Maximum:** 14
  - **Minimum:** 2
  - **Avg / Min:** 4.00
  - **Max / Min:** 6.34
  - **UG (adjacent pts):** 2.17
  - **Nos. of Points:** 66

**LUMINAIRE INFORMATION**

- **Applied Circuits:** C
- **No. of Luminaires:** 4
- **Total Load:** 2.32 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
EQUIPMENT LIST FOR AREAS SHOWN

<table>
<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>Min</th>
<th>Max</th>
<th>Elevation</th>
<th>Size</th>
<th>Grade</th>
<th>Elev.</th>
<th>Mounting</th>
<th>Height</th>
<th>Luminare Type</th>
<th>QTY / Pole</th>
<th>THIS Grid</th>
<th>Other Grids</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>F1-F2</td>
<td>70'</td>
<td>80'</td>
<td>10'</td>
<td>70'</td>
<td>10'</td>
<td>25.52'</td>
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<td>1</td>
<td>2</td>
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<tr>
<td>2</td>
<td>F3-F4</td>
<td>80'</td>
<td>0'</td>
<td>15.52'</td>
<td>60'</td>
<td>0'</td>
<td>15.52'</td>
<td>TLC-BT-575</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

TOTALS: 44

Carmel Pool Retrofit
Carmel, CA

GRID SUMMARY
Name: Away Bleachers
Size: Irregular
Spacing: 10.0' x 10.0'

ILLUMINATION SUMMARY
MAINTAINED HORIZONTAL FOOTCANDLES
Entire Grid
Scan Average: 10.87
Minimum: 21
Maximum: 64
Avg / Min: 2.40
Max / Min: 4.64
UG (adjacent pts): 1.56
No. of Points: 12

LUMINAIRE INFORMATION
Applied Circuits: C
No. of Luminaires: 4
Total Load: 2.32 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Pole-located; dimensions are relative to 0,0 reference point(s)
### EQUIPMENT LIST FOR AREAS SHOWN

<table>
<thead>
<tr>
<th>Pole</th>
<th>Location</th>
<th>Min. to Grid</th>
<th>Elevation</th>
<th>Gantry Code</th>
<th>Luminaire Type</th>
<th>Quantity</th>
<th>Pole</th>
<th>Site</th>
<th>This</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>F1-F2</td>
<td>70'</td>
<td>10'</td>
<td>25.5'</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F2</td>
<td>F3-F4</td>
<td>60'</td>
<td>15.5'</td>
<td>25.5'</td>
<td>TLC-LED-600</td>
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</tr>
</tbody>
</table>

### GRID SUMMARY

- **Name:** Property Spill
- **Spacing:** 30.0'
- **Height:** 23.0' above grade

### ILLUMINATION SUMMARY

- **Scan Average:** 0.0022
- **Maximum:** 0.02
- **Minimum:** 0.00
- **No. of Points:** 102

### LUMINAIRE INFORMATION

- **Applied Circuits:** A, B
- **No. of Luminaires:** 51
- **Total Load:** 60.15 kW

### Guaranteed Performance:

The ILLUMINATION described above is guaranteed per your Musco Warranty document.

### Field Measurements:

Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

### Electrical System Requirements:

Refer to Amperage Draw Chart and the "Musco Control System Summary" for electrical sizing.

### Installation Requirements:

Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

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<th>Location</th>
<th>Min Elevation</th>
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<th>Height</th>
<th>Type</th>
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<td>2</td>
<td>F3-F4</td>
<td>25'</td>
<td>50'</td>
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<td>F3-F4</td>
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<td>0'</td>
<td>50'</td>
<td>3</td>
<td>TLC-LED-600</td>
</tr>
</tbody>
</table>

GRID SUMMARY

Name: Property Spill
Spacing: 30.0' above grade

ILLUMINATION SUMMARY

Max Vertical Footcandles
Scan Average: 0.0067
Maximum: 0.04
Minimum: 0.00
No. of Points: 102

LUMINAIRE INFORMATION
Applied Circuits: A, B
No. of Luminaires: 51
Total Load: 60.15 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ±3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
### Equipment List for Areas Shown

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<th>QTY</th>
<th>Location</th>
<th>Size</th>
<th>Grade</th>
<th>Elevation</th>
<th>Mounting Height</th>
<th>Luminaires Type</th>
<th>QTY / Pole</th>
</tr>
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<tbody>
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<td>F3-F4</td>
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</tbody>
</table>

**Total:**
- QTY: 55
- Luminaires Type: TLC-LED-600, TLC-LED-1500, TLC-BT-575
- QTY / Pole: 51

### Grid Summary

- Name: Property Spill
- Spacing: 30.0'
- Height: 23.0' above grade

### Illumination Summary

**Candela (per fixture)**
- Scan Average: 490.2136
- Maximum: 1837.45
- Minimum: 0.00
- No. of Points: 102

**Luminaires Information**
- Applied Circuits: A, B
- No. of Luminaires: 51
- Total Load: 60.15 kW

**Guaranteed Performance:** The Illumination described above is guaranteed per your Musco Warranty document.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
EQUIPMENT LIST FOR AREAS SHOWN

<table>
<thead>
<tr>
<th>Pole Location</th>
<th>QTY</th>
<th>LOCATION</th>
<th>SIZE</th>
<th>Grade</th>
<th>Elevation</th>
<th>Mounting Height</th>
<th>Luminaires Type</th>
<th>QTY/Pole</th>
<th>This Grid</th>
<th>Other Grids</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>2</td>
<td>F1-F2</td>
<td>70'</td>
<td>10'</td>
<td>25.52'</td>
<td>70'</td>
<td>TLC-BT-575</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>F2</td>
<td>1</td>
<td>F1-F2</td>
<td>70'</td>
<td>10'</td>
<td>25.52'</td>
<td>70'</td>
<td>TLC-LED-600</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>F3</td>
<td>1</td>
<td>F3-F4</td>
<td>80'</td>
<td>0'</td>
<td>15.52'</td>
<td>60'</td>
<td>TLC-BT-575</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>F4</td>
<td>1</td>
<td>F3-F4</td>
<td>80'</td>
<td>0'</td>
<td>15.52'</td>
<td>60'</td>
<td>TLC-LED-600</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

GRID SUMMARY

Name: Track Spill
Spacing: 30.0’
Height: 3.0’ above grade

ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

Enitre Grid
Scan Average: 0.0037
Maximum: 0.01
Minimum: 0.00
No. of Points: 80

LUMINAIRE INFORMATION

Applied Circuits: B
No. of Luminaires: 40
Total Load: 50.36 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and the “Musco Control System Summary” for electrical sizing.

Installation Requirements: Results assume ±3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
Carmel Pool Retrofit
Carmel, CA

GRID SUMMARY
Name: Track Spill
Spacing: 30.07
Height: 3.07 above grade

ILLUMINATION SUMMARY
MAX VERTICAL FOOTCANDLES
Entire Grid
Scan Average: 0.0115
Maximum: 0.03
Minimum: 0.00
No. of Points: 80

FIELD MEASUREMENTS:
Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

ELECTRICAL SYSTEM REQUIREMENTS:
Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
**GRID SUMMARY**

Name: Track Spill  
Spacing: 30.0'  
Height: 14.41 above grade

**ILLUMINATION SUMMARY**

**CANDIDA (PER FIXTURE)**

Enitre Grid  
Scan Average: 493.5110  
Maximum: 1263.52  
Minimum: 14.41  
No. of Points: 80

**LUMINAIRE INFORMATION**

Applied Circuits: B  
No. of Luminaires: 40  
Total Load: 50.36 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ±3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.
**EQUIPMENT LAYOUT**

**INCLUDES:**
- Football
- Pool
- Track

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

**EQUIPMENT LIST FOR AREAS SHOWN**

<table>
<thead>
<tr>
<th>POLE LUMINAIRES</th>
<th>QTY</th>
<th>LOCATION</th>
<th>GRADE</th>
<th>ELEVATION</th>
<th>MOUNTING HEIGHT</th>
<th>LUMINAIRE TYPE</th>
<th>QTY / POLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>1</td>
<td>F1-F2</td>
<td>70'</td>
<td>10'</td>
<td>25.5'</td>
<td>TLC-LED-900</td>
<td>2</td>
</tr>
<tr>
<td>P2</td>
<td>2</td>
<td>F3-F4</td>
<td>80'</td>
<td>-</td>
<td>15.5'</td>
<td>TLC-LED-900</td>
<td>8</td>
</tr>
<tr>
<td>P3</td>
<td>8</td>
<td>P1</td>
<td>50'</td>
<td>10'</td>
<td>60'</td>
<td>TLC-LED-900</td>
<td>2</td>
</tr>
<tr>
<td>P4</td>
<td>3</td>
<td>P2</td>
<td>50'</td>
<td>10'</td>
<td>60'</td>
<td>TLC-LED-900</td>
<td>3</td>
</tr>
<tr>
<td>TOTALS</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SINGLE LUMINARIE AMPERAGE DRAW CHART**

<table>
<thead>
<tr>
<th>Single Phase Voltage</th>
<th>TLC-LED-1500</th>
<th>TLC-LED-900</th>
<th>TLC-LED-600</th>
<th>TLC-BT-575</th>
</tr>
</thead>
<tbody>
<tr>
<td>208 (60)</td>
<td>8.5</td>
<td>5.3</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>220 (60)</td>
<td>8.1</td>
<td>5.0</td>
<td>3.2</td>
<td>2.9</td>
</tr>
<tr>
<td>240 (60)</td>
<td>7.4</td>
<td>4.6</td>
<td>2.6</td>
<td>2.3</td>
</tr>
<tr>
<td>277 (60)</td>
<td>6.4</td>
<td>4.0</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>347 (60)</td>
<td>5.1</td>
<td>3.2</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>380 (60)</td>
<td>4.7</td>
<td>2.9</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>480 (60)</td>
<td>3.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Scale in Feet 1 : 100

Pole location(s): Dimensions are relative to CFL reference plant(s)

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We Make It Happen.

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