

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: STREETWORKS

Report Number: P158710

Luminaire Tested: **VST-E09-LED-E-U-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158710
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33714)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E09-LED-E-U-SL4
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (189) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26108.4 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

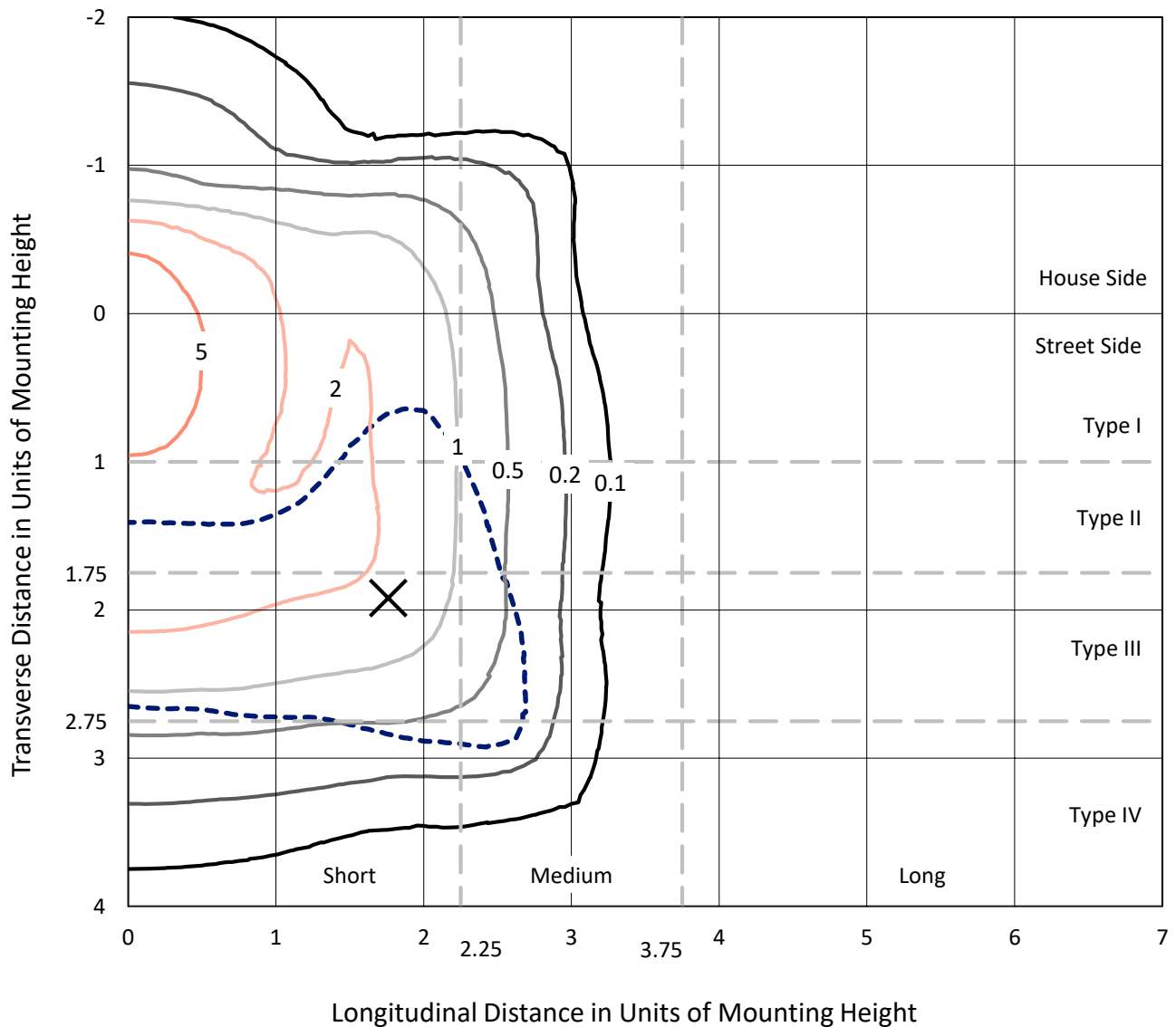
Input Watts (W): 225.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P158710
 CATALOG NUMBER: VST-E09-LED-E-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

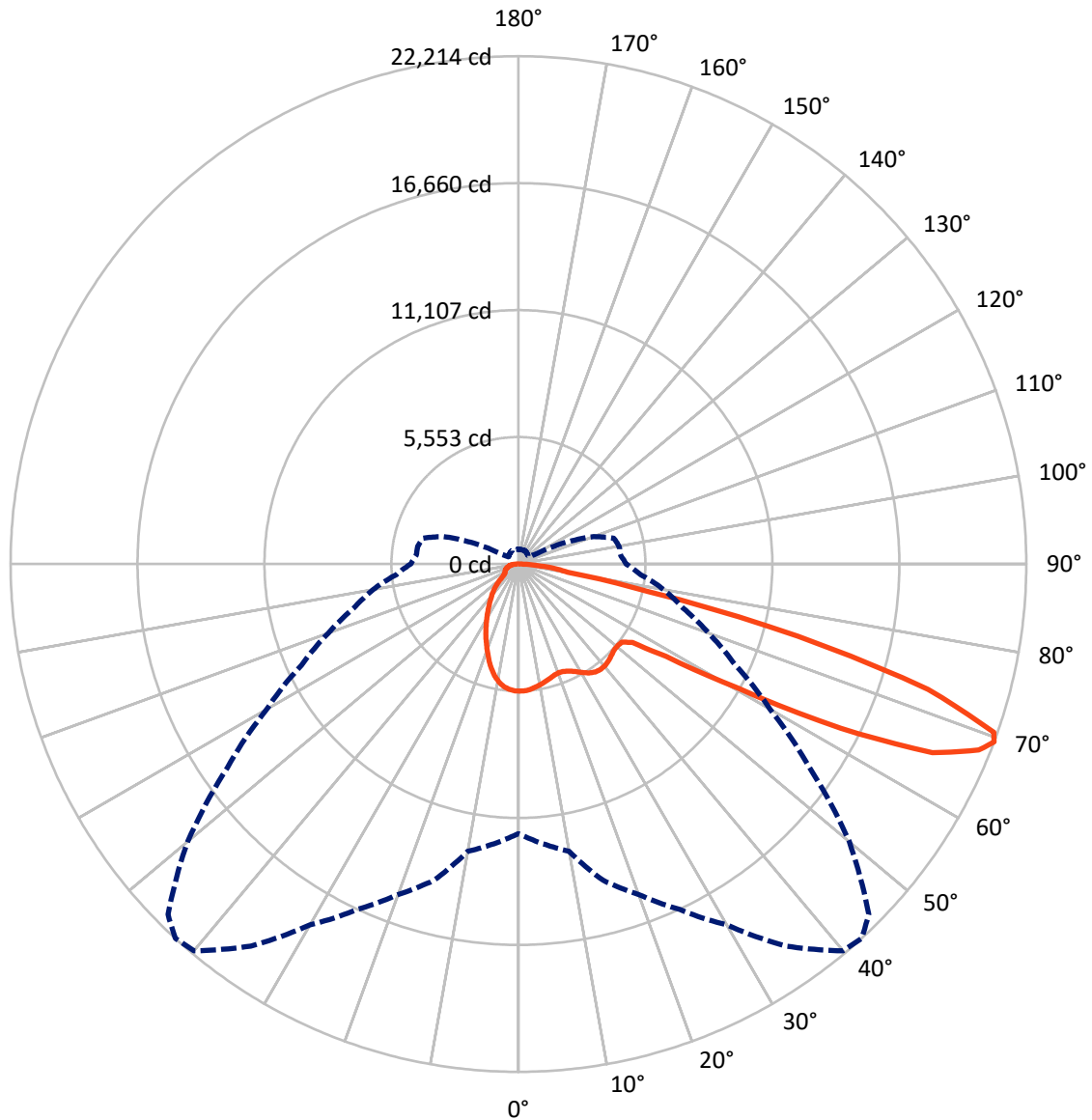


Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
 Type IV - Short - Full Cutoff

REPORT NUMBER: P158710

CATALOG NUMBER: VST-E09-LED-E-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 42.5-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P158710

CATALOG NUMBER: VST-E09-LED-E-U-SL4

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5804.3 | 0.0 | 5804.3 |
| | % Fixture | 22.2 | 0.0 | 22.2 |
| Street Side | Lumens | 20304.1 | 0.0 | 20304.1 |
| | % Fixture | 77.8 | 0.0 | 77.8 |
| Total | Lumens | 26108.4 | 0.0 | 26108.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 517.6 | 2.0 |
| 10°-20° | 1395.0 | 5.3 |
| 20°-30° | 2034.1 | 7.8 |
| 30°-40° | 2593.1 | 9.9 |
| 40°-50° | 3017.2 | 11.6 |
| 50°-60° | 4590.6 | 17.6 |
| 60°-70° | 8109.2 | 31.1 |
| 70°-80° | 3346.3 | 12.8 |
| 80°-90° | 505.3 | 1.9 |
| 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° | 26108.4 | 100.0 |
| 0°-180° | 26108.4 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P158710

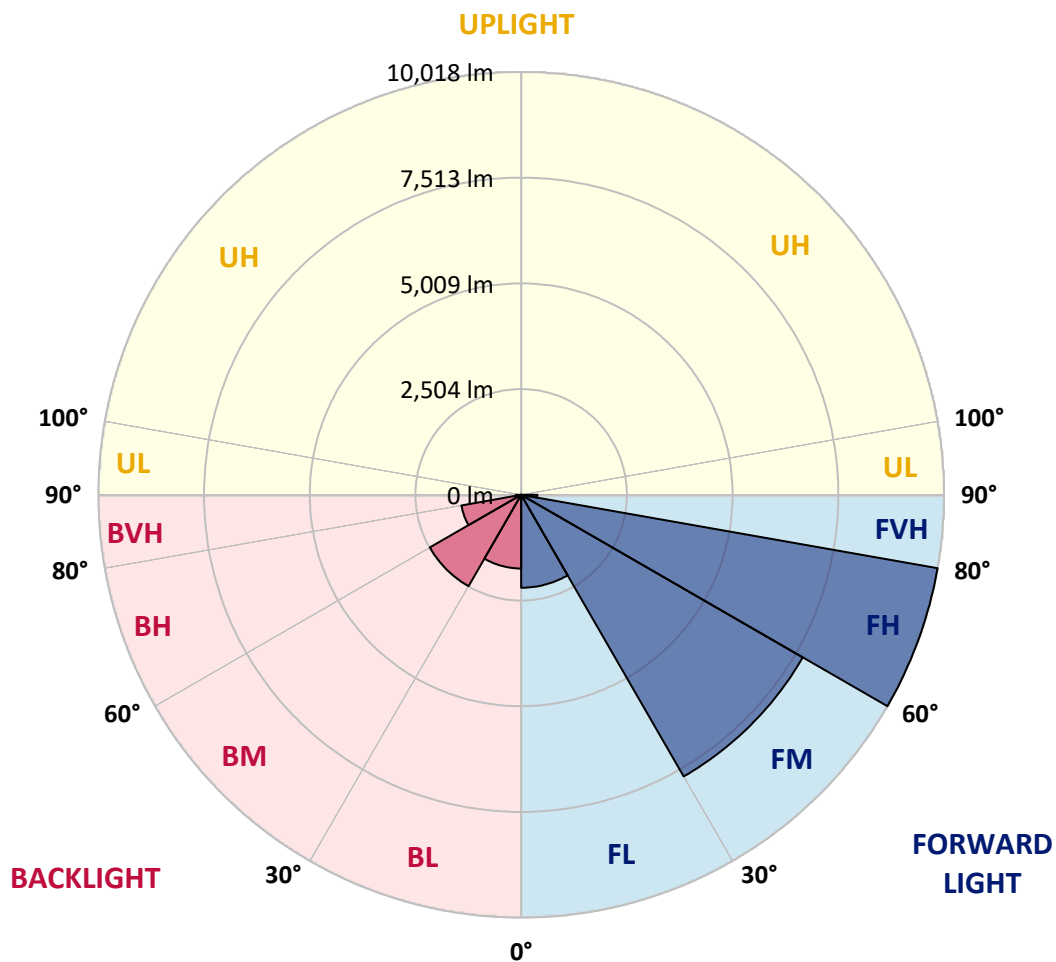
CATALOG NUMBER: VST-E09-LED-E-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 2201.6 | 8.4 | | | |
| FM (30°-60°) | 7702.7 | 29.5 | | | |
| FH (60°-80°) | 10017.8 | 38.4 | | | G4/12000 |
| FVH (80°-90°) | 382.1 | 1.5 | | | G3/500 |
| BL (0°-30°) | 1745.1 | 6.7 | B3/2500 | | |
| BM (30°-60°) | 2498.3 | 9.6 | B2/2500 | | |
| BH (60°-80°) | 1437.7 | 5.5 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 123.2 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type IV Short





REPORT NUMBER: P158710

CATALOG NUMBER: VST-E09-LED-E-U-SL4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 42.5° | 45° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 |
| 2.5° | 5542.2 | 5562.0 | 5554.8 | 5554.8 | 5560.2 | 5551.2 | 5551.2 | 5554.8 | 5545.8 | 5551.2 | 5549.4 |
| 5° | 5522.4 | 5533.2 | 5529.6 | 5529.6 | 5529.6 | 5522.4 | 5518.8 | 5517.0 | 5504.4 | 5504.4 | 5499.0 |
| 7.5° | 5479.2 | 5482.8 | 5488.2 | 5481.0 | 5479.2 | 5477.4 | 5464.8 | 5457.6 | 5443.2 | 5430.6 | 5434.2 |
| 10° | 5421.6 | 5419.8 | 5428.8 | 5423.4 | 5416.2 | 5410.8 | 5400.0 | 5387.4 | 5371.2 | 5355.0 | 5353.2 |
| 12.5° | 5356.8 | 5355.0 | 5362.2 | 5358.6 | 5353.2 | 5342.4 | 5333.4 | 5311.8 | 5286.6 | 5266.8 | 5265.0 |
| 15° | 5315.4 | 5310.0 | 5317.2 | 5310.0 | 5301.0 | 5290.2 | 5274.0 | 5247.0 | 5202.0 | 5182.2 | 5166.0 |
| 17.5° | 5355.0 | 5346.0 | 5349.6 | 5340.6 | 5328.0 | 5299.2 | 5261.4 | 5203.8 | 5139.0 | 5104.8 | 5079.6 |
| 20° | 5493.6 | 5477.4 | 5481.0 | 5472.0 | 5443.2 | 5405.4 | 5333.4 | 5232.6 | 5122.8 | 5067.0 | 5027.4 |
| 22.5° | 5691.6 | 5679.0 | 5684.4 | 5675.4 | 5646.6 | 5589.0 | 5481.0 | 5337.0 | 5180.4 | 5099.4 | 5036.4 |
| 25° | 5992.2 | 6003.0 | 6006.6 | 5965.2 | 5949.0 | 5842.8 | 5693.4 | 5493.6 | 5284.8 | 5189.4 | 5103.0 |
| 27.5° | 6330.6 | 6330.6 | 6346.8 | 6330.6 | 6298.2 | 6174.0 | 5963.4 | 5722.2 | 5454.0 | 5324.4 | 5220.0 |
| 30° | 6660.0 | 6656.4 | 6687.0 | 6683.4 | 6631.2 | 6490.8 | 6251.4 | 5958.0 | 5652.0 | 5506.2 | 5373.0 |
| 32.5° | 7009.2 | 7020.0 | 7039.8 | 7032.6 | 6964.2 | 6769.8 | 6481.8 | 6163.2 | 5841.0 | 5680.8 | 5531.4 |
| 35° | 7387.2 | 7392.6 | 7399.8 | 7396.2 | 7257.6 | 7012.8 | 6651.0 | 6294.6 | 5959.8 | 5801.4 | 5646.6 |
| 37.5° | 7765.2 | 7759.8 | 7750.8 | 7673.4 | 7515.0 | 7174.8 | 6753.6 | 6370.2 | 6019.2 | 5848.2 | 5688.0 |
| 40° | 8103.6 | 8073.0 | 8044.2 | 7923.6 | 7680.6 | 7266.6 | 6793.2 | 6388.2 | 6013.8 | 5837.4 | 5680.8 |
| 42.5° | 8289.0 | 8254.8 | 8195.4 | 8044.2 | 7749.0 | 7275.6 | 6766.2 | 6334.2 | 5958.0 | 5783.4 | 5628.6 |
| 45° | 8323.2 | 8298.0 | 8240.4 | 8071.2 | 7732.8 | 7218.0 | 6683.4 | 6246.0 | 5875.2 | 5700.6 | 5554.8 |
| 47.5° | 8242.2 | 8222.4 | 8166.6 | 7999.2 | 7662.6 | 7131.6 | 6588.0 | 6152.4 | 5794.2 | 5630.4 | 5490.0 |
| 50° | 8118.0 | 8100.0 | 8056.8 | 7903.8 | 7583.4 | 7072.2 | 6539.4 | 6103.8 | 5767.2 | 5617.8 | 5488.2 |
| 52.5° | 8319.6 | 8334.0 | 8208.0 | 8040.6 | 7668.0 | 7124.4 | 6593.4 | 6154.2 | 5815.8 | 5668.2 | 5533.2 |
| 55° | 11453.4 | 11433.6 | 10675.8 | 10040.4 | 8904.6 | 7875.0 | 7106.4 | 6553.8 | 6192.0 | 6044.4 | 5918.4 |
| 57.5° | 14882.4 | 14814.0 | 14502.6 | 13908.6 | 12688.2 | 11059.2 | 9577.8 | 8317.8 | 7821.0 | 7608.6 | 7623.0 |
| 60° | 16002.0 | 16027.2 | 15960.6 | 15750.0 | 15312.6 | 14464.8 | 13338.0 | 12391.2 | 11458.8 | 11003.4 | 11055.6 |
| 62.5° | 16623.0 | 16668.0 | 16725.6 | 16678.8 | 16536.6 | 16340.4 | 16198.2 | 16284.6 | 16155.0 | 15827.4 | 15566.4 |
| 65° | 16709.4 | 16801.2 | 16992.0 | 17143.2 | 17217.0 | 17402.4 | 17838.0 | 18882.0 | 19836.0 | 19899.0 | 19440.0 |
| 67.5° | 14999.4 | 15253.2 | 15667.2 | 16367.4 | 16966.8 | 17625.6 | 18676.8 | 20264.4 | 21672.0 | 21718.8 | 21290.4 |
| 69° | 11793.6 | 12281.4 | 12765.6 | 14329.8 | 15382.8 | 16673.4 | 18228.6 | 20397.6 | 22084.2 | 22213.8 | 21673.8 |
| 70° | 9450.0 | 9739.8 | 10157.4 | 11728.8 | 13302.0 | 14947.2 | 17200.8 | 19958.4 | 21801.6 | 22062.6 | 21466.8 |
| 72.5° | 5673.6 | 5785.2 | 5929.2 | 6492.6 | 7302.6 | 8767.8 | 11755.8 | 16272.0 | 18390.6 | 18739.8 | 17982.0 |
| 75° | 3668.4 | 3661.2 | 3673.8 | 3830.4 | 3877.2 | 4158.0 | 5099.4 | 8371.8 | 11997.0 | 12630.6 | 11723.4 |
| 77.5° | 2763.0 | 2788.2 | 2748.6 | 2763.0 | 2750.4 | 2826.0 | 2854.8 | 2997.0 | 4735.8 | 5833.8 | 5216.4 |
| 80° | 2439.0 | 2451.6 | 2453.4 | 2446.2 | 2358.0 | 2350.8 | 2397.6 | 2316.6 | 2152.8 | 2185.2 | 2093.4 |
| 82.5° | 1391.4 | 1389.6 | 1405.8 | 1528.2 | 1578.6 | 1744.2 | 1812.6 | 1850.4 | 1708.2 | 1602.0 | 1449.0 |
| 85° | 901.8 | 909.0 | 927.0 | 964.8 | 927.0 | 941.4 | 925.2 | 957.6 | 878.4 | 815.4 | 729.0 |
| 87.5° | 369.0 | 369.0 | 392.4 | 426.6 | 397.8 | 390.6 | 334.8 | 331.2 | 280.8 | 253.8 | 198.0 |
| 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: P158710

CATALOG NUMBER: VST-E09-LED-E-U-SL4

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° |
|-------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|
| 0° | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 |
| 2.5° | 5538.6 | 5549.4 | 5544.0 | 5551.2 | 5545.8 | 5545.8 | 5538.6 | 5536.8 | 5542.2 | 5535.0 | 5536.8 |
| 5° | 5490.0 | 5491.8 | 5482.8 | 5486.4 | 5475.6 | 5472.0 | 5466.6 | 5452.2 | 5461.2 | 5452.2 | 5455.8 |
| 7.5° | 5419.8 | 5414.4 | 5401.8 | 5383.8 | 5371.2 | 5365.8 | 5355.0 | 5335.2 | 5338.8 | 5322.6 | 5331.6 |
| 10° | 5329.8 | 5311.8 | 5290.2 | 5263.2 | 5245.2 | 5229.0 | 5205.6 | 5182.2 | 5169.6 | 5155.2 | 5153.4 |
| 12.5° | 5229.0 | 5207.4 | 5178.6 | 5137.2 | 5097.6 | 5070.6 | 5034.6 | 4993.2 | 4980.6 | 4957.2 | 4944.6 |
| 15° | 5119.2 | 5085.0 | 5050.8 | 5004.0 | 4960.8 | 4919.4 | 4870.8 | 4818.6 | 4784.4 | 4748.4 | 4721.4 |
| 17.5° | 5020.2 | 4980.6 | 4935.6 | 4890.6 | 4843.8 | 4793.4 | 4732.2 | 4667.4 | 4617.0 | 4550.4 | 4496.4 |
| 20° | 4942.8 | 4892.4 | 4847.4 | 4800.6 | 4748.4 | 4687.2 | 4613.4 | 4530.6 | 4446.0 | 4372.2 | 4309.2 |
| 22.5° | 4912.2 | 4833.0 | 4779.0 | 4732.2 | 4680.0 | 4608.0 | 4518.0 | 4420.8 | 4318.2 | 4215.6 | 4132.8 |
| 25° | 4937.4 | 4820.4 | 4735.8 | 4680.0 | 4635.0 | 4561.2 | 4460.4 | 4341.6 | 4222.8 | 4100.4 | 3988.8 |
| 27.5° | 5011.2 | 4861.8 | 4739.4 | 4651.2 | 4599.0 | 4525.2 | 4419.0 | 4293.0 | 4152.6 | 4015.8 | 3879.0 |
| 30° | 5126.4 | 4932.0 | 4777.2 | 4653.0 | 4572.0 | 4487.4 | 4375.8 | 4230.0 | 4087.8 | 3931.2 | 3781.8 |
| 32.5° | 5238.0 | 5005.8 | 4820.4 | 4660.2 | 4536.0 | 4426.2 | 4302.0 | 4158.0 | 4005.0 | 3841.2 | 3686.4 |
| 35° | 5317.2 | 5054.4 | 4836.6 | 4644.0 | 4480.2 | 4343.4 | 4210.2 | 4066.2 | 3916.8 | 3749.4 | 3591.0 |
| 37.5° | 5355.0 | 5081.4 | 4838.4 | 4600.8 | 4406.4 | 4255.2 | 4113.0 | 3970.8 | 3830.4 | 3672.0 | 3522.6 |
| 40° | 5353.2 | 5079.6 | 4813.2 | 4545.0 | 4318.2 | 4158.0 | 4017.6 | 3879.0 | 3747.6 | 3609.0 | 3474.0 |
| 42.5° | 5313.6 | 5050.8 | 4777.2 | 4491.0 | 4255.2 | 4077.0 | 3931.2 | 3798.0 | 3686.4 | 3564.0 | 3450.6 |
| 45° | 5252.4 | 5002.2 | 4739.4 | 4465.8 | 4237.2 | 4059.0 | 3904.2 | 3774.6 | 3675.6 | 3564.0 | 3466.8 |
| 47.5° | 5205.6 | 4975.2 | 4744.8 | 4510.8 | 4293.0 | 4107.6 | 3943.8 | 3801.6 | 3717.0 | 3627.0 | 3558.6 |
| 50° | 5212.8 | 4987.8 | 4762.8 | 4537.8 | 4332.6 | 4145.4 | 3987.0 | 3857.4 | 3796.2 | 3772.8 | 3756.6 |
| 52.5° | 5250.6 | 5007.6 | 4816.8 | 4681.8 | 4611.6 | 4471.2 | 4377.6 | 4296.6 | 4341.6 | 4253.4 | 4149.0 |
| 55° | 5733.0 | 5653.8 | 5839.2 | 6013.8 | 6235.2 | 6318.0 | 6238.8 | 6224.4 | 6296.4 | 5997.6 | 5311.8 |
| 57.5° | 7725.6 | 7930.8 | 8217.0 | 8368.2 | 8551.8 | 8503.2 | 8319.6 | 8166.6 | 7986.6 | 7637.4 | 6782.4 |
| 60° | 11115.0 | 10960.2 | 10830.6 | 10465.2 | 10166.4 | 9817.2 | 9428.4 | 9095.4 | 8776.8 | 8274.6 | 7349.4 |
| 62.5° | 14607.0 | 13532.4 | 12634.2 | 11766.6 | 11068.2 | 10488.6 | 9925.2 | 9424.8 | 8942.4 | 8242.2 | 7246.8 |
| 65° | 17627.4 | 15364.8 | 13678.2 | 12405.6 | 11385.0 | 10504.8 | 9781.2 | 9090.0 | 8476.2 | 7655.4 | 6670.8 |
| 67.5° | 18984.6 | 16149.6 | 13696.2 | 11872.8 | 10459.8 | 9264.6 | 8328.6 | 7284.6 | 6597.0 | 6071.4 | 5517.0 |
| 69° | 18883.8 | 15550.2 | 12718.8 | 10474.2 | 8850.6 | 7457.4 | 6453.0 | 5364.0 | 4705.2 | 4482.0 | 4469.4 |
| 70° | 18405.0 | 14535.0 | 11577.6 | 9338.4 | 7480.8 | 6096.6 | 5133.6 | 4156.2 | 3542.4 | 3389.4 | 3661.2 |
| 72.5° | 15026.4 | 10270.8 | 7255.8 | 5540.4 | 4260.6 | 3367.8 | 2746.8 | 2179.8 | 1740.6 | 1508.4 | 1558.8 |
| 75° | 8487.0 | 4755.6 | 3074.4 | 2323.8 | 1963.8 | 1623.6 | 1393.2 | 1188.0 | 1074.6 | 873.0 | 691.2 |
| 77.5° | 3085.2 | 2041.2 | 1623.6 | 1404.0 | 995.4 | 685.8 | 574.2 | 502.2 | 455.4 | 455.4 | 433.8 |
| 80° | 1951.2 | 1537.2 | 1072.8 | 734.4 | 543.6 | 473.4 | 414.0 | 363.6 | 334.8 | 327.6 | 334.8 |
| 82.5° | 1218.6 | 941.4 | 601.2 | 460.8 | 387.0 | 347.4 | 302.4 | 264.6 | 241.2 | 235.8 | 246.6 |
| 85° | 601.2 | 466.2 | 365.4 | 325.8 | 306.0 | 284.4 | 250.2 | 214.2 | 207.0 | 221.4 | 259.2 |
| 87.5° | 180.0 | 160.2 | 131.4 | 136.8 | 144.0 | 140.4 | 111.6 | 97.2 | 91.8 | 120.6 | 189.0 |
| 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: P158710

CATALOG NUMBER: VST-E09-LED-E-U-SL4

CANDELA DISTRIBUTION (continued):

| | 105° | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 |
| 2.5° | 5540.4 | 5538.6 | 5542.2 | 5536.8 | 5540.4 | 5542.2 | 5538.6 | 5554.8 | 5544.0 | 5545.8 | 5553.0 |
| 5° | 5459.4 | 5455.8 | 5470.2 | 5466.6 | 5473.8 | 5481.0 | 5477.4 | 5500.8 | 5491.8 | 5499.0 | 5513.4 |
| 7.5° | 5324.4 | 5331.6 | 5333.4 | 5333.4 | 5347.8 | 5371.2 | 5376.6 | 5391.0 | 5391.0 | 5410.8 | 5425.2 |
| 10° | 5144.4 | 5146.2 | 5157.0 | 5155.2 | 5173.2 | 5198.4 | 5202.0 | 5227.2 | 5236.2 | 5268.6 | 5288.4 |
| 12.5° | 4935.6 | 4926.6 | 4924.8 | 4923.0 | 4946.4 | 4973.4 | 4977.0 | 5020.2 | 5038.2 | 5067.0 | 5099.4 |
| 15° | 4701.6 | 4678.2 | 4671.0 | 4685.4 | 4680.0 | 4696.2 | 4712.4 | 4735.8 | 4761.0 | 4818.6 | 4847.4 |
| 17.5° | 4473.0 | 4426.2 | 4413.6 | 4397.4 | 4381.2 | 4381.2 | 4388.4 | 4417.2 | 4469.4 | 4500.0 | 4564.8 |
| 20° | 4239.0 | 4183.2 | 4138.2 | 4095.0 | 4057.2 | 4042.8 | 4044.6 | 4080.6 | 4118.4 | 4168.8 | 4230.0 |
| 22.5° | 4042.8 | 3958.2 | 3880.8 | 3823.2 | 3745.8 | 3744.0 | 3733.2 | 3744.0 | 3785.4 | 3798.0 | 3832.2 |
| 25° | 3873.6 | 3760.2 | 3655.8 | 3562.2 | 3486.6 | 3447.0 | 3436.2 | 3432.6 | 3412.8 | 3407.4 | 3382.2 |
| 27.5° | 3742.2 | 3605.4 | 3470.4 | 3357.0 | 3263.4 | 3209.4 | 3141.0 | 3092.4 | 3022.2 | 3004.2 | 2959.2 |
| 30° | 3634.2 | 3486.6 | 3339.0 | 3191.4 | 3085.2 | 2988.0 | 2872.8 | 2788.2 | 2680.2 | 2610.0 | 2548.8 |
| 32.5° | 3529.8 | 3380.4 | 3231.0 | 3085.2 | 2921.4 | 2770.2 | 2619.0 | 2487.6 | 2367.0 | 2259.0 | 2169.0 |
| 35° | 3443.4 | 3301.2 | 3150.0 | 2973.6 | 2764.8 | 2547.0 | 2365.2 | 2215.8 | 2050.2 | 1936.8 | 1823.4 |
| 37.5° | 3387.6 | 3258.0 | 3106.8 | 2863.8 | 2595.6 | 2361.6 | 2154.6 | 1972.8 | 1803.6 | 1632.6 | 1504.8 |
| 40° | 3362.4 | 3249.0 | 3060.0 | 2763.0 | 2448.0 | 2188.8 | 1960.2 | 1758.6 | 1542.6 | 1350.0 | 1213.2 |
| 42.5° | 3360.6 | 3245.4 | 2995.2 | 2651.4 | 2325.6 | 2043.0 | 1789.2 | 1548.0 | 1308.6 | 1110.6 | 975.6 |
| 45° | 3393.0 | 3240.0 | 2926.8 | 2557.8 | 2217.6 | 1922.4 | 1620.0 | 1326.6 | 1058.4 | 910.8 | 838.8 |
| 47.5° | 3479.4 | 3249.0 | 2871.0 | 2471.4 | 2115.0 | 1776.6 | 1425.6 | 1083.6 | 862.2 | 793.8 | 793.8 |
| 50° | 3634.2 | 3301.2 | 2856.6 | 2410.2 | 2012.4 | 1607.4 | 1188.0 | 874.8 | 763.2 | 763.2 | 784.8 |
| 52.5° | 3871.8 | 3411.0 | 2881.8 | 2367.0 | 1884.6 | 1384.2 | 936.0 | 754.2 | 732.6 | 752.4 | 781.2 |
| 55° | 4419.0 | 3605.4 | 2916.0 | 2293.2 | 1690.2 | 1098.0 | 772.2 | 712.8 | 721.8 | 745.2 | 772.2 |
| 57.5° | 5423.4 | 4021.2 | 2952.0 | 2131.2 | 1377.0 | 846.0 | 700.2 | 696.6 | 712.8 | 734.4 | 757.8 |
| 60° | 6084.0 | 4550.4 | 3043.8 | 1886.4 | 1042.2 | 698.4 | 664.2 | 685.8 | 705.6 | 723.6 | 741.6 |
| 62.5° | 6084.0 | 4699.8 | 3112.2 | 1612.8 | 783.0 | 635.4 | 640.8 | 675.0 | 698.4 | 707.4 | 718.2 |
| 65° | 5695.2 | 4426.2 | 2880.0 | 1314.0 | 637.2 | 599.4 | 619.2 | 653.4 | 675.0 | 682.2 | 691.2 |
| 67.5° | 4977.0 | 3909.6 | 2426.4 | 990.0 | 568.8 | 568.8 | 594.0 | 619.2 | 637.2 | 651.6 | 666.0 |
| 69° | 4327.2 | 3508.2 | 2136.6 | 838.8 | 541.8 | 545.4 | 570.6 | 592.2 | 613.8 | 631.8 | 649.8 |
| 70° | 3859.2 | 3207.6 | 1935.0 | 761.4 | 525.6 | 527.4 | 552.6 | 576.0 | 595.8 | 615.6 | 637.2 |
| 72.5° | 2066.4 | 2215.8 | 1470.6 | 624.6 | 484.2 | 489.6 | 513.0 | 534.6 | 552.6 | 572.4 | 592.2 |
| 75° | 703.8 | 952.2 | 936.0 | 511.2 | 437.4 | 451.8 | 466.2 | 486.0 | 509.4 | 522.0 | 532.8 |
| 77.5° | 412.2 | 426.6 | 498.6 | 415.8 | 394.2 | 401.4 | 417.6 | 433.8 | 453.6 | 466.2 | 475.2 |
| 80° | 345.6 | 343.8 | 345.6 | 338.4 | 343.8 | 360.0 | 370.8 | 392.4 | 410.4 | 414.0 | 412.2 |
| 82.5° | 280.8 | 295.2 | 297.0 | 293.4 | 309.6 | 322.2 | 331.2 | 343.8 | 342.0 | 345.6 | 352.8 |
| 85° | 250.2 | 248.4 | 261.0 | 262.8 | 262.8 | 253.8 | 255.6 | 255.6 | 255.6 | 261.0 | 262.8 |
| 87.5° | 250.2 | 208.8 | 162.0 | 145.8 | 153.0 | 144.0 | 136.8 | 135.0 | 149.4 | 163.8 | 160.2 |
| 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: P158710

CATALOG NUMBER: VST-E09-LED-E-U-SL4

CANDELA DISTRIBUTION (continued):

| | 160° | 165° | 170° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|
| 0° | 5560.2 | 5560.2 | 5560.2 | 5560.2 | 5560.2 |
| 2.5° | 5556.6 | 5562.0 | 5558.4 | 5558.4 | 5562.0 |
| 5° | 5518.8 | 5527.8 | 5524.2 | 5527.8 | 5527.8 |
| 7.5° | 5432.4 | 5445.0 | 5454.0 | 5463.0 | 5457.6 |
| 10° | 5308.2 | 5329.8 | 5344.2 | 5355.0 | 5349.6 |
| 12.5° | 5122.8 | 5142.6 | 5173.2 | 5191.2 | 5176.8 |
| 15° | 4869.0 | 4924.8 | 4942.8 | 4968.0 | 4953.6 |
| 17.5° | 4604.4 | 4638.6 | 4660.2 | 4683.6 | 4698.0 |
| 20° | 4251.6 | 4278.6 | 4307.4 | 4318.2 | 4302.0 |
| 22.5° | 3826.8 | 3841.2 | 3835.8 | 3852.0 | 3819.6 |
| 25° | 3360.6 | 3369.6 | 3364.2 | 3378.6 | 3351.6 |
| 27.5° | 2919.6 | 2917.8 | 2919.6 | 2901.6 | 2883.6 |
| 30° | 2494.8 | 2478.6 | 2471.4 | 2444.4 | 2439.0 |
| 32.5° | 2115.0 | 2059.2 | 2030.4 | 1990.8 | 1981.8 |
| 35° | 1735.2 | 1656.0 | 1603.8 | 1558.8 | 1539.0 |
| 37.5° | 1395.0 | 1299.6 | 1238.4 | 1198.8 | 1193.4 |
| 40° | 1103.4 | 1015.2 | 972.0 | 950.4 | 946.8 |
| 42.5° | 900.0 | 862.2 | 851.4 | 851.4 | 851.4 |
| 45° | 820.8 | 819.0 | 828.0 | 835.2 | 837.0 |
| 47.5° | 804.6 | 815.4 | 828.0 | 838.8 | 842.4 |
| 50° | 804.6 | 815.4 | 824.4 | 835.2 | 838.8 |
| 52.5° | 801.0 | 810.0 | 813.6 | 820.8 | 824.4 |
| 55° | 790.2 | 795.6 | 795.6 | 799.2 | 802.8 |
| 57.5° | 772.2 | 775.8 | 770.4 | 774.0 | 783.0 |
| 60° | 754.2 | 757.8 | 748.8 | 757.8 | 763.2 |
| 62.5° | 734.4 | 736.2 | 732.6 | 739.8 | 739.8 |
| 65° | 702.0 | 698.4 | 703.8 | 709.2 | 711.0 |
| 67.5° | 669.6 | 660.6 | 666.0 | 667.8 | 671.4 |
| 69° | 644.4 | 639.0 | 640.8 | 644.4 | 648.0 |
| 70° | 626.4 | 622.8 | 626.4 | 631.8 | 637.2 |
| 72.5° | 581.4 | 583.2 | 595.8 | 606.6 | 617.4 |
| 75° | 540.0 | 552.6 | 568.8 | 592.2 | 604.8 |
| 77.5° | 489.6 | 498.6 | 511.2 | 536.4 | 559.8 |
| 80° | 423.0 | 428.4 | 430.2 | 439.2 | 437.4 |
| 82.5° | 343.8 | 338.4 | 334.8 | 331.2 | 329.4 |
| 85° | 246.6 | 244.8 | 230.4 | 219.6 | 219.6 |
| 87.5° | 147.6 | 140.4 | 133.2 | 124.2 | 118.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)