

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: P157903

Luminaire Tested: **VTS-F05-LED-E1-RW-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P157903  
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-F05-LED-E1-RW-8030  
Description: VENTUS LED SITE LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE  
Light Source: (35) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

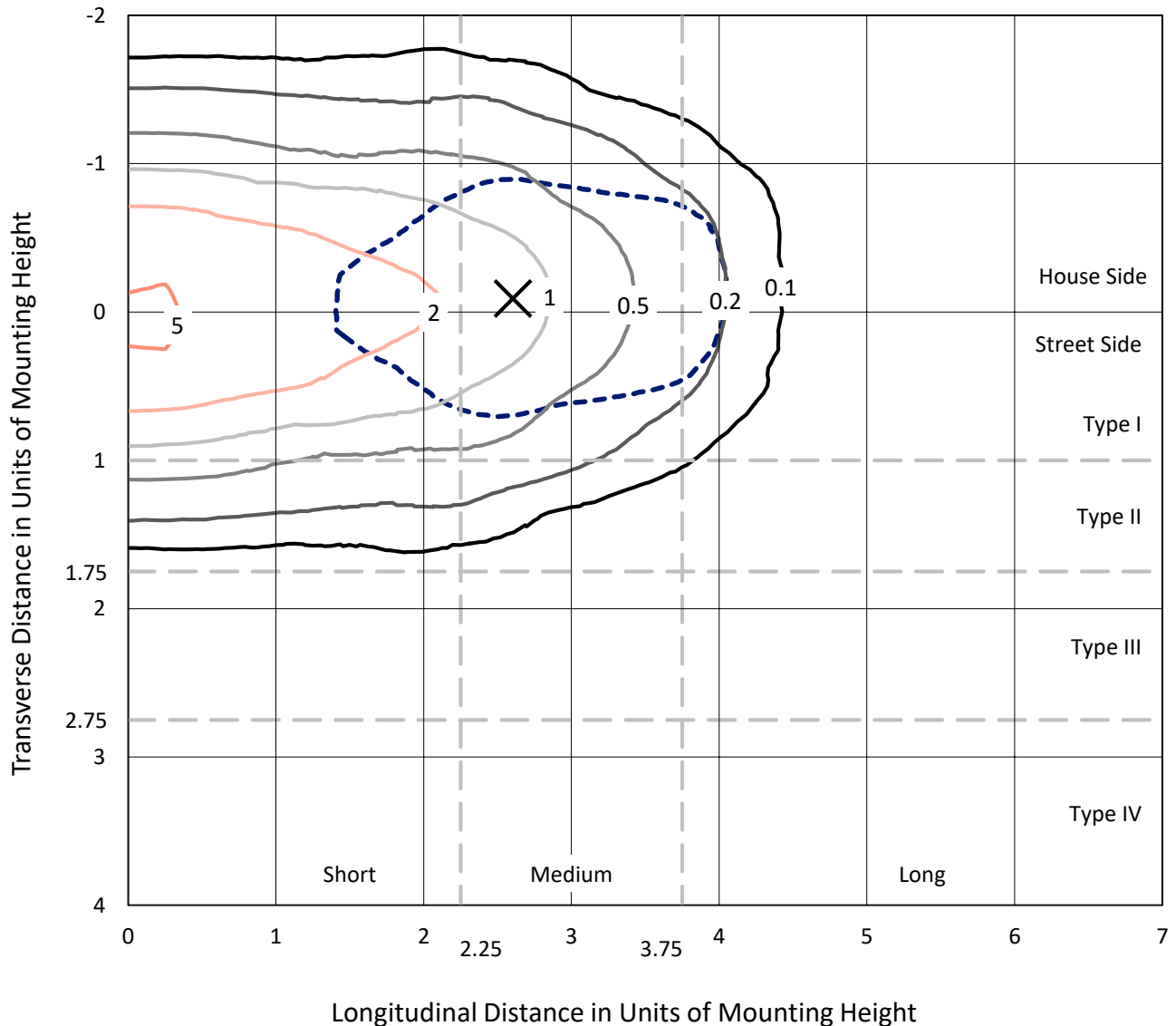
Lumens per Lamp: N/A  
Luminaire Lumens: 10853.1 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 133.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Iso-Footcandle Lines of Horizontal Illumination

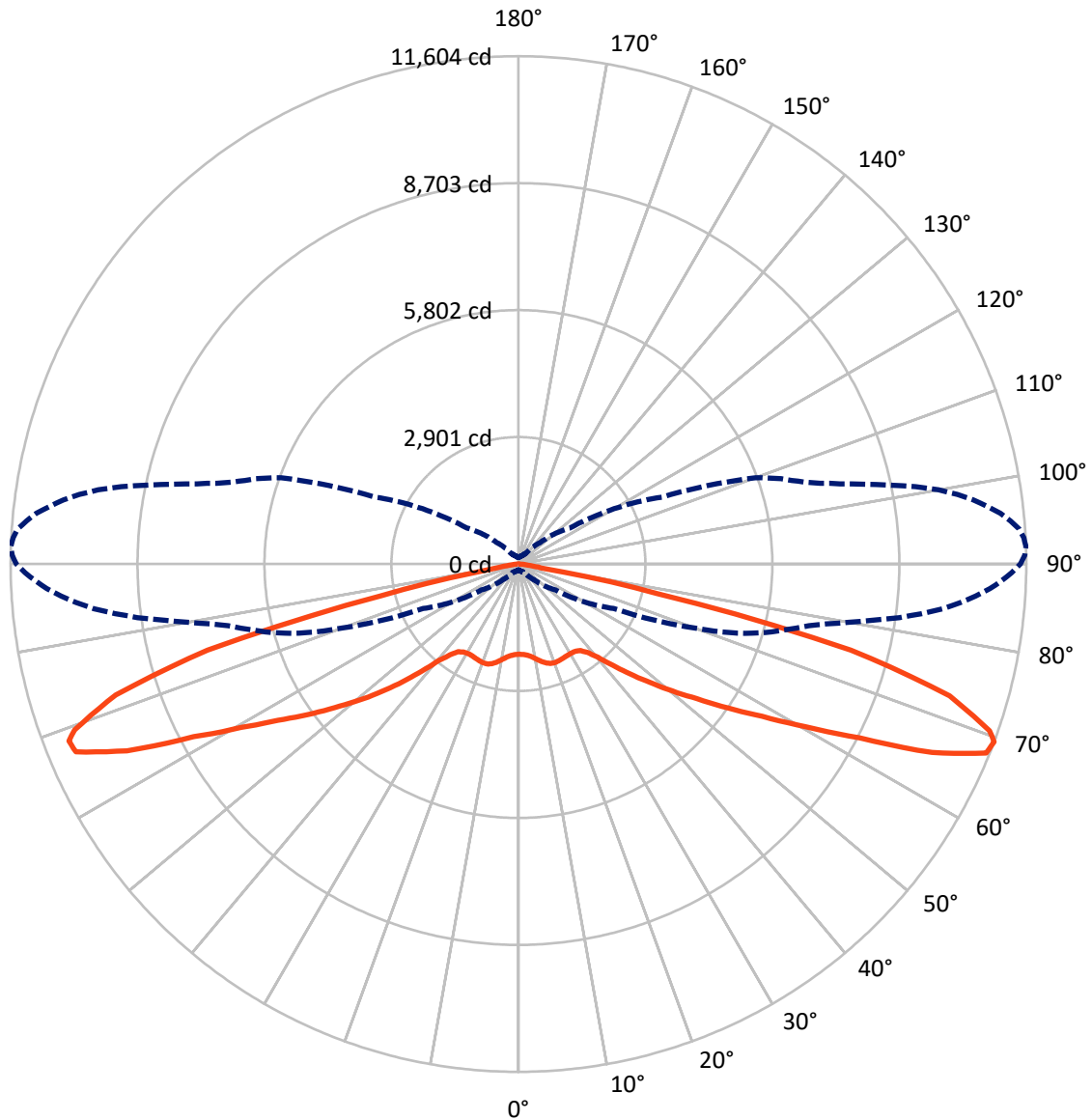
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.3 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   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5756.0   | 0.0    | 5756.0  |
|                    | % Fixture | 53.0     | 0.0    | 53.0    |
| <b>Street Side</b> | Lumens    | 5097.1   | 0.0    | 5097.1  |
|                    | % Fixture | 47.0     | 0.0    | 47.0    |
| <b>Total</b>       | Lumens    | 10853.1  | 0.0    | 10853.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 201.7   | 1.9       |
| 10°-20°   | 637.3   | 5.9       |
| 20°-30°   | 1033.9  | 9.5       |
| 30°-40°   | 1288.6  | 11.9      |
| 40°-50°   | 1604.4  | 14.8      |
| 50°-60°   | 1978.6  | 18.2      |
| 60°-70°   | 2457.3  | 22.6      |
| 70°-80°   | 1509.9  | 13.9      |
| 80°-90°   | 141.5   | 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°    | 10853.1 | 100.0     |
| 0°-180°   | 10853.1 | 100.0     |



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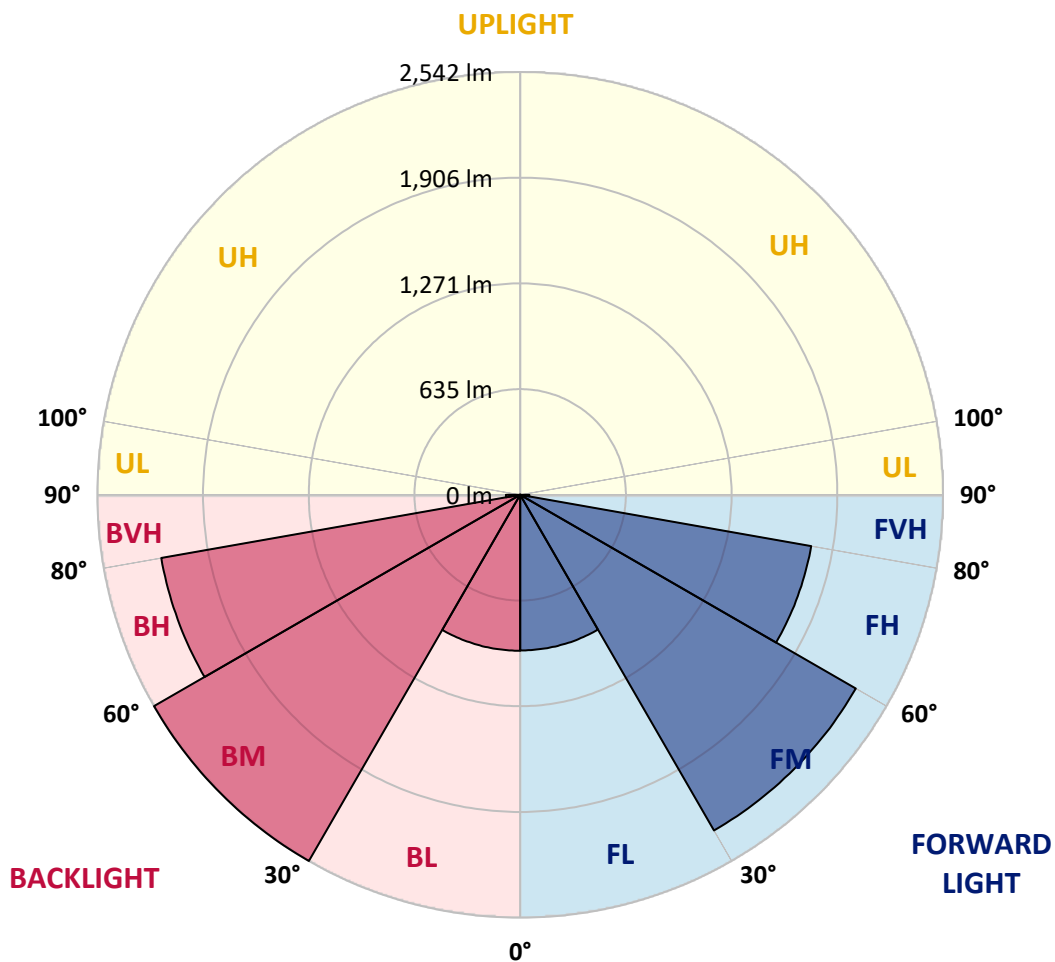
CATALOG NUMBER: VTS-F05-LED-E1-RW-8030

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 935.5  | 8.6       |                         |      |         |
| FM   | (30°-60°)   | 2329.7 | 21.5      |                         |      |         |
| FH   | (60°-80°)   | 1776.5 | 16.4      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 55.4   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 937.5  | 8.6       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 2541.8 | 23.4      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2190.6 | 20.2      | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 86.1   | 0.8       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 70°    | 71°    | 72°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 |
| 2.5°  | 2094.4 | 2088.8 | 2093.7 | 2094.4 | 2093.7 | 2093.7 | 2087.4 | 2086.0 | 2077.7 | 2079.8 | 2079.1 |
| 5°    | 2123.0 | 2120.9 | 2124.3 | 2125.7 | 2127.1 | 2124.3 | 2119.5 | 2117.4 | 2111.8 | 2109.7 | 2109.0 |
| 7.5°  | 2149.4 | 2145.9 | 2151.5 | 2156.4 | 2159.9 | 2160.6 | 2161.3 | 2157.8 | 2157.8 | 2155.0 | 2155.0 |
| 10°   | 2171.7 | 2168.9 | 2178.0 | 2184.3 | 2195.4 | 2201.7 | 2208.7 | 2213.5 | 2216.3 | 2217.0 | 2216.3 |
| 12.5° | 2181.5 | 2179.4 | 2194.0 | 2212.8 | 2233.7 | 2248.4 | 2265.8 | 2278.3 | 2281.8 | 2281.1 | 2284.6 |
| 15°   | 2164.8 | 2166.2 | 2188.4 | 2225.4 | 2270.0 | 2306.9 | 2331.3 | 2341.7 | 2344.5 | 2345.9 | 2346.6 |
| 17.5° | 2119.5 | 2122.3 | 2154.3 | 2214.2 | 2292.3 | 2359.1 | 2395.4 | 2395.4 | 2389.8 | 2389.8 | 2389.1 |
| 20°   | 2047.0 | 2049.8 | 2091.6 | 2178.0 | 2293.0 | 2395.4 | 2446.9 | 2436.5 | 2415.6 | 2411.4 | 2407.2 |
| 22.5° | 1946.7 | 1957.8 | 2003.8 | 2104.1 | 2263.0 | 2405.8 | 2479.0 | 2463.7 | 2430.9 | 2421.9 | 2415.6 |
| 25°   | 1833.1 | 1831.7 | 1886.8 | 1999.6 | 2190.5 | 2380.7 | 2488.0 | 2485.3 | 2450.4 | 2440.7 | 2429.5 |
| 27.5° | 1703.5 | 1707.7 | 1758.6 | 1872.8 | 2079.8 | 2308.3 | 2472.7 | 2509.6 | 2481.1 | 2471.3 | 2460.9 |
| 30°   | 1570.4 | 1574.6 | 1622.7 | 1755.8 | 1953.6 | 2204.5 | 2441.4 | 2533.3 | 2522.2 | 2514.5 | 2507.6 |
| 32.5° | 1436.7 | 1438.1 | 1495.2 | 1638.0 | 1847.0 | 2080.5 | 2394.0 | 2554.9 | 2570.3 | 2566.8 | 2564.0 |
| 35°   | 1311.3 | 1312.6 | 1374.7 | 1519.6 | 1741.8 | 1974.5 | 2336.9 | 2586.3 | 2635.8 | 2639.9 | 2642.7 |
| 37.5° | 1189.3 | 1191.4 | 1254.8 | 1406.7 | 1638.0 | 1894.4 | 2273.4 | 2634.4 | 2727.7 | 2743.0 | 2745.8 |
| 40°   | 1068.1 | 1070.2 | 1130.8 | 1291.7 | 1532.8 | 1824.1 | 2224.7 | 2701.9 | 2851.7 | 2872.6 | 2894.2 |
| 42.5° | 952.4  | 960.1  | 1011.7 | 1165.6 | 1415.8 | 1737.0 | 2203.8 | 2784.2 | 2998.7 | 3031.5 | 3055.9 |
| 45°   | 844.4  | 845.1  | 903.7  | 1047.9 | 1277.1 | 1619.2 | 2189.8 | 2877.5 | 3163.2 | 3212.6 | 3246.1 |
| 47.5° | 728.8  | 737.1  | 798.5  | 938.5  | 1147.5 | 1473.6 | 2145.2 | 2986.9 | 3342.2 | 3400.1 | 3467.7 |
| 50°   | 616.6  | 628.5  | 687.7  | 826.3  | 1029.1 | 1323.1 | 2025.4 | 3115.1 | 3543.6 | 3618.8 | 3696.9 |
| 52.5° | 508.6  | 507.9  | 570.6  | 714.9  | 909.9  | 1195.6 | 1831.0 | 3249.6 | 3776.3 | 3857.1 | 3941.4 |
| 55°   | 384.6  | 384.6  | 446.6  | 578.3  | 781.0  | 1082.0 | 1622.7 | 3333.2 | 3992.3 | 4089.8 | 4181.8 |
| 57.5° | 264.1  | 271.0  | 329.6  | 443.1  | 646.6  | 978.2  | 1463.1 | 3285.1 | 4157.4 | 4278.7 | 4388.0 |
| 60°   | 195.8  | 202.8  | 245.9  | 318.4  | 505.8  | 855.6  | 1343.3 | 3058.7 | 4257.1 | 4418.0 | 4560.1 |
| 62.5° | 169.3  | 174.2  | 215.3  | 255.0  | 364.4  | 725.3  | 1237.4 | 2770.9 | 4400.6 | 4620.8 | 4818.6 |
| 65°   | 151.2  | 156.1  | 197.2  | 220.2  | 285.0  | 583.2  | 1178.2 | 2606.5 | 4572.0 | 4908.5 | 5195.6 |
| 67.5° | 140.0  | 145.6  | 180.5  | 197.2  | 248.7  | 527.4  | 1132.2 | 2568.2 | 4570.6 | 4978.9 | 5345.4 |
| 69°   | 134.5  | 138.7  | 167.2  | 185.3  | 240.4  | 510.7  | 1032.6 | 2401.6 | 4268.9 | 4707.1 | 5075.0 |
| 70°   | 131.0  | 135.2  | 159.6  | 177.7  | 237.6  | 480.7  | 940.6  | 2181.5 | 3925.4 | 4366.4 | 4739.9 |
| 72.5° | 119.8  | 124.0  | 142.1  | 158.9  | 197.9  | 321.2  | 655.6  | 1396.3 | 2805.1 | 3120.0 | 3547.1 |
| 75°   | 105.9  | 110.8  | 124.7  | 138.7  | 149.8  | 186.0  | 378.3  | 724.6  | 1603.9 | 1842.9 | 2223.3 |
| 77.5° | 86.4   | 91.3   | 105.9  | 128.2  | 126.8  | 141.4  | 245.9  | 445.2  | 751.1  | 931.5  | 1072.3 |
| 80°   | 71.1   | 74.6   | 87.1   | 129.6  | 103.8  | 118.4  | 199.3  | 365.1  | 528.8  | 584.6  | 618.0  |
| 82.5° | 47.4   | 52.3   | 67.6   | 101.7  | 79.4   | 84.3   | 149.1  | 341.4  | 447.3  | 490.5  | 530.9  |
| 85°   | 22.3   | 24.4   | 41.1   | 54.3   | 48.1   | 45.3   | 85.0   | 241.1  | 333.0  | 353.2  | 368.6  |
| 87.5° | 0.0    | 0.0    | 2.1    | 4.2    | 6.3    | 6.3    | 15.3   | 50.9   | 93.4   | 112.9  | 111.5  |
| 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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**CANDELA DISTRIBUTION (continued):**

|       | 73°    | 74°    | 75°    | 76°    | 77°    | 78°    | 79°    | 80°    | 81°    | 82°    | 83°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 |
| 2.5°  | 2076.3 | 2077.0 | 2076.3 | 2076.3 | 2075.6 | 2074.2 | 2074.2 | 2072.8 | 2073.5 | 2072.8 | 2074.2 |
| 5°    | 2108.3 | 2108.3 | 2106.2 | 2104.8 | 2106.9 | 2104.8 | 2105.5 | 2102.1 | 2102.1 | 2100.0 | 2097.2 |
| 7.5°  | 2154.3 | 2154.3 | 2155.0 | 2150.8 | 2153.6 | 2154.3 | 2152.2 | 2150.8 | 2149.4 | 2145.9 | 2146.6 |
| 10°   | 2215.6 | 2215.6 | 2217.7 | 2212.1 | 2214.9 | 2216.3 | 2217.0 | 2217.0 | 2215.6 | 2209.3 | 2210.0 |
| 12.5° | 2283.9 | 2282.5 | 2283.2 | 2280.4 | 2283.2 | 2284.6 | 2286.0 | 2284.6 | 2284.6 | 2283.2 | 2282.5 |
| 15°   | 2345.9 | 2345.2 | 2346.6 | 2344.5 | 2345.2 | 2346.6 | 2350.8 | 2350.1 | 2349.4 | 2345.2 | 2345.2 |
| 17.5° | 2388.4 | 2386.3 | 2384.9 | 2384.2 | 2384.2 | 2383.5 | 2384.2 | 2384.2 | 2382.1 | 2381.4 | 2381.4 |
| 20°   | 2404.4 | 2398.9 | 2395.4 | 2393.3 | 2390.5 | 2389.1 | 2387.7 | 2388.4 | 2387.0 | 2384.9 | 2385.6 |
| 22.5° | 2407.2 | 2399.6 | 2392.6 | 2386.3 | 2380.7 | 2377.3 | 2373.8 | 2372.4 | 2368.9 | 2366.8 | 2366.8 |
| 25°   | 2420.5 | 2408.6 | 2397.5 | 2387.0 | 2378.7 | 2371.0 | 2363.3 | 2357.8 | 2353.6 | 2348.7 | 2347.3 |
| 27.5° | 2449.7 | 2437.2 | 2423.9 | 2410.7 | 2399.6 | 2384.2 | 2373.8 | 2362.6 | 2352.9 | 2345.2 | 2339.6 |
| 30°   | 2495.0 | 2482.5 | 2469.2 | 2453.9 | 2439.3 | 2423.2 | 2405.8 | 2392.6 | 2378.7 | 2363.3 | 2355.0 |
| 32.5° | 2554.9 | 2546.6 | 2533.3 | 2518.7 | 2505.5 | 2488.7 | 2467.8 | 2447.6 | 2434.4 | 2416.3 | 2403.0 |
| 35°   | 2640.6 | 2630.9 | 2626.7 | 2620.4 | 2607.2 | 2596.7 | 2573.7 | 2554.9 | 2542.4 | 2517.3 | 2507.6 |
| 37.5° | 2757.7 | 2757.0 | 2760.5 | 2758.4 | 2760.5 | 2747.2 | 2736.8 | 2736.1 | 2718.0 | 2693.6 | 2669.9 |
| 40°   | 2917.2 | 2925.6 | 2944.4 | 2957.6 | 2970.2 | 2971.6 | 2986.2 | 2970.9 | 2973.0 | 2969.5 | 2945.1 |
| 42.5° | 3099.1 | 3127.6 | 3149.9 | 3189.0 | 3218.9 | 3246.8 | 3265.6 | 3291.4 | 3310.9 | 3328.3 | 3332.5 |
| 45°   | 3301.8 | 3344.3 | 3395.9 | 3430.7 | 3489.3 | 3535.9 | 3600.0 | 3649.5 | 3701.1 | 3751.9 | 3770.0 |
| 47.5° | 3522.0 | 3575.0 | 3632.1 | 3696.9 | 3770.7 | 3843.9 | 3942.8 | 4018.8 | 4101.7 | 4170.7 | 4232.0 |
| 50°   | 3765.2 | 3820.2 | 3896.8 | 3971.4 | 4073.1 | 4157.4 | 4287.0 | 4386.6 | 4520.4 | 4612.4 | 4691.8 |
| 52.5° | 4018.8 | 4087.7 | 4173.4 | 4255.7 | 4359.5 | 4467.5 | 4611.7 | 4758.7 | 4919.6 | 5059.0 | 5174.7 |
| 55°   | 4266.8 | 4351.8 | 4434.0 | 4530.2 | 4645.1 | 4770.5 | 4933.6 | 5127.3 | 5327.9 | 5487.5 | 5640.8 |
| 57.5° | 4487.7 | 4585.9 | 4682.8 | 4780.3 | 4898.1 | 5043.7 | 5226.9 | 5435.9 | 5665.9 | 5878.4 | 6088.8 |
| 60°   | 4692.5 | 4810.3 | 4928.7 | 5050.6 | 5185.8 | 5365.6 | 5585.7 | 5842.8 | 6140.3 | 6430.9 | 6706.1 |
| 62.5° | 5016.5 | 5171.2 | 5318.2 | 5475.6 | 5638.7 | 5849.8 | 6109.7 | 6446.9 | 6788.3 | 7151.3 | 7433.5 |
| 65°   | 5455.4 | 5672.8 | 5865.1 | 6069.3 | 6280.4 | 6562.6 | 6873.3 | 7276.7 | 7765.8 | 8137.9 | 8590.7 |
| 67.5° | 5673.5 | 5959.9 | 6207.2 | 6434.4 | 6695.6 | 6980.6 | 7349.9 | 7827.1 | 8349.0 | 8888.3 | 9393.4 |
| 69°   | 5417.1 | 5712.5 | 5986.4 | 6240.7 | 6504.7 | 6781.3 | 7167.3 | 7657.1 | 8208.9 | 8792.1 | 9285.4 |
| 70°   | 5084.8 | 5380.2 | 5672.1 | 5962.0 | 6203.0 | 6472.7 | 6860.1 | 7365.2 | 7916.3 | 8522.5 | 9011.6 |
| 72.5° | 3895.4 | 4250.8 | 4514.8 | 4786.6 | 5066.0 | 5294.5 | 5741.8 | 6167.5 | 6741.6 | 7356.8 | 7895.4 |
| 75°   | 2492.2 | 2819.0 | 3107.4 | 3338.8 | 3611.9 | 3885.7 | 4215.9 | 4689.0 | 5048.5 | 5553.7 | 5990.5 |
| 77.5° | 1280.6 | 1377.4 | 1655.4 | 1738.4 | 1927.9 | 2077.0 | 2258.8 | 2377.3 | 2669.9 | 2731.9 | 2989.7 |
| 80°   | 606.9  | 546.9  | 514.9  | 485.6  | 494.0  | 490.5  | 475.9  | 456.4  | 480.7  | 470.3  | 466.1  |
| 82.5° | 528.8  | 471.7  | 376.2  | 319.8  | 276.6  | 234.8  | 202.1  | 185.3  | 187.4  | 193.0  | 195.1  |
| 85°   | 370.7  | 348.4  | 271.7  | 206.2  | 160.9  | 124.7  | 100.3  | 96.1   | 98.9   | 106.6  | 103.8  |
| 87.5° | 107.3  | 112.2  | 98.9   | 69.0   | 48.1   | 34.8   | 27.2   | 30.7   | 29.3   | 28.6   | 30.0   |
| 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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**CANDELA DISTRIBUTION (continued):**

|       | 84°    | 85°     | 86°     | 87°     | 88°     | 89°     | 90°     | 91°     | 92°     | 93°     | 94°     |
|-------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2061.6 | 2061.6  | 2061.6  | 2061.6  | 2061.6  | 2061.6  | 2061.6  | 2061.6  | 2061.6  | 2061.6  | 2061.6  |
| 2.5°  | 2074.2 | 2073.5  | 2071.4  | 2069.3  | 2069.3  | 2067.9  | 2069.3  | 2070.0  | 2069.3  | 2069.3  | 2067.9  |
| 5°    | 2097.9 | 2098.6  | 2100.7  | 2096.5  | 2095.8  | 2096.5  | 2093.7  | 2093.0  | 2090.9  | 2093.0  | 2090.2  |
| 7.5°  | 2143.2 | 2145.2  | 2145.2  | 2142.5  | 2141.8  | 2143.9  | 2139.7  | 2138.3  | 2136.2  | 2135.5  | 2134.8  |
| 10°   | 2210.7 | 2212.8  | 2209.3  | 2207.3  | 2205.2  | 2208.0  | 2204.5  | 2204.5  | 2202.4  | 2200.3  | 2199.6  |
| 12.5° | 2286.0 | 2284.6  | 2283.2  | 2284.6  | 2282.5  | 2282.5  | 2280.4  | 2279.0  | 2278.3  | 2277.6  | 2276.2  |
| 15°   | 2344.5 | 2349.4  | 2349.4  | 2350.8  | 2349.4  | 2349.4  | 2346.6  | 2347.3  | 2345.9  | 2345.2  | 2345.9  |
| 17.5° | 2382.1 | 2383.5  | 2387.0  | 2389.1  | 2389.1  | 2389.8  | 2388.4  | 2389.8  | 2388.4  | 2388.4  | 2391.2  |
| 20°   | 2387.0 | 2388.4  | 2391.9  | 2395.4  | 2397.5  | 2398.9  | 2398.9  | 2401.0  | 2402.3  | 2403.7  | 2407.2  |
| 22.5° | 2367.5 | 2369.6  | 2373.8  | 2380.0  | 2383.5  | 2384.9  | 2387.7  | 2391.2  | 2394.7  | 2397.5  | 2402.3  |
| 25°   | 2347.3 | 2348.0  | 2352.2  | 2358.4  | 2362.6  | 2366.1  | 2371.0  | 2375.2  | 2380.0  | 2385.6  | 2391.2  |
| 27.5° | 2336.2 | 2335.5  | 2338.9  | 2345.2  | 2348.7  | 2353.6  | 2357.8  | 2364.0  | 2369.6  | 2376.6  | 2381.4  |
| 30°   | 2345.9 | 2340.3  | 2341.0  | 2343.8  | 2346.6  | 2350.1  | 2355.0  | 2360.5  | 2366.8  | 2373.1  | 2378.7  |
| 32.5° | 2389.1 | 2376.6  | 2368.2  | 2366.1  | 2366.8  | 2367.5  | 2370.3  | 2373.8  | 2378.7  | 2383.5  | 2385.6  |
| 35°   | 2482.5 | 2460.9  | 2449.7  | 2440.7  | 2433.0  | 2426.7  | 2428.1  | 2427.4  | 2427.4  | 2431.6  | 2426.7  |
| 37.5° | 2660.1 | 2633.0  | 2621.1  | 2605.1  | 2596.0  | 2573.0  | 2566.8  | 2565.4  | 2556.3  | 2556.3  | 2545.9  |
| 40°   | 2938.8 | 2922.8  | 2913.7  | 2899.1  | 2855.2  | 2860.8  | 2829.4  | 2830.1  | 2804.4  | 2807.1  | 2789.0  |
| 42.5° | 3335.3 | 3337.4  | 3326.2  | 3316.5  | 3282.3  | 3267.0  | 3237.7  | 3195.9  | 3163.2  | 3162.5  | 3126.3  |
| 45°   | 3793.7 | 3818.8  | 3783.3  | 3795.8  | 3765.9  | 3724.7  | 3690.6  | 3637.0  | 3586.1  | 3570.1  | 3533.1  |
| 47.5° | 4273.1 | 4314.2  | 4287.0  | 4291.9  | 4277.3  | 4218.7  | 4172.7  | 4106.6  | 4040.4  | 3995.8  | 3973.5  |
| 50°   | 4785.2 | 4812.4  | 4811.7  | 4798.4  | 4791.5  | 4734.3  | 4660.5  | 4610.3  | 4561.5  | 4501.6  | 4482.1  |
| 52.5° | 5249.2 | 5312.6  | 5355.1  | 5345.4  | 5325.1  | 5291.0  | 5225.5  | 5182.3  | 5110.6  | 5102.2  | 5110.6  |
| 55°   | 5746.0 | 5828.2  | 5871.4  | 5923.6  | 5924.3  | 5918.1  | 5890.9  | 5874.9  | 5808.0  | 5815.7  | 5805.9  |
| 57.5° | 6216.3 | 6336.8  | 6403.0  | 6514.5  | 6552.8  | 6603.7  | 6584.8  | 6605.7  | 6565.3  | 6591.8  | 6584.2  |
| 60°   | 6853.8 | 7021.0  | 7131.1  | 7283.7  | 7354.7  | 7482.2  | 7507.3  | 7522.7  | 7544.9  | 7599.3  | 7568.6  |
| 62.5° | 7655.7 | 7901.0  | 8129.5  | 8337.1  | 8405.4  | 8597.0  | 8628.4  | 8748.2  | 8754.5  | 8791.4  | 8723.8  |
| 65°   | 8968.4 | 9267.3  | 9518.8  | 9767.5  | 9911.1  | 10135.4 | 10226.0 | 10458.7 | 10387.6 | 10417.6 | 10273.4 |
| 67.5° | 9828.2 | 10175.8 | 10513.0 | 10748.5 | 10986.8 | 11216.0 | 11381.2 | 11531.7 | 11530.3 | 11501.0 | 11372.8 |
| 69°   | 9752.2 | 10139.6 | 10471.9 | 10787.6 | 11038.4 | 11273.9 | 11472.4 | 11570.0 | 11604.1 | 11561.6 | 11470.4 |
| 70°   | 9489.5 | 9887.4  | 10294.3 | 10554.2 | 10827.3 | 11085.8 | 11290.6 | 11397.2 | 11420.9 | 11390.9 | 11312.2 |
| 72.5° | 8275.8 | 8657.6  | 9106.3  | 9342.5  | 9672.8  | 9859.5  | 10141.7 | 10279.6 | 10304.0 | 10265.7 | 10214.1 |
| 75°   | 6458.7 | 6527.7  | 6984.8  | 7135.3  | 7374.9  | 7590.2  | 7765.8  | 7721.2  | 7845.9  | 7821.6  | 7802.0  |
| 77.5° | 3042.6 | 2858.7  | 3154.8  | 3292.8  | 3220.3  | 3027.3  | 3308.1  | 3105.4  | 3239.8  | 3414.7  | 3370.1  |
| 80°   | 501.6  | 500.3   | 513.5   | 542.8   | 507.9   | 539.3   | 538.6   | 523.2   | 524.6   | 562.3   | 542.8   |
| 82.5° | 193.0  | 197.2   | 199.3   | 204.8   | 204.8   | 205.5   | 209.0   | 213.2   | 209.7   | 216.7   | 215.3   |
| 85°   | 104.5  | 111.5   | 105.2   | 100.3   | 103.8   | 105.9   | 108.7   | 112.2   | 108.7   | 119.1   | 113.6   |
| 87.5° | 27.2   | 28.6    | 25.1    | 25.1    | 24.4    | 22.3    | 22.3    | 23.7    | 25.8    | 30.7    | 33.4    |
| 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-F05-LED-E1-RW-8030

**CANDELA DISTRIBUTION (continued):**

|       | 95°     | 96°     | 97°     | 98°     | 99°     | 100°   | 101°   | 102°   | 103°   | 104°   | 105°   |
|-------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|
| 0°    | 2061.6  | 2061.6  | 2061.6  | 2061.6  | 2061.6  | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 |
| 2.5°  | 2065.1  | 2065.8  | 2066.5  | 2064.4  | 2063.0  | 2063.0 | 2062.3 | 2060.9 | 2060.2 | 2060.2 | 2060.2 |
| 5°    | 2088.8  | 2090.2  | 2086.7  | 2086.0  | 2084.6  | 2083.2 | 2083.2 | 2081.8 | 2082.5 | 2082.5 | 2079.1 |
| 7.5°  | 2136.2  | 2134.1  | 2129.9  | 2127.1  | 2129.9  | 2125.0 | 2123.0 | 2124.3 | 2123.0 | 2123.6 | 2122.3 |
| 10°   | 2199.6  | 2199.6  | 2194.7  | 2197.5  | 2194.0  | 2188.4 | 2190.5 | 2188.4 | 2187.1 | 2182.2 | 2185.0 |
| 12.5° | 2278.3  | 2276.2  | 2273.4  | 2267.2  | 2265.1  | 2264.4 | 2258.1 | 2258.8 | 2256.7 | 2255.3 | 2253.2 |
| 15°   | 2347.3  | 2346.6  | 2340.3  | 2336.9  | 2336.2  | 2333.4 | 2330.6 | 2329.2 | 2325.7 | 2325.0 | 2323.6 |
| 17.5° | 2393.3  | 2391.2  | 2388.4  | 2384.9  | 2384.9  | 2380.7 | 2379.4 | 2375.9 | 2375.2 | 2373.1 | 2371.0 |
| 20°   | 2408.6  | 2409.3  | 2406.5  | 2403.7  | 2402.3  | 2399.6 | 2397.5 | 2394.7 | 2393.3 | 2390.5 | 2388.4 |
| 22.5° | 2405.1  | 2405.1  | 2402.3  | 2401.6  | 2398.9  | 2394.7 | 2391.9 | 2388.4 | 2384.9 | 2381.4 | 2377.3 |
| 25°   | 2394.0  | 2393.3  | 2391.2  | 2387.7  | 2384.2  | 2378.0 | 2372.4 | 2366.8 | 2361.9 | 2357.8 | 2351.5 |
| 27.5° | 2384.2  | 2382.8  | 2378.7  | 2373.8  | 2366.8  | 2359.8 | 2349.4 | 2341.7 | 2335.5 | 2329.9 | 2322.9 |
| 30°   | 2380.7  | 2375.9  | 2369.6  | 2361.9  | 2353.6  | 2343.1 | 2332.0 | 2322.2 | 2315.3 | 2309.7 | 2306.9 |
| 32.5° | 2384.9  | 2378.7  | 2368.9  | 2359.1  | 2348.7  | 2336.2 | 2325.0 | 2316.6 | 2310.4 | 2309.0 | 2309.0 |
| 35°   | 2423.2  | 2412.8  | 2399.6  | 2385.6  | 2372.4  | 2361.9 | 2354.3 | 2353.6 | 2349.4 | 2354.3 | 2361.9 |
| 37.5° | 2535.4  | 2526.4  | 2506.2  | 2488.0  | 2479.0  | 2474.1 | 2467.1 | 2468.5 | 2458.8 | 2474.1 | 2486.6 |
| 40°   | 2773.7  | 2762.6  | 2738.9  | 2724.2  | 2706.1  | 2688.7 | 2702.6 | 2698.5 | 2705.4 | 2702.6 | 2715.9 |
| 42.5° | 3121.4  | 3110.2  | 3072.6  | 3067.0  | 3059.4  | 3052.4 | 3052.4 | 3046.8 | 3044.0 | 3053.8 | 3042.6 |
| 45°   | 3544.3  | 3522.0  | 3508.1  | 3524.8  | 3501.8  | 3508.8 | 3533.1 | 3500.4 | 3508.1 | 3462.8 | 3421.0 |
| 47.5° | 3983.2  | 3981.1  | 3977.7  | 3997.9  | 4001.4  | 4011.8 | 4025.0 | 3991.6 | 3931.0 | 3896.8 | 3811.8 |
| 50°   | 4488.4  | 4510.0  | 4518.3  | 4537.8  | 4546.2  | 4553.9 | 4533.0 | 4483.5 | 4381.1 | 4290.5 | 4190.2 |
| 52.5° | 5102.2  | 5064.6  | 5116.1  | 5134.9  | 5126.6  | 5095.9 | 5020.7 | 4960.1 | 4818.6 | 4688.3 | 4533.0 |
| 55°   | 5817.0  | 5826.1  | 5789.9  | 5775.2  | 5746.7  | 5661.7 | 5557.9 | 5421.3 | 5242.2 | 5072.2 | 4875.8 |
| 57.5° | 6545.1  | 6541.7  | 6485.2  | 6405.8  | 6308.9  | 6206.5 | 6051.8 | 5856.1 | 5647.0 | 5418.5 | 5180.9 |
| 60°   | 7430.7  | 7427.2  | 7312.9  | 7177.1  | 7039.1  | 6874.0 | 6631.5 | 6396.0 | 6115.9 | 5815.7 | 5532.8 |
| 62.5° | 8594.2  | 8444.4  | 8332.3  | 8129.5  | 7916.3  | 7700.3 | 7372.2 | 7059.3 | 6685.2 | 6306.2 | 5975.9 |
| 65°   | 10085.2 | 9838.6  | 9711.1  | 9417.1  | 9086.8  | 8749.6 | 8415.9 | 8004.8 | 7501.1 | 7042.6 | 6639.2 |
| 67.5° | 11188.2 | 10962.4 | 10729.0 | 10435.7 | 10073.4 | 9697.2 | 9240.1 | 8722.4 | 8150.4 | 7636.2 | 7196.6 |
| 69°   | 11285.0 | 11073.9 | 10793.8 | 10499.8 | 10157.0 | 9748.0 | 9249.2 | 8669.5 | 8089.8 | 7569.3 | 7136.7 |
| 70°   | 11138.0 | 10913.7 | 10618.9 | 10313.1 | 9929.9  | 9543.9 | 9021.3 | 8417.3 | 7836.9 | 7315.0 | 6892.8 |
| 72.5° | 10041.4 | 9822.6  | 9509.0  | 9143.3  | 8750.3  | 8420.0 | 7924.0 | 7294.1 | 6662.9 | 6180.7 | 5851.9 |
| 75°   | 7635.5  | 7587.5  | 7365.2  | 7152.0  | 6842.6  | 6474.1 | 6020.5 | 5596.9 | 5079.2 | 4569.2 | 4262.6 |
| 77.5° | 3257.9  | 3368.7  | 3484.4  | 3501.1  | 3512.2  | 3398.7 | 3328.3 | 3221.7 | 2875.4 | 2718.0 | 2555.6 |
| 80°   | 602.0   | 537.9   | 574.1   | 578.3   | 602.0   | 614.5  | 660.5  | 783.1  | 797.1  | 827.0  | 864.0  |
| 82.5° | 213.9   | 217.4   | 223.0   | 225.0   | 227.1   | 235.5  | 266.8  | 319.8  | 367.9  | 430.6  | 514.2  |
| 85°   | 121.2   | 123.3   | 128.2   | 132.4   | 135.2   | 143.5  | 160.9  | 192.3  | 239.7  | 311.4  | 422.2  |
| 87.5° | 36.9    | 41.8    | 44.6    | 50.2    | 52.3    | 53.6   | 61.3   | 82.2   | 105.9  | 156.8  | 228.5  |
| 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-F05-LED-E1-RW-8030

**CANDELA DISTRIBUTION (continued):**

|       | 106°   | 107°   | 108°   | 109°   | 110°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 | 2061.6 |
| 2.5°  | 2060.2 | 2059.6 | 2058.2 | 2056.8 | 2057.5 | 2056.1 | 2051.9 | 2050.5 | 2045.6 | 2042.1 | 2039.3 |
| 5°    | 2079.1 | 2078.4 | 2075.6 | 2076.3 | 2075.6 | 2068.6 | 2063.7 | 2055.4 | 2050.5 | 2042.8 | 2040.0 |
| 7.5°  | 2118.1 | 2117.4 | 2112.5 | 2114.6 | 2113.2 | 2102.7 | 2094.4 | 2081.1 | 2074.2 | 2064.4 | 2056.8 |
| 10°   | 2176.6 | 2176.6 | 2171.0 | 2171.7 | 2171.7 | 2157.8 | 2143.2 | 2120.9 | 2104.8 | 2089.5 | 2076.3 |
| 12.5° | 2247.7 | 2244.9 | 2244.2 | 2240.7 | 2237.9 | 2222.6 | 2200.3 | 2170.3 | 2140.4 | 2115.3 | 2097.2 |
| 15°   | 2319.4 | 2315.3 | 2313.2 | 2309.0 | 2305.5 | 2291.6 | 2261.6 | 2224.7 | 2184.3 | 2143.9 | 2113.9 |
| 17.5° | 2366.1 | 2363.3 | 2359.1 | 2357.8 | 2352.9 | 2338.9 | 2318.0 | 2281.1 | 2230.9 | 2174.5 | 2129.2 |
| 20°   | 2383.5 | 2378.7 | 2375.9 | 2373.1 | 2370.3 | 2360.5 | 2360.5 | 2336.9 | 2281.1 | 2201.7 | 2132.7 |
| 22.5° | 2372.4 | 2369.6 | 2365.4 | 2363.3 | 2360.5 | 2361.9 | 2389.1 | 2385.6 | 2321.5 | 2208.0 | 2107.6 |
| 25°   | 2346.6 | 2343.1 | 2339.6 | 2339.6 | 2338.9 | 2353.6 | 2419.1 | 2428.1 | 2333.4 | 2177.3 | 2052.6 |
| 27.5° | 2320.1 | 2315.3 | 2316.6 | 2317.3 | 2320.8 | 2352.2 | 2451.8 | 2439.3 | 2301.3 | 2103.4 | 1957.8 |
| 30°   | 2304.1 | 2304.1 | 2307.6 | 2313.2 | 2320.1 | 2375.2 | 2477.6 | 2414.2 | 2218.4 | 1992.0 | 1832.4 |
| 32.5° | 2311.1 | 2318.0 | 2325.7 | 2339.6 | 2350.1 | 2426.0 | 2486.6 | 2349.4 | 2097.9 | 1854.0 | 1701.4 |
| 35°   | 2373.1 | 2381.4 | 2396.1 | 2417.7 | 2430.2 | 2499.2 | 2486.6 | 2254.6 | 1957.8 | 1735.6 | 1566.3 |
| 37.5° | 2508.2 | 2516.6 | 2534.0 | 2550.7 | 2563.3 | 2591.2 | 2476.2 | 2134.1 | 1840.8 | 1612.9 | 1445.0 |
| 40°   | 2725.6 | 2737.5 | 2750.0 | 2747.2 | 2738.9 | 2711.7 | 2455.3 | 2021.9 | 1732.8 | 1505.6 | 1325.9 |
| 42.5° | 3031.5 | 3020.3 | 3019.0 | 2991.8 | 2963.9 | 2847.6 | 2440.0 | 1948.8 | 1640.1 | 1392.8 | 1207.4 |
| 45°   | 3384.7 | 3339.5 | 3292.8 | 3256.5 | 3214.0 | 2996.7 | 2435.8 | 1889.5 | 1537.7 | 1267.4 | 1078.5 |
| 47.5° | 3740.1 | 3667.6 | 3577.0 | 3520.6 | 3451.6 | 3155.5 | 2448.3 | 1810.1 | 1406.0 | 1130.8 | 958.0  |
| 50°   | 4088.4 | 3970.0 | 3857.8 | 3790.2 | 3712.2 | 3338.1 | 2468.5 | 1676.3 | 1248.6 | 1006.8 | 847.9  |
| 52.5° | 4411.0 | 4258.4 | 4143.5 | 4064.1 | 3968.6 | 3550.6 | 2450.4 | 1500.8 | 1112.0 | 887.6  | 743.4  |
| 55°   | 4717.6 | 4549.0 | 4429.8 | 4346.2 | 4234.1 | 3763.8 | 2319.4 | 1341.2 | 981.7  | 771.3  | 625.7  |
| 57.5° | 4985.8 | 4824.2 | 4700.2 | 4586.6 | 4491.9 | 3949.1 | 2060.9 | 1209.5 | 856.3  | 638.2  | 498.2  |
| 60°   | 5299.4 | 5117.5 | 4970.5 | 4849.3 | 4737.8 | 4044.5 | 1771.1 | 1092.5 | 722.5  | 494.0  | 360.2  |
| 62.5° | 5722.3 | 5513.3 | 5343.3 | 5204.6 | 5059.0 | 4065.5 | 1573.2 | 975.4  | 573.4  | 357.4  | 262.0  |
| 65°   | 6349.4 | 6091.6 | 5879.1 | 5688.1 | 5491.0 | 3979.1 | 1475.7 | 847.9  | 426.4  | 265.5  | 219.5  |
| 67.5° | 6847.5 | 6580.0 | 6334.0 | 6088.8 | 5836.6 | 3818.8 | 1454.1 | 730.2  | 327.5  | 225.7  | 197.2  |
| 69°   | 6786.9 | 6531.9 | 6306.2 | 6040.7 | 5761.3 | 3617.5 | 1432.5 | 684.9  | 298.9  | 209.7  | 186.7  |
| 70°   | 6553.5 | 6311.7 | 6082.5 | 5866.5 | 5524.4 | 3393.1 | 1375.4 | 659.8  | 287.8  | 202.1  | 179.1  |
| 72.5° | 5537.7 | 5257.6 | 5035.3 | 4766.4 | 4406.2 | 2521.5 | 1043.0 | 533.7  | 264.1  | 184.6  | 161.6  |
| 75°   | 4039.0 | 3807.0 | 3585.4 | 3287.9 | 2937.4 | 1459.0 | 649.4  | 305.2  | 193.7  | 167.2  | 146.3  |
| 77.5° | 2358.4 | 2306.2 | 2092.3 | 1896.5 | 1549.5 | 742.7  | 372.8  | 182.5  | 150.5  | 151.9  | 128.9  |
| 80°   | 887.6  | 945.5  | 967.1  | 899.5  | 831.2  | 512.8  | 271.0  | 148.4  | 131.0  | 149.8  | 109.4  |
| 82.5° | 647.3  | 751.1  | 763.6  | 731.6  | 680.7  | 478.0  | 216.7  | 119.1  | 106.6  | 160.9  | 94.1   |
| 85°   | 540.0  | 597.8  | 606.9  | 573.4  | 556.7  | 404.8  | 151.2  | 83.6   | 78.0   | 115.7  | 70.4   |
| 87.5° | 273.1  | 287.8  | 295.4  | 267.5  | 268.9  | 188.8  | 60.6   | 35.5   | 42.5   | 49.5   | 39.0   |
| 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-F05-LED-E1-RW-8030

**CANDELA DISTRIBUTION (continued):**

|       | 175°   | 180°   |
|-------|--------|--------|
| 0°    | 2061.6 | 2061.6 |
| 2.5°  | 2033.1 | 2037.3 |
| 5°    | 2035.9 | 2035.9 |
| 7.5°  | 2051.9 | 2051.9 |
| 10°   | 2069.3 | 2070.0 |
| 12.5° | 2085.3 | 2084.6 |
| 15°   | 2097.9 | 2095.8 |
| 17.5° | 2105.5 | 2103.4 |
| 20°   | 2097.9 | 2094.4 |
| 22.5° | 2058.9 | 2049.1 |
| 25°   | 1987.8 | 1975.2 |
| 27.5° | 1893.7 | 1885.4 |
| 30°   | 1771.1 | 1758.6 |
| 32.5° | 1627.6 | 1621.3 |
| 35°   | 1490.3 | 1482.7 |
| 37.5° | 1364.9 | 1362.8 |
| 40°   | 1259.0 | 1247.9 |
| 42.5° | 1135.0 | 1130.1 |
| 45°   | 1008.9 | 1006.1 |
| 47.5° | 890.4  | 887.6  |
| 50°   | 781.0  | 775.5  |
| 52.5° | 673.7  | 664.7  |
| 55°   | 554.6  | 548.3  |
| 57.5° | 425.7  | 420.1  |
| 60°   | 299.6  | 293.3  |
| 62.5° | 213.2  | 206.2  |
| 65°   | 177.7  | 172.1  |
| 67.5° | 160.9  | 154.7  |
| 69°   | 153.3  | 147.7  |
| 70°   | 148.4  | 144.2  |
| 72.5° | 138.0  | 135.2  |
| 75°   | 126.1  | 124.0  |
| 77.5° | 110.8  | 107.3  |
| 80°   | 92.7   | 89.2   |
| 82.5° | 78.0   | 74.6   |
| 85°   | 52.3   | 47.4   |
| 87.5° | 23.7   | 20.9   |
| 90°   | 0.0    | 0.0    |

(END OF REPORT)