

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: INVUE

Report Number: P148777

Luminaire Tested: **VXS-F06-LED-E1-RW-7060**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P148777  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33677)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: VXS-F06-LED-E1-RW-7060  
Description: VISION SITE SMALL LED LUMINAIRE  
(6) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE  
Light Source: (42) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15877.2 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B4 - U0 - G4

Input Watts (W): 156.5  
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



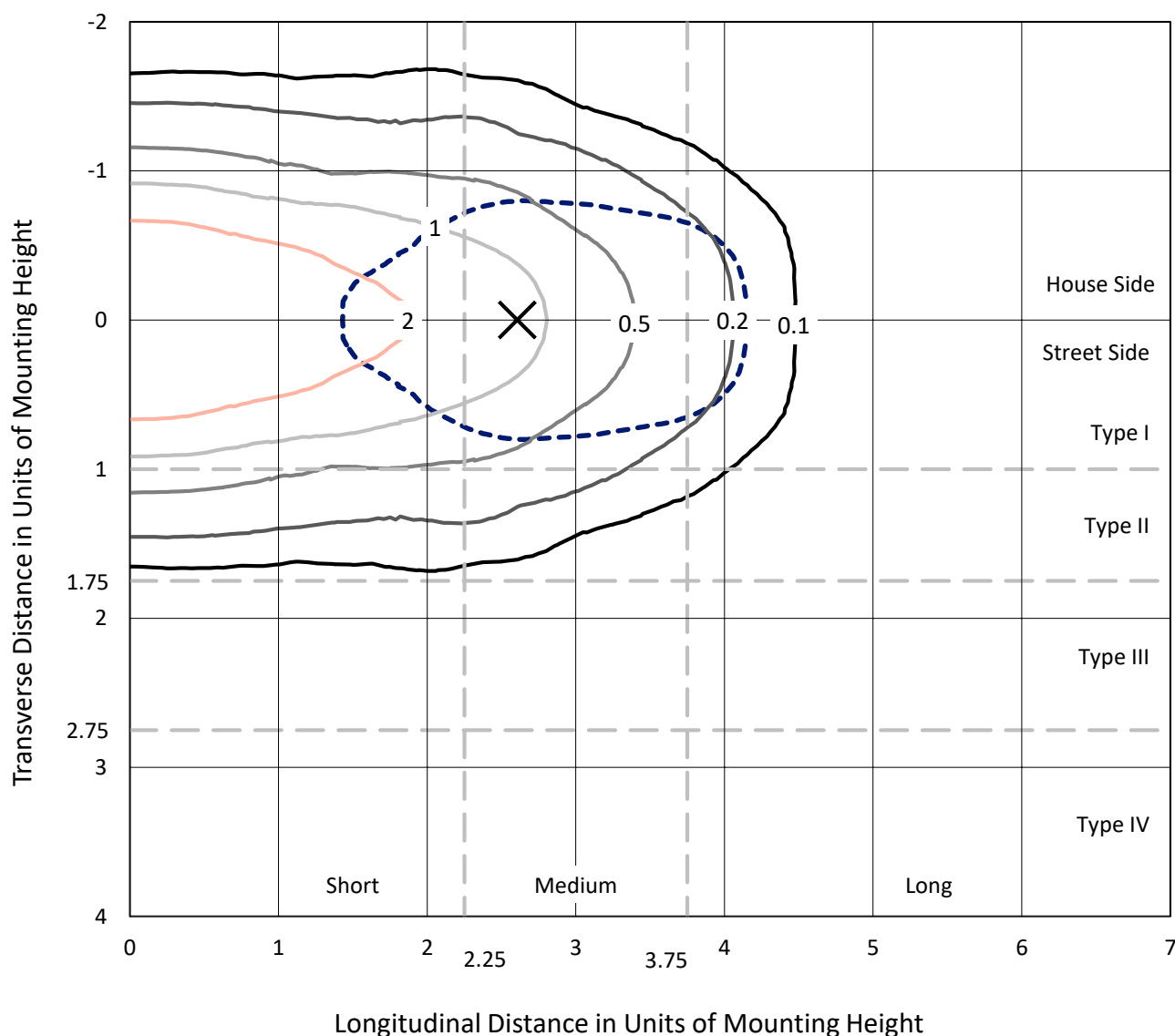
REPORT NUMBER: P148777

CATALOG NUMBER: VXS-F06-LED-E1-RW-7060

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

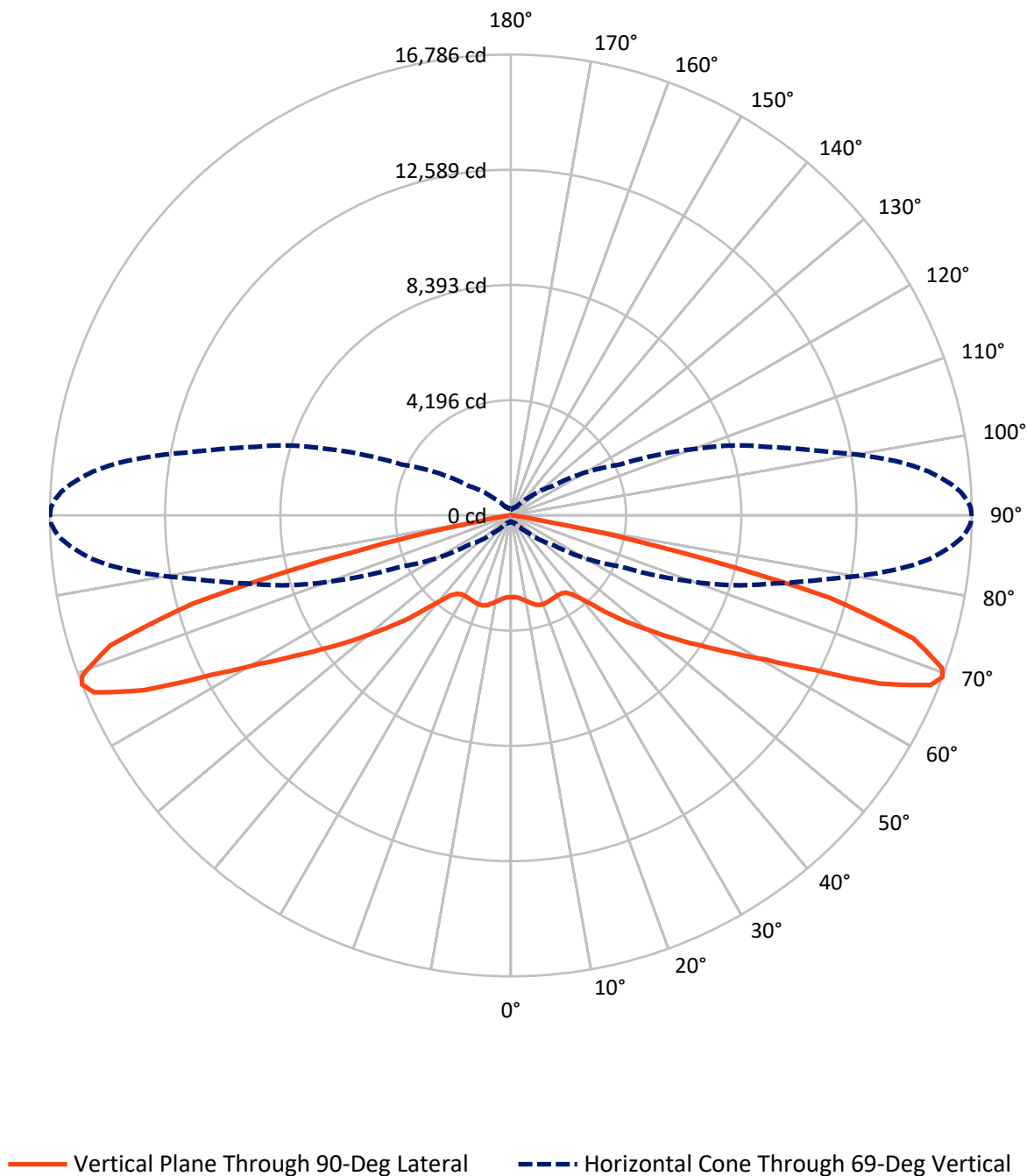


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc  
 Type I - Short - Full Cutoff

REPORT NUMBER: P148777

CATALOG NUMBER: VXS-F06-LED-E1-RW-7060

## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7938.6   | 0.0    | 7938.6  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 7938.6   | 0.0    | 7938.6  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 15877.2  | 0.0    | 15877.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 291.8   | 1.8       |
| 10°-20°   | 920.5   | 5.8       |
| 20°-30°   | 1491.4  | 9.4       |
| 30°-40°   | 1858.6  | 11.7      |
| 40°-50°   | 2322.6  | 14.6      |
| 50°-60°   | 2867.9  | 18.1      |
| 60°-70°   | 3563.5  | 22.4      |
| 70°-80°   | 2365.7  | 14.9      |
| 80°-90°   | 195.3   | 1.2       |
| 90°-100°  | 0.0     | 0.0       |
| 100°-110° | 0.0     | 0.0       |
| 110°-120° | 0.0     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-90°    | 15877.2 | 100.0     |
| 0°-180°   | 15877.2 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P148777

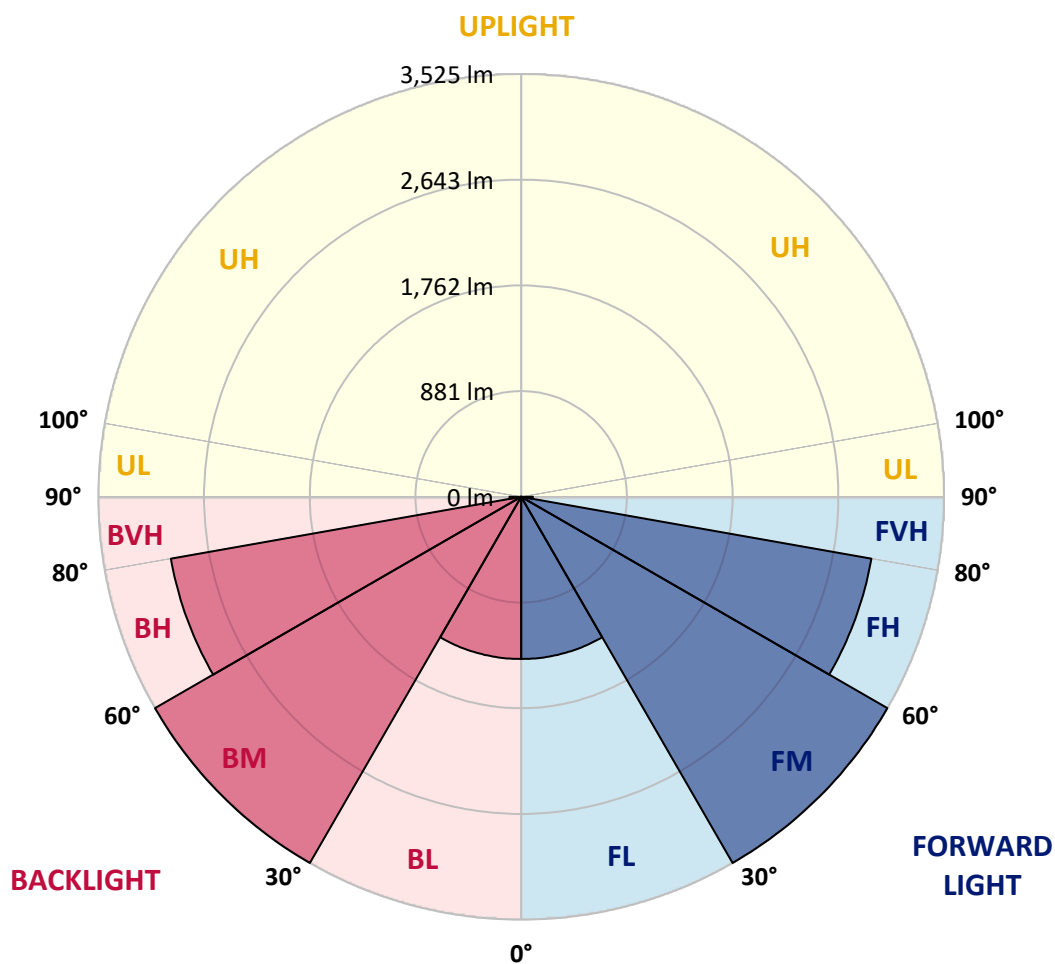
CATALOG NUMBER: VXS-F06-LED-E1-RW-7060

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1351.9 | 8.5       |                         |      |         |
| FM   | (30°-60°)   | 3524.5 | 22.2      |                         |      |         |
| FH   | (60°-80°)   | 2964.6 | 18.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 97.7   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 1351.9 | 8.5       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3524.5 | 22.2      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2964.6 | 18.7      | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 97.7   | 0.6       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G4**

Type I Short



REPORT NUMBER: P148777

CATALOG NUMBER: VXS-F06-LED-E1-RW-7060

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 66°    | 67°    | 68°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9 |
| 2.5°  | 2988.5 | 2991.0 | 2989.4 | 2992.7 | 2991.9 | 2991.9 | 2990.2 | 2986.8 | 2986.4 | 2986.0 | 2985.5 |
| 5°    | 3017.3 | 3013.9 | 3019.0 | 3024.1 | 3022.4 | 3023.2 | 3022.4 | 3022.4 | 3022.0 | 3021.7 | 3021.3 |
| 7.5°  | 3047.8 | 3046.8 | 3050.4 | 3063.9 | 3065.6 | 3070.7 | 3076.6 | 3080.8 | 3081.0 | 3081.1 | 3081.3 |
| 10°   | 3074.0 | 3074.9 | 3083.4 | 3102.9 | 3113.0 | 3129.2 | 3145.2 | 3158.0 | 3158.9 | 3159.8 | 3160.7 |
| 12.5° | 3095.2 | 3096.0 | 3108.8 | 3139.2 | 3163.9 | 3194.4 | 3229.1 | 3248.5 | 3250.2 | 3251.9 | 3253.6 |
| 15°   | 3096.9 | 3099.4 | 3121.5 | 3171.4 | 3220.6 | 3270.6 | 3312.1 | 3338.4 | 3339.7 | 3341.1 | 3342.4 |
| 17.5° | 3074.8 | 3076.6 | 3113.9 | 3187.6 | 3269.7 | 3347.6 | 3390.9 | 3402.7 | 3403.2 | 3403.7 | 3404.2 |
| 20°   | 3017.2 | 3021.5 | 3074.0 | 3183.3 | 3308.6 | 3410.4 | 3455.2 | 3439.1 | 3437.5 | 3435.9 | 3434.3 |
| 22.5° | 2924.1 | 2923.2 | 2991.8 | 3139.3 | 3316.4 | 3459.4 | 3499.3 | 3457.0 | 3452.0 | 3447.0 | 3442.0 |
| 25°   | 2773.3 | 2783.6 | 2864.0 | 3040.2 | 3273.1 | 3470.4 | 3530.6 | 3466.2 | 3459.0 | 3451.8 | 3444.6 |
| 27.5° | 2609.8 | 2615.8 | 2701.3 | 2890.2 | 3172.3 | 3432.4 | 3545.8 | 3484.8 | 3476.8 | 3468.8 | 3460.7 |
| 30°   | 2419.2 | 2426.9 | 2518.4 | 2715.7 | 3010.5 | 3334.1 | 3541.6 | 3527.2 | 3517.8 | 3508.4 | 3499.0 |
| 32.5° | 2232.9 | 2241.4 | 2323.5 | 2539.5 | 2840.2 | 3199.4 | 3516.2 | 3587.4 | 3577.7 | 3568.0 | 3558.4 |
| 35°   | 2039.8 | 2052.4 | 2152.4 | 2371.0 | 2675.9 | 3049.4 | 3477.2 | 3664.4 | 3659.1 | 3653.8 | 3648.5 |
| 37.5° | 1879.7 | 1882.2 | 1978.8 | 2208.3 | 2523.4 | 2906.3 | 3425.6 | 3761.9 | 3765.8 | 3769.7 | 3773.6 |
| 40°   | 1701.0 | 1717.0 | 1813.6 | 2055.8 | 2385.4 | 2785.2 | 3376.4 | 3894.0 | 3914.2 | 3934.5 | 3954.8 |
| 42.5° | 1540.8 | 1542.6 | 1640.8 | 1890.7 | 2235.4 | 2687.8 | 3349.4 | 4053.2 | 4096.5 | 4139.8 | 4183.1 |
| 45°   | 1372.2 | 1379.0 | 1468.0 | 1709.4 | 2062.6 | 2572.6 | 3348.5 | 4237.1 | 4306.2 | 4375.3 | 4444.4 |
| 47.5° | 1213.0 | 1215.6 | 1309.6 | 1534.0 | 1864.4 | 2411.6 | 3342.6 | 4434.5 | 4528.6 | 4622.7 | 4716.8 |
| 50°   | 1060.5 | 1058.0 | 1150.4 | 1366.4 | 1668.8 | 2200.6 | 3290.8 | 4658.1 | 4776.9 | 4895.8 | 5014.6 |
| 52.5° | 886.0  | 897.8  | 993.6  | 1200.4 | 1490.8 | 1986.4 | 3140.1 | 4902.8 | 5045.0 | 5187.1 | 5329.3 |
| 55°   | 714.9  | 720.1  | 822.4  | 1015.6 | 1310.5 | 1786.5 | 2877.5 | 5128.2 | 5295.7 | 5463.3 | 5630.8 |
| 57.5° | 526.9  | 542.1  | 631.9  | 822.6  | 1127.4 | 1617.8 | 2543.8 | 5245.0 | 5449.0 | 5652.8 | 5856.8 |
| 60°   | 371.8  | 383.7  | 463.3  | 623.4  | 926.7  | 1440.8 | 2256.6 | 5179.8 | 5444.8 | 5709.8 | 5974.7 |
| 62.5° | 289.6  | 299.0  | 362.6  | 466.7  | 722.5  | 1263.8 | 2050.8 | 4969.0 | 5329.5 | 5690.0 | 6050.5 |
| 65°   | 254.1  | 262.5  | 320.2  | 373.6  | 539.6  | 1083.4 | 1938.1 | 4746.2 | 5222.8 | 5699.3 | 6175.8 |
| 67.5° | 229.6  | 239.7  | 289.7  | 327.0  | 439.6  | 945.3  | 1908.5 | 4605.6 | 5145.3 | 5685.0 | 6224.8 |
| 69°   | 218.6  | 228.7  | 273.5  | 305.0  | 408.3  | 896.2  | 1857.6 | 4384.5 | 4921.1 | 5457.8 | 5994.4 |
| 70°   | 211.8  | 220.2  | 261.7  | 294.0  | 398.1  | 862.2  | 1772.9 | 4108.2 | 4635.2 | 5162.2 | 5689.2 |
| 72.5° | 196.6  | 200.8  | 237.2  | 268.5  | 369.3  | 697.2  | 1363.8 | 3051.2 | 3508.0 | 3964.8 | 4421.6 |
| 75°   | 173.6  | 178.8  | 212.6  | 243.1  | 288.0  | 432.8  | 863.2  | 1887.3 | 2228.3 | 2569.4 | 2910.4 |
| 77.5° | 150.0  | 154.2  | 183.8  | 232.0  | 223.6  | 270.2  | 515.8  | 1050.4 | 1248.1 | 1445.9 | 1643.7 |
| 80°   | 120.3  | 125.4  | 151.6  | 230.4  | 184.6  | 210.0  | 371.0  | 734.4  | 787.8  | 841.1  | 894.5  |
| 82.5° | 88.1   | 92.4   | 118.6  | 186.4  | 141.5  | 158.4  | 282.9  | 622.6  | 641.1  | 659.7  | 678.2  |
| 85°   | 44.9   | 45.8   | 75.4   | 113.5  | 89.8   | 82.2   | 159.3  | 426.0  | 437.9  | 449.8  | 461.6  |
| 87.5° | 7.6    | 7.6    | 17.0   | 19.5   | 22.0   | 13.6   | 20.3   | 72.8   | 75.1   | 77.4   | 79.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

REPORT NUMBER: P148777

CATALOG NUMBER: VXS-F06-LED-E1-RW-7060

**CANDELA DISTRIBUTION (continued):**

|       | 69°    | 70°    | 71°    | 72°    | 73°    | 74°    | 75°    | 76°     | 77°     | 78°     | 79°     |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0°    | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9 | 2974.9  | 2974.9  | 2974.9  | 2974.9  |
| 2.5°  | 2985.1 | 2984.7 | 2983.2 | 2983.5 | 2984.6 | 2984.0 | 2985.0 | 2985.2  | 2986.3  | 2983.0  | 2982.4  |
| 5°    | 3021.0 | 3020.6 | 3020.5 | 3020.4 | 3021.0 | 3020.9 | 3021.5 | 3022.9  | 3022.5  | 3020.5  | 3020.2  |
| 7.5°  | 3081.5 | 3081.6 | 3082.5 | 3081.7 | 3083.3 | 3082.5 | 3080.8 | 3083.5  | 3085.4  | 3085.6  | 3087.4  |
| 10°   | 3161.6 | 3162.6 | 3165.6 | 3165.1 | 3168.1 | 3167.6 | 3168.1 | 3170.9  | 3173.0  | 3173.3  | 3175.4  |
| 12.5° | 3255.3 | 3257.0 | 3258.6 | 3260.1 | 3263.3 | 3261.5 | 3265.5 | 3267.2  | 3269.7  | 3274.8  | 3272.2  |
| 15°   | 3343.8 | 3345.2 | 3349.7 | 3350.0 | 3352.9 | 3354.1 | 3357.8 | 3359.4  | 3360.0  | 3364.1  | 3364.7  |
| 17.5° | 3404.8 | 3405.3 | 3407.0 | 3406.1 | 3408.6 | 3407.8 | 3410.3 | 3411.7  | 3413.9  | 3416.1  | 3420.0  |
| 20°   | 3432.7 | 3431.0 | 3430.1 | 3429.2 | 3427.4 | 3424.8 | 3425.6 | 3426.8  | 3427.1  | 3429.2  | 3432.0  |
| 22.5° | 3437.0 | 3432.0 | 3426.8 | 3423.3 | 3418.1 | 3413.8 | 3409.5 | 3409.8  | 3410.2  | 3409.7  | 3411.7  |
| 25°   | 3437.4 | 3430.2 | 3422.2 | 3412.5 | 3405.2 | 3395.5 | 3387.4 | 3386.8  | 3384.4  | 3384.6  | 3385.6  |
| 27.5° | 3452.6 | 3444.6 | 3433.4 | 3422.0 | 3406.6 | 3393.6 | 3380.6 | 3376.1  | 3371.5  | 3368.6  | 3367.4  |
| 30°   | 3489.6 | 3480.2 | 3466.7 | 3452.4 | 3435.6 | 3415.3 | 3396.8 | 3391.0  | 3384.4  | 3378.6  | 3373.8  |
| 32.5° | 3548.7 | 3539.1 | 3524.2 | 3509.3 | 3486.8 | 3466.7 | 3448.4 | 3439.1  | 3429.8  | 3419.7  | 3410.3  |
| 35°   | 3643.1 | 3637.8 | 3624.7 | 3611.5 | 3595.0 | 3579.3 | 3562.8 | 3552.3  | 3536.8  | 3528.8  | 3517.3  |
| 37.5° | 3777.4 | 3781.3 | 3781.4 | 3783.0 | 3777.9 | 3770.3 | 3758.4 | 3747.5  | 3742.4  | 3721.2  | 3707.7  |
| 40°   | 3975.0 | 3995.2 | 4013.8 | 4028.1 | 4040.8 | 4053.4 | 4064.3 | 4057.8  | 4059.8  | 4054.3  | 4046.2  |
| 42.5° | 4226.4 | 4269.7 | 4309.3 | 4348.8 | 4377.4 | 4422.0 | 4453.1 | 4462.9  | 4488.0  | 4497.9  | 4516.1  |
| 45°   | 4513.6 | 4582.7 | 4649.1 | 4710.4 | 4767.5 | 4831.4 | 4893.6 | 4939.8  | 4990.3  | 5047.6  | 5104.8  |
| 47.5° | 4810.9 | 4905.0 | 5002.9 | 5082.9 | 5165.5 | 5259.9 | 5342.5 | 5412.1  | 5503.0  | 5587.0  | 5679.5  |
| 50°   | 5133.5 | 5252.3 | 5363.7 | 5462.3 | 5568.7 | 5677.5 | 5790.6 | 5892.9  | 6015.6  | 6150.1  | 6295.6  |
| 52.5° | 5471.4 | 5613.6 | 5742.5 | 5866.3 | 5991.1 | 6115.7 | 6236.2 | 6380.7  | 6532.0  | 6709.5  | 6891.3  |
| 55°   | 5798.4 | 5966.0 | 6112.2 | 6249.9 | 6392.8 | 6532.2 | 6656.4 | 6849.7  | 7035.3  | 7247.2  | 7484.6  |
| 57.5° | 6060.6 | 6264.5 | 6433.2 | 6596.7 | 6757.8 | 6906.2 | 7058.7 | 7276.8  | 7513.4  | 7761.1  | 8062.1  |
| 60°   | 6239.7 | 6504.7 | 6720.0 | 6916.6 | 7114.2 | 7300.7 | 7476.2 | 7761.2  | 8042.7  | 8350.6  | 8725.4  |
| 62.5° | 6411.0 | 6771.5 | 7052.4 | 7320.6 | 7587.1 | 7826.5 | 8044.7 | 8403.2  | 8771.0  | 9151.4  | 9597.2  |
| 65°   | 6652.4 | 7129.0 | 7542.7 | 7916.6 | 8285.4 | 8637.3 | 8963.8 | 9418.0  | 9882.3  | 10383.1 | 10915.2 |
| 67.5° | 6764.5 | 7304.3 | 7843.1 | 8347.1 | 8815.5 | 9261.0 | 9680.4 | 10229.5 | 10776.0 | 11356.4 | 11999.5 |
| 69°   | 6531.0 | 7067.6 | 7643.5 | 8194.0 | 8711.5 | 9184.1 | 9638.0 | 10198.6 | 10766.9 | 11359.6 | 12008.3 |
| 70°   | 6216.2 | 6743.1 | 7324.5 | 7899.9 | 8394.8 | 8887.2 | 9357.6 | 9913.8  | 10489.5 | 11083.8 | 11762.8 |
| 72.5° | 4878.5 | 5335.3 | 5902.2 | 6460.7 | 6957.3 | 7451.5 | 7908.3 | 8477.5  | 9056.9  | 9681.2  | 10324.1 |
| 75°   | 3251.4 | 3592.5 | 4014.8 | 4532.9 | 4988.3 | 5425.1 | 5867.8 | 6349.2  | 6914.5  | 7429.0  | 8017.2  |
| 77.5° | 1841.5 | 2039.3 | 2284.7 | 2621.6 | 2948.3 | 3209.8 | 3525.6 | 3752.0  | 4080.2  | 4363.5  | 4662.8  |
| 80°   | 947.9  | 1001.2 | 1074.4 | 1155.3 | 1201.3 | 1194.1 | 1241.0 | 1194.5  | 1204.9  | 1166.9  | 1126.5  |
| 82.5° | 696.8  | 715.4  | 748.5  | 764.6  | 763.0  | 709.8  | 653.1  | 574.5   | 505.2   | 432.5   | 365.8   |
| 85°   | 473.5  | 485.4  | 493.7  | 506.2  | 502.6  | 479.6  | 428.6  | 360.4   | 293.8   | 235.7   | 188.6   |
| 87.5° | 82.0   | 84.3   | 83.7   | 90.7   | 91.0   | 84.5   | 69.5   | 59.3    | 49.9    | 37.3    | 26.2    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |

REPORT NUMBER: P148777

CATALOG NUMBER: VXS-F06-LED-E1-RW-7060

**CANDELA DISTRIBUTION (continued):**

|       | 80°     | 81°     | 82°     | 83°     | 84°     | 85°     | 86°     | 87°     | 88°     | 89°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2974.9  | 2974.9  | 2974.9  | 2974.9  | 2974.9  | 2974.9  | 2974.9  | 2974.9  | 2974.9  | 2974.9  | 2974.9  |
| 2.5°  | 2981.7  | 2981.8  | 2983.4  | 2981.7  | 2981.7  | 2981.7  | 2980.8  | 2982.6  | 2981.7  | 2979.1  | 2976.6  |
| 5°    | 3020.6  | 3018.1  | 3017.3  | 3019.0  | 3020.7  | 3017.3  | 3019.8  | 3022.4  | 3018.1  | 3019.0  | 3017.3  |
| 7.5°  | 3085.9  | 3085.0  | 3084.2  | 3085.9  | 3086.0  | 3085.0  | 3085.9  | 3083.4  | 3081.6  | 3084.2  | 3086.7  |
| 10°   | 3173.1  | 3172.3  | 3174.0  | 3174.0  | 3177.4  | 3175.6  | 3174.9  | 3177.4  | 3175.7  | 3174.0  | 3174.8  |
| 12.5° | 3275.6  | 3273.1  | 3277.3  | 3277.4  | 3279.8  | 3279.9  | 3279.0  | 3279.9  | 3279.0  | 3276.5  | 3274.8  |
| 15°   | 3367.1  | 3363.8  | 3364.6  | 3371.4  | 3370.5  | 3372.2  | 3372.2  | 3370.6  | 3369.7  | 3368.8  | 3369.6  |
| 17.5° | 3422.2  | 3420.5  | 3420.4  | 3423.9  | 3426.4  | 3425.6  | 3425.6  | 3425.6  | 3424.8  | 3425.6  | 3427.3  |
| 20°   | 3432.4  | 3432.4  | 3433.2  | 3436.6  | 3440.8  | 3438.3  | 3438.3  | 3440.0  | 3438.3  | 3440.0  | 3440.8  |
| 22.5° | 3412.9  | 3414.6  | 3416.2  | 3420.5  | 3421.4  | 3421.4  | 3421.4  | 3422.2  | 3423.8  | 3423.8  | 3425.6  |
| 25°   | 3385.8  | 3387.5  | 3390.0  | 3393.4  | 3396.8  | 3396.8  | 3396.8  | 3398.5  | 3398.4  | 3399.3  | 3400.2  |
| 27.5° | 3365.4  | 3367.1  | 3369.6  | 3373.0  | 3377.3  | 3377.3  | 3377.2  | 3379.0  | 3379.0  | 3379.8  | 3381.6  |
| 30°   | 3368.0  | 3364.6  | 3367.2  | 3368.8  | 3371.4  | 3371.4  | 3370.5  | 3371.4  | 3372.2  | 3372.2  | 3373.1  |
| 32.5° | 3404.4  | 3396.8  | 3394.2  | 3393.4  | 3394.2  | 3391.8  | 3390.8  | 3389.2  | 3387.4  | 3387.4  | 3386.6  |
| 35°   | 3501.0  | 3489.1  | 3488.2  | 3481.5  | 3474.7  | 3468.0  | 3468.8  | 3463.7  | 3465.4  | 3461.2  | 3457.7  |
| 37.5° | 3699.2  | 3685.6  | 3694.1  | 3679.8  | 3670.4  | 3663.6  | 3656.0  | 3645.8  | 3639.8  | 3647.5  | 3647.5  |
| 40°   | 4054.1  | 4044.8  | 4042.3  | 4044.8  | 4036.4  | 4040.5  | 4022.0  | 4016.8  | 4005.8  | 4013.4  | 4023.6  |
| 42.5° | 4544.5  | 4538.6  | 4570.8  | 4576.8  | 4580.2  | 4585.2  | 4588.6  | 4560.7  | 4559.8  | 4553.9  | 4536.9  |
| 45°   | 5150.2  | 5185.8  | 5184.1  | 5223.0  | 5224.8  | 5212.9  | 5218.0  | 5205.3  | 5200.2  | 5181.6  | 5204.5  |
| 47.5° | 5772.8  | 5840.6  | 5866.0  | 5874.5  | 5906.7  | 5914.3  | 5883.8  | 5873.6  | 5891.4  | 5860.9  | 5865.2  |
| 50°   | 6441.2  | 6514.0  | 6573.3  | 6613.1  | 6636.0  | 6637.7  | 6614.8  | 6609.8  | 6625.8  | 6568.2  | 6595.3  |
| 52.5° | 7098.5  | 7208.6  | 7320.4  | 7379.8  | 7422.1  | 7425.4  | 7443.2  | 7422.1  | 7430.6  | 7417.0  | 7444.1  |
| 55°   | 7746.4  | 7937.1  | 8068.4  | 8184.4  | 8258.2  | 8321.7  | 8327.6  | 8350.4  | 8352.1  | 8380.1  | 8352.1  |
| 57.5° | 8380.1  | 8587.7  | 8816.4  | 9022.2  | 9136.6  | 9208.6  | 9276.3  | 9368.6  | 9389.0  | 9377.9  | 9395.8  |
| 60°   | 9128.0  | 9449.2  | 9760.0  | 9997.2  | 10194.6 | 10383.4 | 10485.1 | 10630.0 | 10652.8 | 10715.5 | 10661.2 |
| 62.5° | 10073.4 | 10539.4 | 10961.2 | 11280.5 | 11580.4 | 11874.3 | 12096.2 | 12208.1 | 12275.8 | 12407.2 | 12363.9 |
| 65°   | 11523.6 | 12082.6 | 12641.0 | 13098.4 | 13518.4 | 13868.4 | 14205.4 | 14366.4 | 14544.2 | 14730.6 | 14764.6 |
| 67.5° | 12718.0 | 13410.0 | 14039.4 | 14596.8 | 15105.8 | 15494.6 | 15845.4 | 16124.0 | 16341.0 | 16478.2 | 16489.2 |
| 69°   | 12772.2 | 13491.4 | 14174.9 | 14773.0 | 15304.1 | 15717.5 | 16086.8 | 16396.8 | 16607.8 | 16748.4 | 16785.7 |
| 70°   | 12513.0 | 13249.2 | 13977.6 | 14581.6 | 15125.4 | 15548.1 | 15939.4 | 16235.0 | 16470.5 | 16613.7 | 16663.6 |
| 72.5° | 11055.2 | 11841.2 | 12619.8 | 13149.1 | 13704.8 | 14208.0 | 14521.4 | 14823.0 | 15155.0 | 15198.2 | 15335.4 |
| 75°   | 8714.7  | 9375.4  | 9979.3  | 10384.3 | 10848.5 | 11300.0 | 11607.4 | 11687.2 | 11860.8 | 12079.2 | 12001.3 |
| 77.5° | 5050.2  | 5253.6  | 5643.2  | 5743.2  | 5658.5  | 5855.0  | 5920.2  | 5781.3  | 5774.5  | 5902.5  | 5648.3  |
| 80°   | 1119.0  | 1055.4  | 1135.1  | 1075.8  | 1077.5  | 1079.2  | 1061.4  | 1054.6  | 1067.3  | 1054.6  | 1036.8  |
| 82.5° | 310.0   | 299.9   | 301.5   | 298.2   | 304.1   | 299.8   | 297.3   | 304.1   | 303.3   | 302.4   | 308.3   |
| 85°   | 149.2   | 147.4   | 144.9   | 144.0   | 140.6   | 136.4   | 129.6   | 129.6   | 133.0   | 128.0   | 130.5   |
| 87.5° | 19.4    | 18.6    | 18.6    | 22.1    | 19.5    | 16.0    | 16.0    | 16.0    | 15.2    | 15.2    | 15.2    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)