

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: P157977

Luminaire Tested: **VTS-F12-LED-E1-RW-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157977
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33711)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VTS-F12-LED-E1-RW-7060
Description: VENTUS LED SITE LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (84) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31667.9 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B5 - U0 - G5

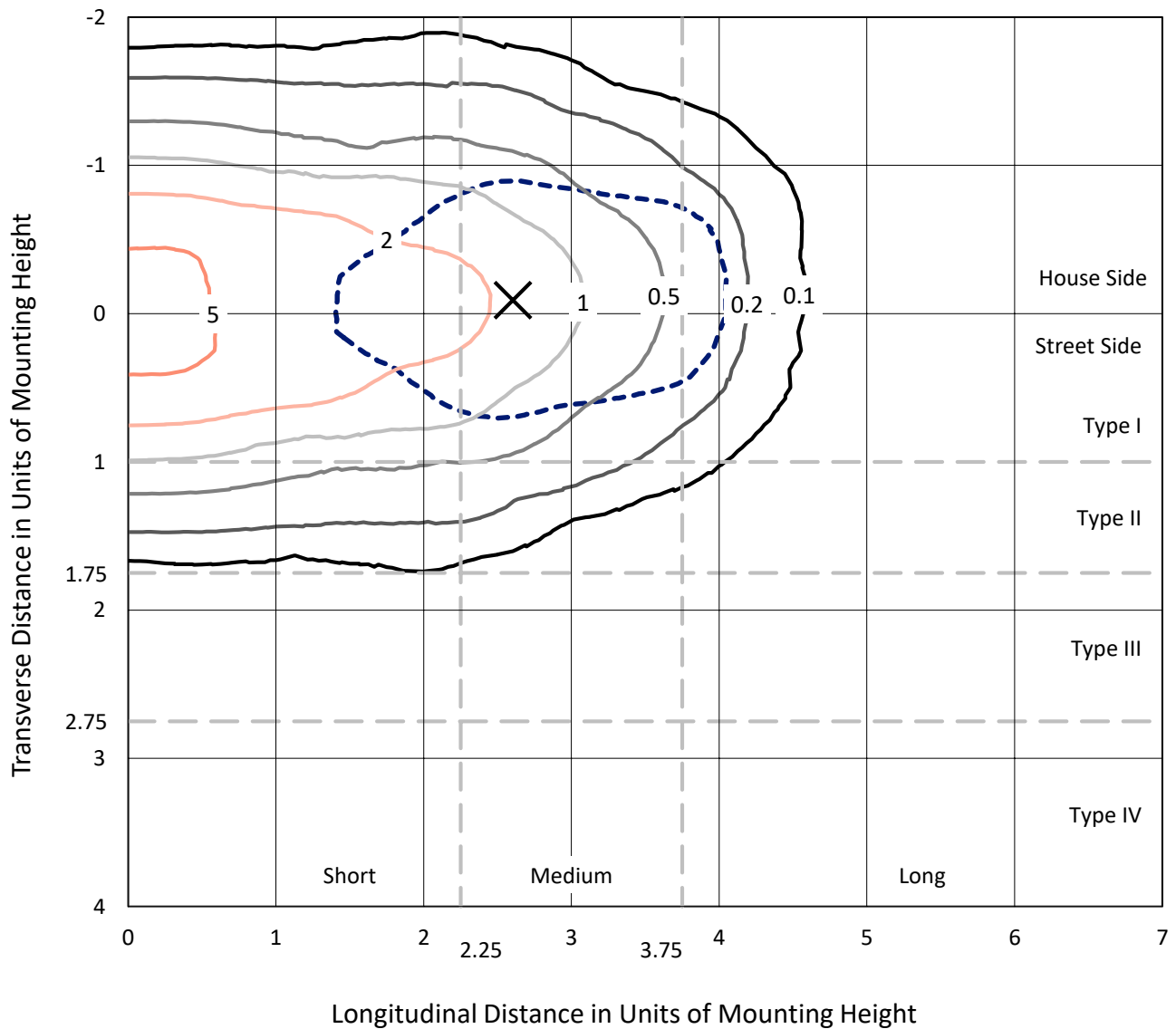
Input Watts (W): 306.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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CATALOG NUMBER: VTS-F12-LED-E1-RW-7060

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

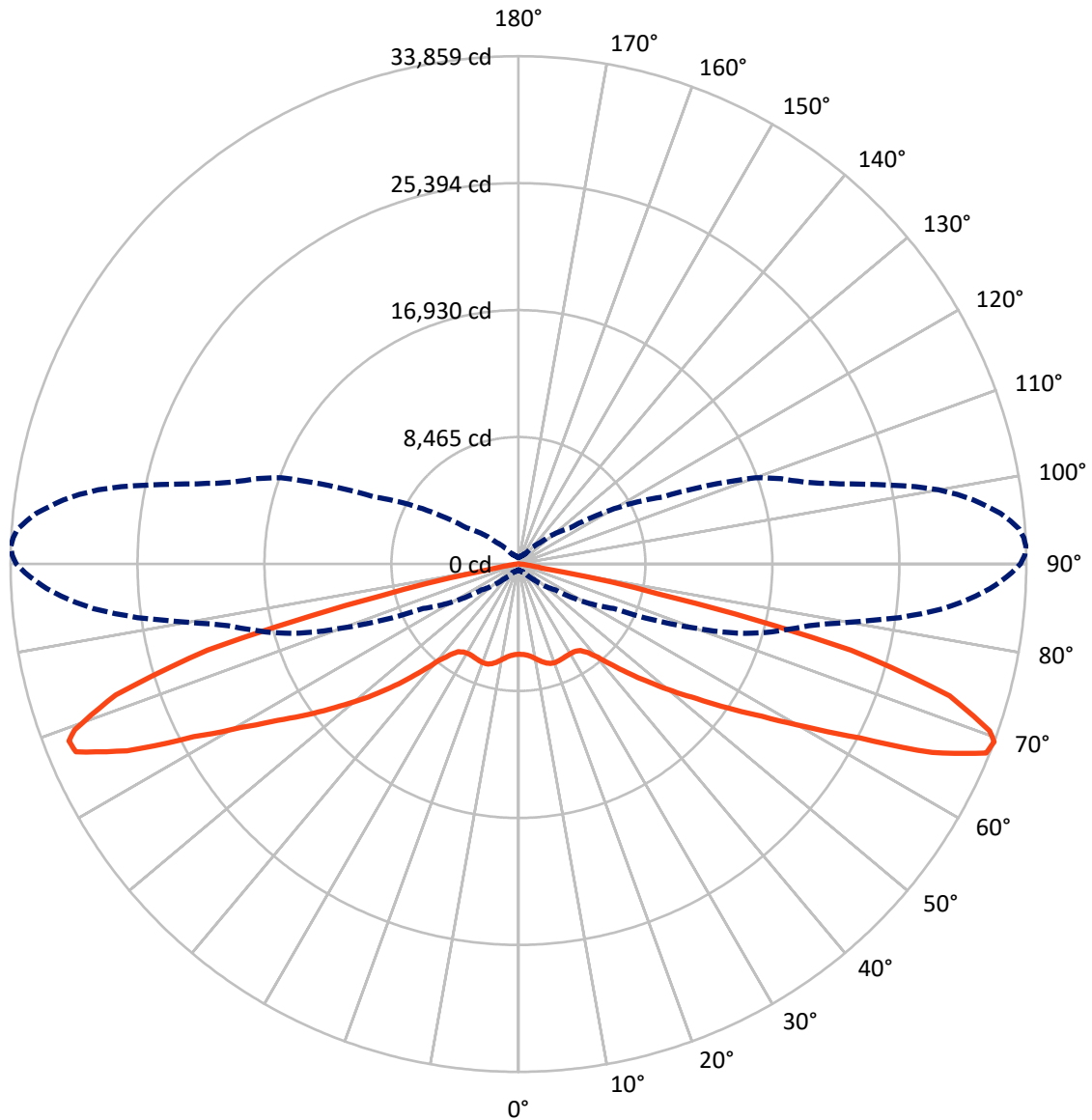


Based on 30 foot mounting height. Maximum calculated value = 6.9 fc
 Type I - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 16795.1 | 0.0 | 16795.1 |
| | % Fixture | 53.0 | 0.0 | 53.0 |
| Street Side | Lumens | 14872.8 | 0.0 | 14872.8 |
| | % Fixture | 47.0 | 0.0 | 47.0 |
| Total | Lumens | 31667.9 | 0.0 | 31667.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 588.6 | 1.9 |
| 10°-20° | 1859.5 | 5.9 |
| 20°-30° | 3016.8 | 9.5 |
| 30°-40° | 3759.8 | 11.9 |
| 40°-50° | 4681.3 | 14.8 |
| 50°-60° | 5773.3 | 18.2 |
| 60°-70° | 7170.0 | 22.6 |
| 70°-80° | 4405.6 | 13.9 |
| 80°-90° | 412.9 | 1.3 |
| 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° | 31667.9 | 100.0 |
| 0°-180° | 31667.9 | 100.0 |



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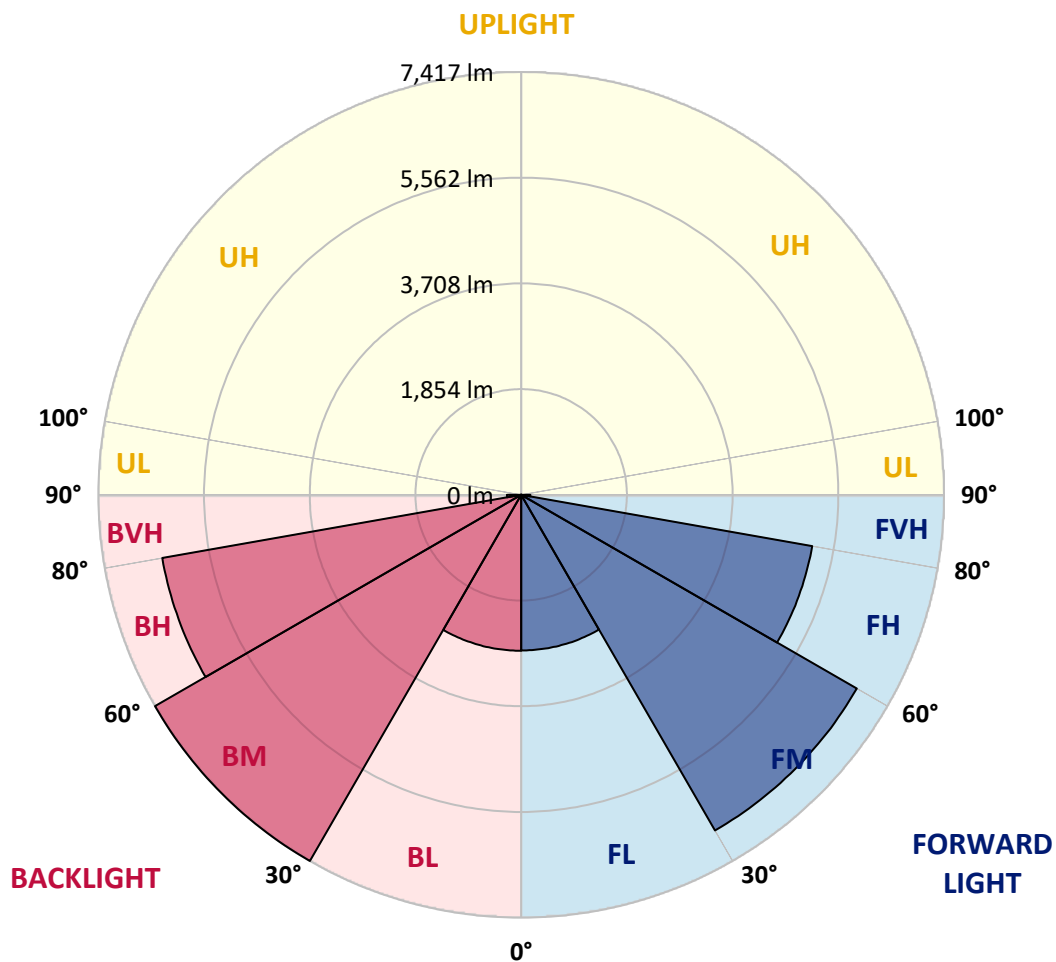
CATALOG NUMBER: VTS-F12-LED-E1-RW-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2729.6 | 8.6 | | | |
| FM (30°-60°) | 6797.9 | 21.5 | | | |
| FH (60°-80°) | 5183.6 | 16.4 | | | G3/7500 |
| FVH (80°-90°) | 161.7 | 0.5 | | | G2/225 |
| BL (0°-30°) | 2735.4 | 8.6 | B4/5000 | | |
| BM (30°-60°) | 7416.6 | 23.4 | B4/8500 | | |
| BH (60°-80°) | 6392.0 | 20.2 | B5 | | G5 |
| BVH (80°-90°) | 251.2 | 0.8 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G5

Type I Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 71° | 72° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0° | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 |
| 2.5° | 6111.1 | 6094.9 | 6109.1 | 6111.1 | 6109.1 | 6109.1 | 6090.8 | 6086.7 | 6062.4 | 6068.4 | 6066.4 |
| 5° | 6194.5 | 6188.4 | 6198.6 | 6202.6 | 6206.7 | 6198.6 | 6184.3 | 6178.2 | 6162.0 | 6155.9 | 6153.8 |
| 7.5° | 6271.7 | 6261.6 | 6277.8 | 6292.1 | 6302.2 | 6304.3 | 6306.3 | 6296.1 | 6296.1 | 6288.0 | 6288.0 |
| 10° | 6336.8 | 6328.7 | 6355.1 | 6373.4 | 6405.9 | 6424.2 | 6444.6 | 6458.8 | 6466.9 | 6468.9 | 6466.9 |
| 12.5° | 6365.3 | 6359.2 | 6401.9 | 6456.7 | 6517.7 | 6560.4 | 6611.3 | 6647.8 | 6658.0 | 6656.0 | 6666.1 |
| 15° | 6316.5 | 6320.5 | 6385.6 | 6493.3 | 6623.5 | 6731.2 | 6802.4 | 6832.9 | 6841.0 | 6845.0 | 6847.1 |
| 17.5° | 6184.3 | 6192.5 | 6286.0 | 6460.8 | 6688.5 | 6883.7 | 6989.4 | 6989.4 | 6973.1 | 6973.1 | 6971.1 |
| 20° | 5972.9 | 5981.0 | 6103.0 | 6355.1 | 6690.5 | 6989.4 | 7139.8 | 7109.3 | 7048.3 | 7036.1 | 7024.0 |
| 22.5° | 5680.2 | 5712.7 | 5846.9 | 6139.6 | 6603.1 | 7019.9 | 7233.3 | 7188.6 | 7093.1 | 7066.6 | 7048.3 |
| 25° | 5348.8 | 5344.7 | 5505.3 | 5834.7 | 6391.7 | 6946.7 | 7259.8 | 7251.6 | 7150.0 | 7121.5 | 7089.0 |
| 27.5° | 4970.6 | 4982.8 | 5131.2 | 5464.7 | 6068.4 | 6735.3 | 7215.1 | 7322.8 | 7239.4 | 7211.0 | 7180.5 |
| 30° | 4582.3 | 4594.5 | 4734.8 | 5123.1 | 5700.5 | 6432.4 | 7123.6 | 7391.9 | 7359.4 | 7337.0 | 7316.7 |
| 32.5° | 4192.0 | 4196.1 | 4362.8 | 4779.5 | 5389.4 | 6070.5 | 6985.3 | 7454.9 | 7499.7 | 7489.5 | 7481.4 |
| 35° | 3826.1 | 3830.1 | 4011.1 | 4433.9 | 5082.5 | 5761.5 | 6818.6 | 7546.4 | 7690.8 | 7703.0 | 7711.1 |
| 37.5° | 3470.3 | 3476.4 | 3661.4 | 4104.6 | 4779.5 | 5527.7 | 6633.6 | 7686.7 | 7959.1 | 8003.8 | 8012.0 |
| 40° | 3116.6 | 3122.7 | 3299.5 | 3769.1 | 4472.6 | 5322.3 | 6491.3 | 7883.9 | 8321.0 | 8382.0 | 8445.0 |
| 42.5° | 2779.1 | 2801.4 | 2951.9 | 3401.2 | 4131.0 | 5068.2 | 6430.3 | 8123.8 | 8750.0 | 8845.5 | 8916.7 |
| 45° | 2464.0 | 2466.0 | 2636.8 | 3057.6 | 3726.5 | 4724.6 | 6389.7 | 8396.2 | 9229.7 | 9374.1 | 9471.7 |
| 47.5° | 2126.5 | 2150.9 | 2329.8 | 2738.4 | 3348.3 | 4299.8 | 6259.5 | 8715.4 | 9752.2 | 9920.9 | 10118.1 |
| 50° | 1799.2 | 1833.7 | 2006.6 | 2411.1 | 3002.7 | 3860.6 | 5909.9 | 9089.5 | 10339.7 | 10559.3 | 10787.0 |
| 52.5° | 1484.1 | 1482.0 | 1665.0 | 2085.8 | 2655.1 | 3488.6 | 5342.7 | 9481.8 | 11018.8 | 11254.6 | 11500.6 |
| 55° | 1122.2 | 1122.2 | 1303.1 | 1687.4 | 2279.0 | 3157.2 | 4734.8 | 9725.8 | 11649.0 | 11933.6 | 12202.0 |
| 57.5° | 770.5 | 790.8 | 961.6 | 1293.0 | 1886.6 | 2854.3 | 4269.3 | 9585.5 | 12130.8 | 12484.5 | 12803.7 |
| 60° | 571.3 | 591.6 | 717.6 | 929.1 | 1475.9 | 2496.5 | 3919.6 | 8924.8 | 12421.5 | 12891.1 | 13305.9 |
| 62.5° | 494.0 | 508.2 | 628.2 | 744.1 | 1063.2 | 2116.3 | 3610.6 | 8085.2 | 12840.3 | 13482.7 | 14060.1 |
| 65° | 441.2 | 455.4 | 575.3 | 642.4 | 831.5 | 1701.6 | 3437.8 | 7605.4 | 13340.4 | 14322.4 | 15159.9 |
| 67.5° | 408.6 | 424.9 | 526.5 | 575.3 | 725.8 | 1539.0 | 3303.6 | 7493.6 | 13336.4 | 14527.7 | 15597.0 |
| 69° | 392.4 | 404.6 | 487.9 | 540.8 | 701.4 | 1490.2 | 3012.9 | 7007.7 | 12456.1 | 13734.8 | 14808.2 |
| 70° | 382.2 | 394.4 | 465.6 | 518.4 | 693.2 | 1402.8 | 2744.5 | 6365.3 | 11453.8 | 12740.7 | 13830.4 |
| 72.5° | 349.7 | 361.9 | 414.7 | 463.5 | 577.4 | 937.2 | 1913.0 | 4074.1 | 8184.8 | 9103.7 | 10349.9 |
| 75° | 309.0 | 323.2 | 363.9 | 404.6 | 437.1 | 542.8 | 1103.9 | 2114.3 | 4679.9 | 5377.2 | 6487.2 |
| 77.5° | 252.1 | 266.3 | 309.0 | 374.1 | 370.0 | 412.7 | 717.6 | 1299.1 | 2191.6 | 2718.1 | 3128.8 |
| 80° | 207.4 | 217.5 | 254.1 | 378.1 | 302.9 | 345.6 | 581.4 | 1065.3 | 1543.0 | 1705.7 | 1803.3 |
| 82.5° | 138.2 | 152.5 | 197.2 | 296.8 | 231.8 | 246.0 | 435.1 | 996.2 | 1305.2 | 1431.2 | 1549.1 |
| 85° | 65.1 | 71.2 | 119.9 | 158.6 | 140.3 | 132.1 | 248.0 | 703.4 | 971.8 | 1030.7 | 1075.4 |
| 87.5° | 0.0 | 0.0 | 6.1 | 12.2 | 18.3 | 18.3 | 44.7 | 148.4 | 272.4 | 329.3 | 325.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: VTS-F12-LED-E1-RW-7060

CANDELA DISTRIBUTION (continued):

| | 73° | 74° | 75° | 76° | 77° | 78° | 79° | 80° | 81° | 82° | 83° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 |
| 2.5° | 6058.3 | 6060.3 | 6058.3 | 6058.3 | 6056.3 | 6052.2 | 6052.2 | 6048.1 | 6050.2 | 6048.1 | 6052.2 |
| 5° | 6151.8 | 6151.8 | 6145.7 | 6141.6 | 6147.7 | 6141.6 | 6143.7 | 6133.5 | 6133.5 | 6127.4 | 6119.3 |
| 7.5° | 6286.0 | 6286.0 | 6288.0 | 6275.8 | 6283.9 | 6286.0 | 6279.9 | 6275.8 | 6271.7 | 6261.6 | 6263.6 |
| 10° | 6464.9 | 6464.9 | 6471.0 | 6454.7 | 6462.8 | 6466.9 | 6468.9 | 6468.9 | 6464.9 | 6446.6 | 6448.6 |
| 12.5° | 6664.1 | 6660.0 | 6662.1 | 6653.9 | 6662.1 | 6666.1 | 6670.2 | 6666.1 | 6666.1 | 6662.1 | 6660.0 |
| 15° | 6845.0 | 6843.0 | 6847.1 | 6841.0 | 6843.0 | 6847.1 | 6859.3 | 6857.2 | 6855.2 | 6843.0 | 6843.0 |
| 17.5° | 6969.1 | 6963.0 | 6958.9 | 6956.9 | 6956.9 | 6954.8 | 6956.9 | 6956.9 | 6950.8 | 6948.7 | 6948.7 |
| 20° | 7015.8 | 6999.6 | 6989.4 | 6983.3 | 6975.2 | 6971.1 | 6967.0 | 6969.1 | 6965.0 | 6958.9 | 6960.9 |
| 22.5° | 7024.0 | 7001.6 | 6981.3 | 6963.0 | 6946.7 | 6936.5 | 6926.4 | 6922.3 | 6912.1 | 6906.0 | 6906.0 |
| 25° | 7062.6 | 7028.0 | 6995.5 | 6965.0 | 6940.6 | 6918.2 | 6895.9 | 6879.6 | 6867.4 | 6853.2 | 6849.1 |
| 27.5° | 7148.0 | 7111.4 | 7072.7 | 7034.1 | 7001.6 | 6956.9 | 6926.4 | 6893.8 | 6865.4 | 6843.0 | 6826.8 |
| 30° | 7280.1 | 7243.5 | 7204.9 | 7160.2 | 7117.5 | 7070.7 | 7019.9 | 6981.3 | 6940.6 | 6895.9 | 6871.5 |
| 32.5° | 7454.9 | 7430.5 | 7391.9 | 7349.2 | 7310.6 | 7261.8 | 7200.8 | 7141.9 | 7103.2 | 7050.4 | 7011.8 |
| 35° | 7705.0 | 7676.5 | 7664.3 | 7646.0 | 7607.4 | 7576.9 | 7509.8 | 7454.9 | 7418.3 | 7345.2 | 7316.7 |
| 37.5° | 8046.5 | 8044.5 | 8054.7 | 8048.6 | 8054.7 | 8016.0 | 7985.6 | 7983.5 | 7930.7 | 7859.5 | 7790.4 |
| 40° | 8512.1 | 8536.5 | 8591.4 | 8630.0 | 8666.6 | 8670.7 | 8713.4 | 8668.6 | 8674.7 | 8664.6 | 8593.4 |
| 42.5° | 9042.7 | 9126.1 | 9191.1 | 9305.0 | 9392.4 | 9473.7 | 9528.6 | 9603.8 | 9660.7 | 9711.6 | 9723.8 |
| 45° | 9634.3 | 9758.3 | 9908.8 | 10010.4 | 10181.2 | 10317.4 | 10504.4 | 10648.8 | 10799.2 | 10947.6 | 11000.5 |
| 47.5° | 10276.7 | 10431.2 | 10597.9 | 10787.0 | 11002.5 | 11216.0 | 11504.6 | 11726.2 | 11968.2 | 12169.4 | 12348.3 |
| 50° | 10986.2 | 11146.8 | 11370.5 | 11588.0 | 11884.8 | 12130.8 | 12508.9 | 12799.7 | 13190.0 | 13458.3 | 13690.1 |
| 52.5° | 11726.2 | 11927.5 | 12177.6 | 12417.5 | 12720.4 | 13035.5 | 13456.3 | 13885.3 | 14354.9 | 14761.5 | 15099.0 |
| 55° | 12450.0 | 12698.0 | 12937.9 | 13218.4 | 13553.9 | 13919.8 | 14395.5 | 14960.7 | 15546.2 | 16011.8 | 16459.0 |
| 57.5° | 13094.4 | 13381.1 | 13663.7 | 13948.3 | 14291.9 | 14716.8 | 15251.4 | 15861.3 | 16532.2 | 17152.3 | 17766.2 |
| 60° | 13692.1 | 14035.7 | 14381.3 | 14737.1 | 15131.5 | 15656.0 | 16298.4 | 17048.6 | 17916.7 | 18764.4 | 19567.4 |
| 62.5° | 14637.5 | 15088.8 | 15517.7 | 15977.2 | 16452.9 | 17068.9 | 17827.2 | 18811.2 | 19807.3 | 20866.5 | 21689.9 |
| 65° | 15918.2 | 16552.5 | 17113.6 | 17709.3 | 18325.3 | 19148.7 | 20055.4 | 21232.5 | 22659.6 | 23745.2 | 25066.7 |
| 67.5° | 16554.6 | 17390.1 | 18111.8 | 18774.6 | 19537.0 | 20368.4 | 21445.9 | 22838.5 | 24361.2 | 25934.7 | 27408.7 |
| 69° | 15806.4 | 16668.4 | 17467.4 | 18209.4 | 18979.9 | 19787.0 | 20913.3 | 22342.5 | 23952.6 | 25654.2 | 27093.5 |
| 70° | 14836.7 | 15698.7 | 16550.5 | 17396.2 | 18099.6 | 18886.4 | 20016.7 | 21490.6 | 23098.7 | 24867.4 | 26294.6 |
| 72.5° | 11366.4 | 12403.2 | 13173.7 | 13966.6 | 14781.8 | 15448.6 | 16753.8 | 17996.0 | 19671.1 | 21466.3 | 23037.7 |
| 75° | 7272.0 | 8225.4 | 9067.1 | 9742.0 | 10539.0 | 11337.9 | 12301.6 | 13682.0 | 14731.0 | 16204.9 | 17479.6 |
| 77.5° | 3736.6 | 4019.2 | 4830.4 | 5072.3 | 5625.3 | 6060.3 | 6590.9 | 6936.5 | 7790.4 | 7971.3 | 8723.5 |
| 80° | 1770.7 | 1595.9 | 1502.4 | 1417.0 | 1441.4 | 1431.2 | 1388.5 | 1331.6 | 1402.8 | 1372.3 | 1360.1 |
| 82.5° | 1543.0 | 1376.3 | 1097.8 | 933.1 | 807.1 | 685.1 | 589.6 | 540.8 | 546.9 | 563.1 | 569.2 |
| 85° | 1081.5 | 1016.5 | 792.9 | 601.8 | 469.6 | 363.9 | 292.7 | 280.6 | 288.7 | 311.0 | 302.9 |
| 87.5° | 313.1 | 327.3 | 288.7 | 201.3 | 140.3 | 101.6 | 79.3 | 89.5 | 85.4 | 83.4 | 87.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: VTS-F12-LED-E1-RW-7060

CANDELA DISTRIBUTION (continued):

| | 84° | 85° | 86° | 87° | 88° | 89° | 90° | 91° | 92° | 93° | 94° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 |
| 2.5° | 6052.2 | 6050.2 | 6044.1 | 6038.0 | 6038.0 | 6033.9 | 6038.0 | 6040.0 | 6038.0 | 6038.0 | 6033.9 |
| 5° | 6121.3 | 6123.3 | 6129.4 | 6117.2 | 6115.2 | 6117.2 | 6109.1 | 6107.1 | 6101.0 | 6107.1 | 6098.9 |
| 7.5° | 6253.5 | 6259.5 | 6259.5 | 6251.4 | 6249.4 | 6255.5 | 6243.3 | 6239.2 | 6233.1 | 6231.1 | 6229.1 |
| 10° | 6450.7 | 6456.7 | 6446.6 | 6440.5 | 6434.4 | 6442.5 | 6432.4 | 6432.4 | 6426.3 | 6420.2 | 6418.1 |
| 12.5° | 6670.2 | 6666.1 | 6662.1 | 6666.1 | 6660.0 | 6660.0 | 6653.9 | 6649.9 | 6647.8 | 6645.8 | 6641.8 |
| 15° | 6841.0 | 6855.2 | 6855.2 | 6859.3 | 6855.2 | 6855.2 | 6847.1 | 6849.1 | 6845.0 | 6843.0 | 6845.0 |
| 17.5° | 6950.8 | 6954.8 | 6965.0 | 6971.1 | 6971.1 | 6973.1 | 6969.1 | 6973.1 | 6969.1 | 6969.1 | 6977.2 |
| 20° | 6965.0 | 6969.1 | 6979.2 | 6989.4 | 6995.5 | 6999.6 | 6999.6 | 7005.7 | 7009.7 | 7013.8 | 7024.0 |
| 22.5° | 6908.1 | 6914.2 | 6926.4 | 6944.7 | 6954.8 | 6958.9 | 6967.0 | 6977.2 | 6987.4 | 6995.5 | 7009.7 |
| 25° | 6849.1 | 6851.1 | 6863.3 | 6881.6 | 6893.8 | 6904.0 | 6918.2 | 6930.4 | 6944.7 | 6960.9 | 6977.2 |
| 27.5° | 6816.6 | 6814.6 | 6824.7 | 6843.0 | 6853.2 | 6867.4 | 6879.6 | 6897.9 | 6914.2 | 6934.5 | 6948.7 |
| 30° | 6845.0 | 6828.8 | 6830.8 | 6838.9 | 6847.1 | 6857.2 | 6871.5 | 6887.7 | 6906.0 | 6924.3 | 6940.6 |
| 32.5° | 6971.1 | 6934.5 | 6910.1 | 6904.0 | 6906.0 | 6908.1 | 6916.2 | 6926.4 | 6940.6 | 6954.8 | 6960.9 |
| 35° | 7243.5 | 7180.5 | 7148.0 | 7121.5 | 7099.2 | 7080.9 | 7084.9 | 7082.9 | 7082.9 | 7095.1 | 7080.9 |
| 37.5° | 7761.9 | 7682.6 | 7648.1 | 7601.3 | 7574.9 | 7507.8 | 7489.5 | 7485.4 | 7459.0 | 7459.0 | 7428.5 |
| 40° | 8575.1 | 8528.4 | 8501.9 | 8459.2 | 8331.2 | 8347.4 | 8255.9 | 8258.0 | 8182.8 | 8190.9 | 8138.0 |
| 42.5° | 9731.9 | 9738.0 | 9705.5 | 9677.0 | 9577.4 | 9532.7 | 9447.3 | 9325.3 | 9229.7 | 9227.7 | 9122.0 |
| 45° | 11069.6 | 11142.8 | 11039.1 | 11075.7 | 10988.3 | 10868.3 | 10768.7 | 10612.2 | 10463.8 | 10417.0 | 10309.2 |
| 47.5° | 12468.3 | 12588.2 | 12508.9 | 12523.2 | 12480.5 | 12309.7 | 12175.5 | 11982.4 | 11789.3 | 11659.1 | 11594.1 |
| 50° | 13962.5 | 14041.8 | 14039.8 | 14001.1 | 13980.8 | 13814.1 | 13598.6 | 13452.2 | 13309.9 | 13135.1 | 13078.2 |
| 52.5° | 15316.5 | 15501.5 | 15625.5 | 15597.0 | 15538.1 | 15438.5 | 15247.4 | 15121.3 | 14911.9 | 14887.5 | 14911.9 |
| 55° | 16766.0 | 17005.9 | 17131.9 | 17284.4 | 17286.4 | 17268.1 | 17188.9 | 17142.1 | 16946.9 | 16969.3 | 16940.8 |
| 57.5° | 18138.3 | 18490.0 | 18683.1 | 19008.4 | 19120.2 | 19268.6 | 19213.7 | 19274.7 | 19156.8 | 19234.0 | 19211.7 |
| 60° | 19998.4 | 20486.4 | 20807.6 | 21252.8 | 21460.2 | 21832.2 | 21905.4 | 21950.1 | 22015.2 | 22173.7 | 22084.3 |
| 62.5° | 22338.4 | 23054.0 | 23720.8 | 24326.7 | 24525.9 | 25085.0 | 25176.4 | 25526.1 | 25544.4 | 25652.2 | 25455.0 |
| 65° | 26168.5 | 27040.7 | 27774.6 | 28500.4 | 28919.2 | 29573.8 | 29838.1 | 30517.1 | 30309.7 | 30397.1 | 29976.3 |
| 67.5° | 28677.2 | 29691.7 | 30675.7 | 31362.8 | 32058.1 | 32726.9 | 33208.8 | 33647.9 | 33643.8 | 33558.4 | 33184.4 |
| 69° | 28455.6 | 29586.0 | 30555.7 | 31476.7 | 32208.5 | 32895.7 | 33475.1 | 33759.7 | 33859.3 | 33735.3 | 33469.0 |
| 70° | 27689.2 | 28850.0 | 30037.3 | 30795.6 | 31592.5 | 32346.8 | 32944.5 | 33255.5 | 33324.6 | 33237.2 | 33007.5 |
| 72.5° | 24147.8 | 25261.8 | 26571.1 | 27260.2 | 28223.9 | 28768.7 | 29592.1 | 29994.6 | 30065.8 | 29953.9 | 29803.5 |
| 75° | 18845.7 | 19047.0 | 20380.6 | 20819.8 | 21519.1 | 22147.3 | 22659.6 | 22529.5 | 22893.4 | 22822.3 | 22765.3 |
| 77.5° | 8878.0 | 8341.3 | 9205.3 | 9607.9 | 9396.4 | 8833.3 | 9652.6 | 9061.0 | 9453.4 | 9963.6 | 9833.5 |
| 80° | 1463.7 | 1459.7 | 1498.3 | 1583.7 | 1482.0 | 1573.5 | 1571.5 | 1526.8 | 1530.8 | 1640.6 | 1583.7 |
| 82.5° | 563.1 | 575.3 | 581.4 | 597.7 | 597.7 | 599.7 | 609.9 | 622.1 | 611.9 | 632.3 | 628.2 |
| 85° | 304.9 | 325.3 | 307.0 | 292.7 | 302.9 | 309.0 | 317.1 | 327.3 | 317.1 | 347.6 | 331.4 |
| 87.5° | 79.3 | 83.4 | 73.2 | 73.2 | 71.2 | 65.1 | 65.1 | 69.1 | 75.2 | 89.5 | 97.6 |
| 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: P157977

CATALOG NUMBER: VTS-F12-LED-E1-RW-7060

CANDELA DISTRIBUTION (continued):

| | 95° | 96° | 97° | 98° | 99° | 100° | 101° | 102° | 103° | 104° | 105° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 |
| 2.5° | 6025.8 | 6027.8 | 6029.8 | 6023.7 | 6019.7 | 6019.7 | 6017.6 | 6013.6 | 6011.5 | 6011.5 | 6011.5 |
| 5° | 6094.9 | 6098.9 | 6088.8 | 6086.7 | 6082.7 | 6078.6 | 6078.6 | 6074.5 | 6076.6 | 6076.6 | 6066.4 |
| 7.5° | 6233.1 | 6227.0 | 6214.8 | 6206.7 | 6214.8 | 6200.6 | 6194.5 | 6198.6 | 6194.5 | 6196.5 | 6192.5 |
| 10° | 6418.1 | 6418.1 | 6403.9 | 6412.0 | 6401.9 | 6385.6 | 6391.7 | 6385.6 | 6381.5 | 6367.3 | 6375.4 |
| 12.5° | 6647.8 | 6641.8 | 6633.6 | 6615.3 | 6609.2 | 6607.2 | 6588.9 | 6590.9 | 6584.8 | 6580.8 | 6574.7 |
| 15° | 6849.1 | 6847.1 | 6828.8 | 6818.6 | 6816.6 | 6808.5 | 6800.3 | 6796.3 | 6786.1 | 6784.1 | 6780.0 |
| 17.5° | 6983.3 | 6977.2 | 6969.1 | 6958.9 | 6958.9 | 6946.7 | 6942.6 | 6932.5 | 6930.4 | 6924.3 | 6918.2 |
| 20° | 7028.0 | 7030.0 | 7021.9 | 7013.8 | 7009.7 | 7001.6 | 6995.5 | 6987.4 | 6983.3 | 6975.2 | 6969.1 |
| 22.5° | 7017.9 | 7017.9 | 7009.7 | 7007.7 | 6999.6 | 6987.4 | 6979.2 | 6969.1 | 6958.9 | 6948.7 | 6936.5 |
| 25° | 6985.3 | 6983.3 | 6977.2 | 6967.0 | 6956.9 | 6938.6 | 6922.3 | 6906.0 | 6891.8 | 6879.6 | 6861.3 |
| 27.5° | 6956.9 | 6952.8 | 6940.6 | 6926.4 | 6906.0 | 6885.7 | 6855.2 | 6832.9 | 6814.6 | 6798.3 | 6778.0 |
| 30° | 6946.7 | 6932.5 | 6914.2 | 6891.8 | 6867.4 | 6836.9 | 6804.4 | 6775.9 | 6755.6 | 6739.3 | 6731.2 |
| 32.5° | 6958.9 | 6940.6 | 6912.1 | 6883.7 | 6853.2 | 6816.6 | 6784.1 | 6759.7 | 6741.4 | 6737.3 | 6737.3 |
| 35° | 7070.7 | 7040.2 | 7001.6 | 6960.9 | 6922.3 | 6891.8 | 6869.4 | 6867.4 | 6855.2 | 6869.4 | 6891.8 |
| 37.5° | 7398.0 | 7371.6 | 7312.6 | 7259.8 | 7233.3 | 7219.1 | 7198.8 | 7202.9 | 7174.4 | 7219.1 | 7255.7 |
| 40° | 8093.3 | 8060.8 | 7991.7 | 7949.0 | 7896.1 | 7845.3 | 7885.9 | 7873.7 | 7894.1 | 7885.9 | 7924.6 |
| 42.5° | 9107.8 | 9075.2 | 8965.4 | 8949.2 | 8926.8 | 8906.5 | 8906.5 | 8890.2 | 8882.1 | 8910.6 | 8878.0 |
| 45° | 10341.8 | 10276.7 | 10236.1 | 10284.9 | 10217.8 | 10238.1 | 10309.2 | 10213.7 | 10236.1 | 10103.9 | 9981.9 |
| 47.5° | 11622.6 | 11616.5 | 11606.3 | 11665.2 | 11675.4 | 11705.9 | 11744.5 | 11647.0 | 11470.1 | 11370.5 | 11122.4 |
| 50° | 13096.5 | 13159.5 | 13183.9 | 13240.8 | 13265.2 | 13287.6 | 13226.6 | 13082.2 | 12783.4 | 12519.1 | 12226.4 |
| 52.5° | 14887.5 | 14777.7 | 14928.2 | 14983.1 | 14958.7 | 14869.2 | 14649.7 | 14472.8 | 14060.1 | 13679.9 | 13226.6 |
| 55° | 16973.4 | 16999.8 | 16894.1 | 16851.4 | 16768.0 | 16520.0 | 16217.1 | 15818.6 | 15296.2 | 14800.1 | 14226.8 |
| 57.5° | 19097.8 | 19087.7 | 18923.0 | 18691.2 | 18408.6 | 18109.8 | 17658.5 | 17087.2 | 16477.3 | 15810.5 | 15117.3 |
| 60° | 21681.7 | 21671.6 | 21338.2 | 20941.7 | 20539.2 | 20057.4 | 19349.9 | 18662.8 | 17845.5 | 16969.3 | 16143.9 |
| 62.5° | 25076.8 | 24639.7 | 24312.4 | 23720.8 | 23098.7 | 22468.5 | 21511.0 | 20598.2 | 19506.5 | 18400.5 | 17436.9 |
| 65° | 29427.4 | 28707.7 | 28335.7 | 27477.8 | 26514.1 | 25530.2 | 24556.4 | 23356.9 | 21887.1 | 20549.4 | 19372.3 |
| 67.5° | 32645.6 | 31986.9 | 31305.9 | 30450.0 | 29392.8 | 28295.0 | 26961.4 | 25450.9 | 23781.8 | 22281.5 | 20998.7 |
| 69° | 32928.2 | 32312.2 | 31494.9 | 30637.0 | 29636.8 | 28443.4 | 26987.8 | 25296.4 | 23604.9 | 22086.3 | 20823.8 |
| 70° | 32499.2 | 31844.6 | 30984.7 | 30092.2 | 28974.1 | 27847.8 | 26323.0 | 24560.4 | 22867.0 | 21344.3 | 20112.3 |
| 72.5° | 29299.3 | 28661.0 | 27746.1 | 26678.8 | 25532.2 | 24568.6 | 23121.1 | 21283.3 | 19441.4 | 18034.6 | 17075.0 |
| 75° | 22279.4 | 22139.2 | 21490.6 | 20868.6 | 19965.9 | 18890.5 | 17567.0 | 16330.9 | 14820.4 | 13332.3 | 12437.8 |
| 77.5° | 9506.2 | 9829.5 | 10166.9 | 10215.7 | 10248.3 | 9916.9 | 9711.6 | 9400.5 | 8390.1 | 7930.7 | 7457.0 |
| 80° | 1756.5 | 1569.5 | 1675.2 | 1687.4 | 1756.5 | 1793.1 | 1927.3 | 2285.1 | 2325.7 | 2413.1 | 2520.9 |
| 82.5° | 624.1 | 634.3 | 650.6 | 656.7 | 662.8 | 687.1 | 778.6 | 933.1 | 1073.4 | 1256.4 | 1500.3 |
| 85° | 353.7 | 359.8 | 374.1 | 386.3 | 394.4 | 418.8 | 469.6 | 561.1 | 699.3 | 908.7 | 1232.0 |
| 87.5° | 107.7 | 122.0 | 130.1 | 146.4 | 152.5 | 156.5 | 178.9 | 239.9 | 309.0 | 457.4 | 666.8 |
| 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: P157977

CATALOG NUMBER: VTS-F12-LED-E1-RW-7060

CANDELA DISTRIBUTION (continued):

| | 106° | 107° | 108° | 109° | 110° | 115° | 125° | 135° | 145° | 155° | 165° |
|-------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|
| 0° | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 | 6015.6 |
| 2.5° | 6011.5 | 6009.5 | 6005.4 | 6001.4 | 6003.4 | 5999.3 | 5987.1 | 5983.1 | 5968.8 | 5958.7 | 5950.5 |
| 5° | 6066.4 | 6064.4 | 6056.3 | 6058.3 | 6056.3 | 6035.9 | 6021.7 | 5997.3 | 5983.1 | 5960.7 | 5952.6 |
| 7.5° | 6180.3 | 6178.2 | 6164.0 | 6170.1 | 6166.0 | 6135.5 | 6111.1 | 6072.5 | 6052.2 | 6023.7 | 6001.4 |
| 10° | 6351.0 | 6351.0 | 6334.8 | 6336.8 | 6336.8 | 6296.1 | 6253.5 | 6188.4 | 6141.6 | 6096.9 | 6058.3 |
| 12.5° | 6558.4 | 6550.3 | 6548.2 | 6538.1 | 6529.9 | 6485.2 | 6420.2 | 6332.7 | 6245.3 | 6172.1 | 6119.3 |
| 15° | 6767.8 | 6755.6 | 6749.5 | 6737.3 | 6727.1 | 6686.5 | 6599.1 | 6491.3 | 6373.4 | 6255.5 | 6168.1 |
| 17.5° | 6904.0 | 6895.9 | 6883.7 | 6879.6 | 6865.4 | 6824.7 | 6763.7 | 6656.0 | 6509.6 | 6344.9 | 6212.8 |
| 20° | 6954.8 | 6940.6 | 6932.5 | 6924.3 | 6916.2 | 6887.7 | 6887.7 | 6818.6 | 6656.0 | 6424.2 | 6223.0 |
| 22.5° | 6922.3 | 6914.2 | 6902.0 | 6895.9 | 6887.7 | 6891.8 | 6971.1 | 6960.9 | 6773.9 | 6442.5 | 6149.8 |
| 25° | 6847.1 | 6836.9 | 6826.8 | 6826.8 | 6824.7 | 6867.4 | 7058.5 | 7084.9 | 6808.5 | 6353.1 | 5989.2 |
| 27.5° | 6769.8 | 6755.6 | 6759.7 | 6761.7 | 6771.9 | 6863.3 | 7154.1 | 7117.5 | 6714.9 | 6137.6 | 5712.7 |
| 30° | 6723.1 | 6723.1 | 6733.2 | 6749.5 | 6769.8 | 6930.4 | 7229.3 | 7044.3 | 6473.0 | 5812.3 | 5346.7 |
| 32.5° | 6743.4 | 6763.7 | 6786.1 | 6826.8 | 6857.2 | 7078.8 | 7255.7 | 6855.2 | 6121.3 | 5409.8 | 4964.5 |
| 35° | 6924.3 | 6948.7 | 6991.4 | 7054.4 | 7091.0 | 7292.3 | 7255.7 | 6578.7 | 5712.7 | 5064.2 | 4570.1 |
| 37.5° | 7318.7 | 7343.1 | 7394.0 | 7442.7 | 7479.3 | 7560.7 | 7225.2 | 6227.0 | 5371.1 | 4706.4 | 4216.4 |
| 40° | 7953.0 | 7987.6 | 8024.2 | 8016.0 | 7991.7 | 7912.4 | 7164.2 | 5899.7 | 5056.0 | 4393.3 | 3868.8 |
| 42.5° | 8845.5 | 8813.0 | 8808.9 | 8729.6 | 8648.3 | 8308.8 | 7119.5 | 5686.2 | 4785.6 | 4063.9 | 3523.2 |
| 45° | 9876.2 | 9744.1 | 9607.9 | 9502.2 | 9378.1 | 8743.9 | 7107.3 | 5513.4 | 4486.8 | 3698.0 | 3147.1 |
| 47.5° | 10913.0 | 10701.6 | 10437.3 | 10272.7 | 10071.4 | 9207.4 | 7143.9 | 5281.7 | 4102.6 | 3299.5 | 2795.3 |
| 50° | 11929.5 | 11583.9 | 11256.6 | 11059.4 | 10831.7 | 9740.0 | 7202.9 | 4891.4 | 3643.1 | 2937.7 | 2474.1 |
| 52.5° | 12870.8 | 12425.6 | 12090.1 | 11858.4 | 11579.9 | 10360.1 | 7150.0 | 4379.0 | 3244.6 | 2590.0 | 2169.2 |
| 55° | 13765.3 | 13273.3 | 12925.7 | 12681.7 | 12354.4 | 10982.2 | 6767.8 | 3913.5 | 2864.5 | 2250.5 | 1825.6 |
| 57.5° | 14548.0 | 14076.4 | 13714.5 | 13383.1 | 13106.6 | 11522.9 | 6013.6 | 3529.3 | 2498.5 | 1862.2 | 1453.6 |
| 60° | 15462.9 | 14932.2 | 14503.3 | 14149.6 | 13824.3 | 11801.5 | 5167.8 | 3187.7 | 2108.2 | 1441.4 | 1051.1 |
| 62.5° | 16696.9 | 16087.0 | 15590.9 | 15186.4 | 14761.5 | 11862.4 | 4590.5 | 2846.2 | 1673.1 | 1042.9 | 764.4 |
| 65° | 18526.6 | 17774.4 | 17154.3 | 16597.3 | 16021.9 | 11610.4 | 4305.9 | 2474.1 | 1244.2 | 774.6 | 640.4 |
| 67.5° | 19980.1 | 19199.5 | 18481.8 | 17766.2 | 17030.3 | 11142.8 | 4242.8 | 2130.6 | 955.5 | 658.7 | 575.3 |
| 69° | 19803.3 | 19059.2 | 18400.5 | 17625.9 | 16810.7 | 10555.2 | 4179.8 | 1998.4 | 872.1 | 611.9 | 544.8 |
| 70° | 19122.2 | 18416.8 | 17747.9 | 17117.7 | 16119.5 | 9900.6 | 4013.1 | 1925.2 | 839.6 | 589.6 | 522.5 |
| 72.5° | 16158.1 | 15340.9 | 14692.4 | 13907.6 | 12856.6 | 7357.4 | 3043.4 | 1557.3 | 770.5 | 538.7 | 471.7 |
| 75° | 11785.2 | 11108.2 | 10461.7 | 9593.6 | 8571.0 | 4257.1 | 1894.7 | 890.4 | 565.2 | 487.9 | 426.9 |
| 77.5° | 6881.6 | 6729.2 | 6105.0 | 5533.8 | 4521.4 | 2167.2 | 1087.6 | 532.6 | 439.1 | 443.2 | 376.1 |
| 80° | 2590.0 | 2758.8 | 2821.8 | 2624.6 | 2425.3 | 1496.3 | 790.8 | 433.0 | 382.2 | 437.1 | 319.2 |
| 82.5° | 1888.6 | 2191.6 | 2228.1 | 2134.6 | 1986.2 | 1394.6 | 632.3 | 347.6 | 311.0 | 469.6 | 274.5 |
| 85° | 1575.6 | 1744.3 | 1770.7 | 1673.1 | 1624.4 | 1181.2 | 441.2 | 244.0 | 227.7 | 337.5 | 205.3 |
| 87.5° | 796.9 | 839.6 | 862.0 | 780.7 | 784.7 | 550.9 | 176.9 | 103.7 | 124.0 | 144.3 | 113.8 |
| 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: P157977

CATALOG NUMBER: VTS-F12-LED-E1-RW-7060

CANDELA DISTRIBUTION (continued):

| | 175° | 180° |
|-------|--------|--------|
| 0° | 6015.6 | 6015.6 |
| 2.5° | 5932.2 | 5944.4 |
| 5° | 5940.4 | 5940.4 |
| 7.5° | 5987.1 | 5987.1 |
| 10° | 6038.0 | 6040.0 |
| 12.5° | 6084.7 | 6082.7 |
| 15° | 6121.3 | 6115.2 |
| 17.5° | 6143.7 | 6137.6 |
| 20° | 6121.3 | 6111.1 |
| 22.5° | 6007.5 | 5979.0 |
| 25° | 5800.1 | 5763.5 |
| 27.5° | 5525.6 | 5501.2 |
| 30° | 5167.8 | 5131.2 |
| 32.5° | 4749.0 | 4730.7 |
| 35° | 4348.5 | 4326.2 |
| 37.5° | 3982.6 | 3976.5 |
| 40° | 3673.6 | 3641.1 |
| 42.5° | 3311.7 | 3297.5 |
| 45° | 2943.8 | 2935.6 |
| 47.5° | 2598.2 | 2590.0 |
| 50° | 2279.0 | 2262.7 |
| 52.5° | 1965.9 | 1939.5 |
| 55° | 1618.3 | 1600.0 |
| 57.5° | 1242.2 | 1225.9 |
| 60° | 874.2 | 855.9 |
| 62.5° | 622.1 | 601.8 |
| 65° | 518.4 | 502.1 |
| 67.5° | 469.6 | 451.3 |
| 69° | 447.3 | 431.0 |
| 70° | 433.0 | 420.8 |
| 72.5° | 402.5 | 394.4 |
| 75° | 368.0 | 361.9 |
| 77.5° | 323.2 | 313.1 |
| 80° | 270.4 | 260.2 |
| 82.5° | 227.7 | 217.5 |
| 85° | 152.5 | 138.2 |
| 87.5° | 69.1 | 61.0 |
| 90° | 0.0 | 0.0 |

(END OF REPORT)