

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: EPHESUS

Report Number: P574856

Luminaire Tested: **EPH-VN-04-740-U-5NQ**

Issue Date: 10/19/2021



Test Information

Test Method: LM-79-08
Report Number: P574856
Test Lab: INNOVATION CENTER(G2)
Issue Date: 10/19/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHEBUS
Catalog Number: EPH-VN-04-740-U-5NQ
Description: EPHEBUS LUMAVISION – Middle Tier Light Square Luminaire w/ 5NQ distribution lens
Light Source: (64) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

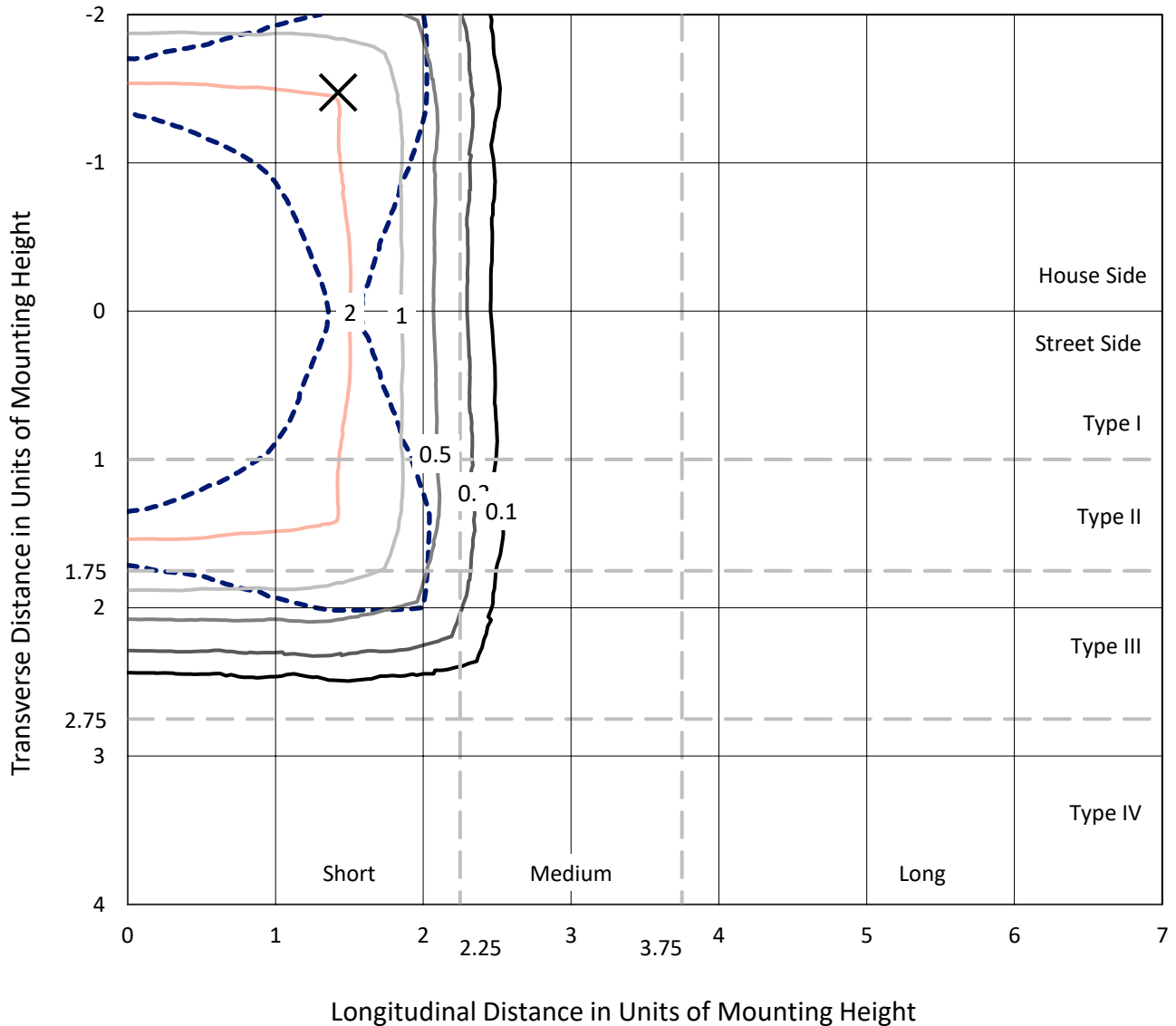
Lumens per Lamp: N/A
Luminaire Lumens: 34882.8 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

Input Watts (W): 303.8
Input Voltage (V): 120
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: 24 FT

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Iso-Footcandle Lines of Horizontal Illumination

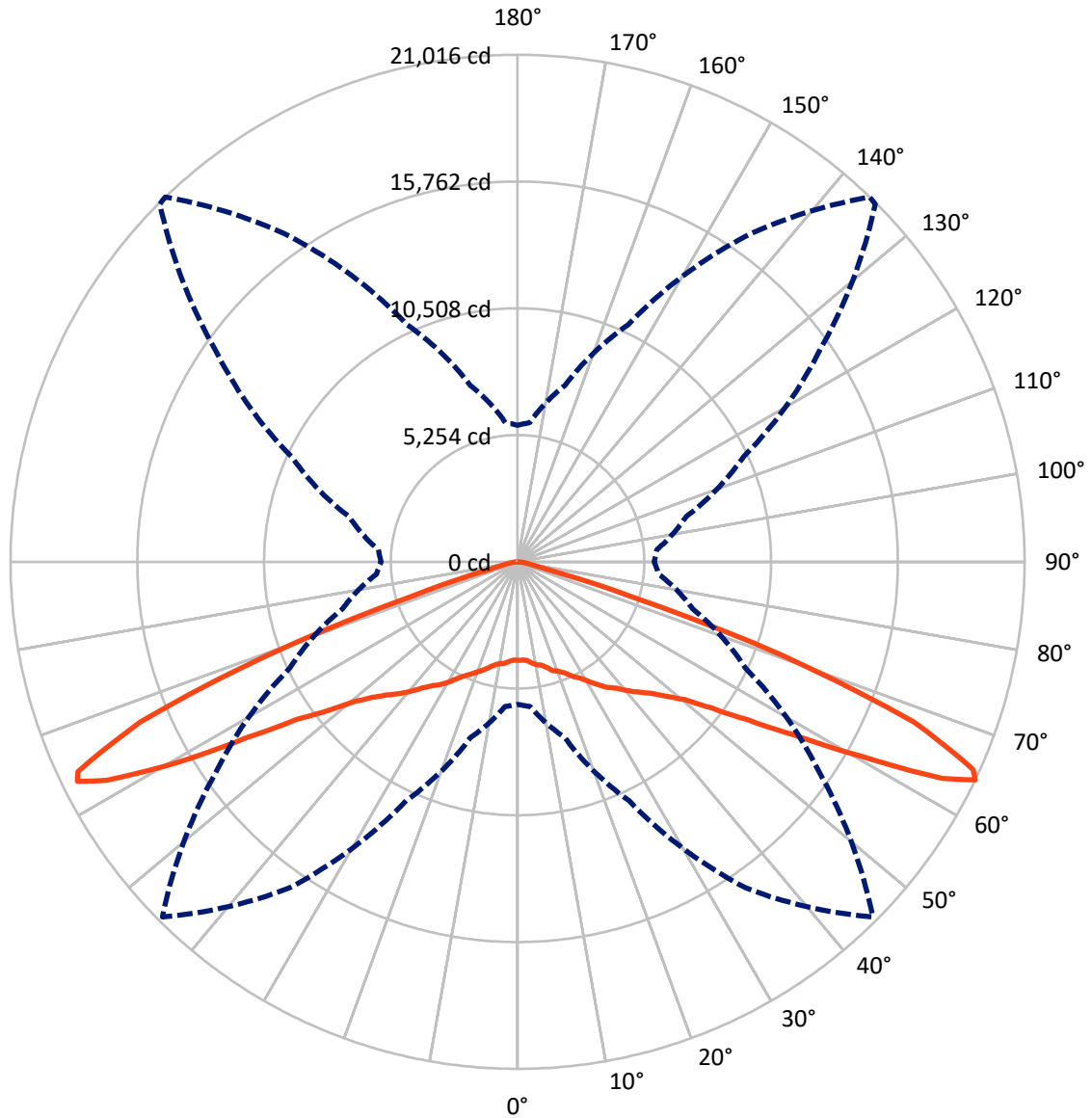
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.7 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 136-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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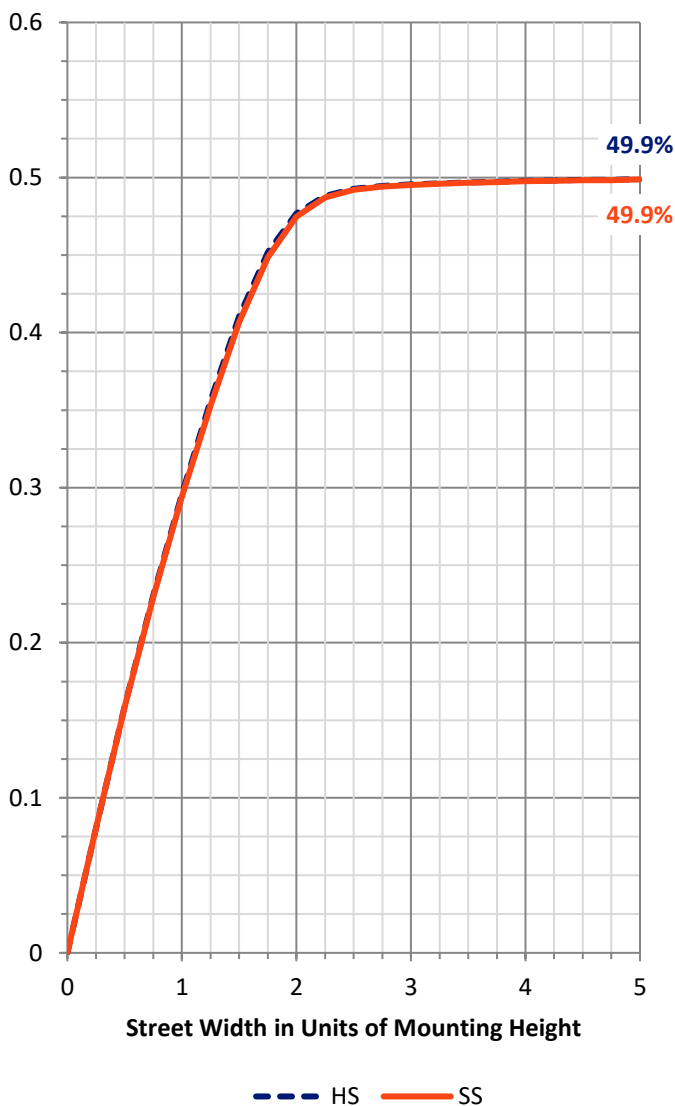
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 17458.0 | 0.0 | 17458.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 17424.8 | 0.0 | 17424.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 34882.8 | 0.0 | 34882.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 401.3 | 1.2 |
| 10°-20° | 1293.4 | 3.7 |
| 20°-30° | 2430.8 | 7.0 |
| 30°-40° | 4008.7 | 11.5 |
| 40°-50° | 6269.4 | 18.0 |
| 50°-60° | 10129.8 | 29.0 |
| 60°-70° | 9121.2 | 26.1 |
| 70°-80° | 1080.4 | 3.1 |
| 80°-90° | 147.9 | 0.4 |
| 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° | 34882.8 | 100.0 |
| 0°-180° | 34882.8 | 100.0 |

Coefficient of Utilization



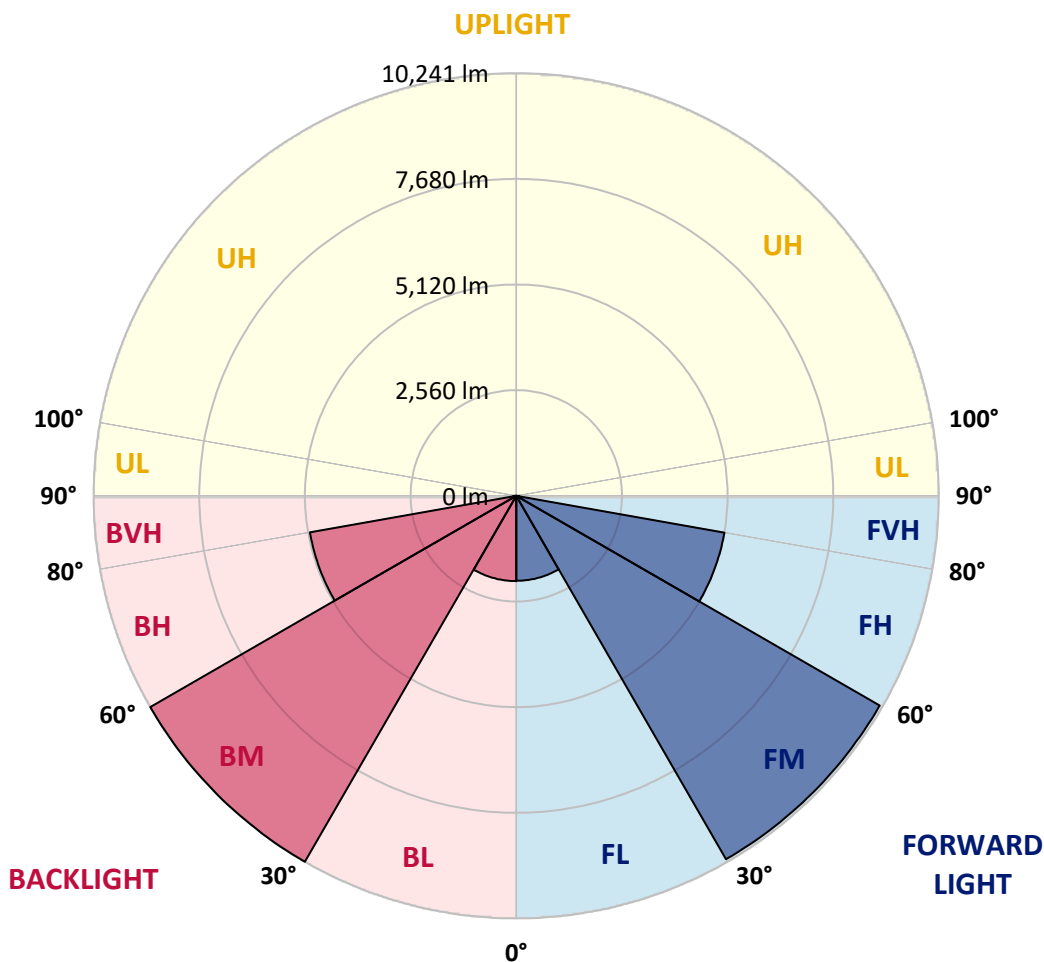
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2058.7 | 5.9 | | | |
| FM (30°-60°) | 10167.3 | 29.1 | | | |
| FH (60°-80°) | 5122.9 | 14.7 | | | G3/7500 |
| FVH (80°-90°) | 75.9 | 0.2 | | | G1/100 |
| BL (0°-30°) | 2066.7 | 5.9 | B3/2500 | | |
| BM (30°-60°) | 10240.6 | 29.4 | B5 | | |
| BH (60°-80°) | 5078.7 | 14.6 | B5 | | G3/7500 |
| BVH (80°-90°) | 72.0 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 |
| 2.5° | 4036.1 | 4044.1 | 4116.1 | 4088.1 | 4112.1 | 4068.1 | 4100.1 | 4168.1 | 4088.1 | 4148.1 |
| 5° | 4080.1 | 4092.1 | 4092.1 | 4120.1 | 4136.1 | 4128.1 | 4148.1 | 4120.1 | 4196.1 | 4164.1 |
| 7.5° | 4240.1 | 4220.1 | 4188.1 | 4212.1 | 4216.1 | 4236.1 | 4256.1 | 4292.1 | 4280.1 | 4252.1 |
| 10° | 4268.1 | 4252.1 | 4300.1 | 4304.1 | 4284.1 | 4268.1 | 4288.1 | 4288.1 | 4324.1 | 4332.1 |
| 12.5° | 4316.1 | 4332.1 | 4328.1 | 4360.1 | 4364.1 | 4352.1 | 4384.1 | 4444.1 | 4428.1 | 4440.1 |
| 15° | 4500.1 | 4480.1 | 4476.1 | 4508.1 | 4560.1 | 4484.1 | 4540.1 | 4536.1 | 4520.1 | 4544.1 |
| 17.5° | 4660.1 | 4596.1 | 4624.1 | 4676.1 | 4656.1 | 4672.1 | 4744.1 | 4680.1 | 4696.1 | 4668.1 |
| 20° | 4800.1 | 4748.1 | 4752.1 | 4772.1 | 4772.1 | 4820.1 | 4848.1 | 4824.1 | 4808.1 | 4804.1 |
| 22.5° | 4956.1 | 4896.1 | 4900.1 | 4984.1 | 5012.1 | 4996.1 | 4976.1 | 5016.1 | 5024.1 | 4992.1 |
| 25° | 5072.1 | 5136.1 | 5156.1 | 5196.1 | 5136.1 | 5180.1 | 5164.1 | 5240.1 | 5288.1 | 5224.1 |
| 27.5° | 5376.1 | 5348.1 | 5400.1 | 5396.1 | 5444.1 | 5400.1 | 5428.1 | 5452.1 | 5472.1 | 5476.1 |
| 30° | 5648.1 | 5660.1 | 5608.1 | 5748.1 | 5636.1 | 5708.1 | 5756.1 | 5768.1 | 5792.1 | 5792.1 |
| 32.5° | 5936.1 | 5912.1 | 5996.1 | 5964.1 | 5944.1 | 6000.1 | 5948.1 | 6112.1 | 6016.1 | 6072.1 |
| 35° | 6260.1 | 6260.1 | 6292.1 | 6380.1 | 6260.1 | 6224.1 | 6320.1 | 6388.1 | 6388.1 | 6288.1 |
| 37.5° | 6624.1 | 6592.1 | 6632.1 | 6744.1 | 6652.1 | 6532.1 | 6708.1 | 6736.1 | 6716.1 | 6688.1 |
| 40° | 6880.1 | 6872.1 | 6952.1 | 7100.1 | 6968.1 | 6944.1 | 6976.1 | 7052.1 | 7076.1 | 7104.1 |
| 42.5° | 7312.1 | 7348.1 | 7580.1 | 7544.1 | 7436.1 | 7352.1 | 7344.1 | 7628.1 | 7560.1 | 7488.1 |
| 45° | 7952.1 | 7920.1 | 8040.1 | 8044.1 | 7904.1 | 7720.1 | 7760.1 | 8020.1 | 8136.1 | 7976.1 |
| 47.5° | 8460.1 | 8476.1 | 8560.1 | 8732.1 | 8408.1 | 8216.1 | 8364.1 | 8784.1 | 8748.1 | 8688.1 |
| 50° | 9140.1 | 9212.1 | 9476.1 | 9416.1 | 9128.1 | 8892.1 | 9216.1 | 9612.1 | 9656.1 | 9436.1 |
| 52.5° | 10080.1 | 10192.1 | 10336.1 | 10384.2 | 10108.1 | 10024.1 | 10044.1 | 10536.2 | 10428.2 | 10216.1 |
| 55° | 10904.2 | 10956.2 | 11220.2 | 11616.2 | 11596.2 | 11192.2 | 11424.2 | 11608.2 | 11168.2 | 10732.2 |
| 57.5° | 11256.2 | 11280.2 | 12016.2 | 12808.2 | 13280.2 | 13372.2 | 13108.2 | 12488.2 | 11440.2 | 10600.2 |
| 60° | 10380.2 | 10608.2 | 11496.2 | 13284.2 | 15440.2 | 16504.2 | 14748.2 | 12588.2 | 10804.2 | 9784.1 |
| 62.5° | 8296.1 | 8308.1 | 9628.1 | 12340.2 | 16784.2 | 19572.3 | 15376.2 | 11648.2 | 9108.1 | 7952.1 |
| 64° | 5908.1 | 6020.1 | 7536.1 | 10924.2 | 16504.2 | 20820.3 | 15300.2 | 10420.2 | 7508.1 | 5868.1 |
| 65° | 4240.1 | 4396.1 | 5860.1 | 9484.1 | 15848.2 | 20672.3 | 15072.2 | 9364.1 | 6072.1 | 4480.1 |
| 67.5° | 1560.0 | 1624.0 | 2300.0 | 4744.1 | 11380.2 | 17616.3 | 11944.2 | 5148.1 | 2668.0 | 1900.0 |
| 70° | 724.0 | 728.0 | 852.0 | 1568.0 | 4976.1 | 11780.2 | 5700.1 | 1932.0 | 1004.0 | 796.0 |
| 72.5° | 532.0 | 544.0 | 596.0 | 724.0 | 1464.0 | 4988.1 | 1872.0 | 792.0 | 588.0 | 520.0 |
| 75° | 432.0 | 440.0 | 456.0 | 524.0 | 676.0 | 1336.0 | 760.0 | 548.0 | 468.0 | 420.0 |
| 77.5° | 332.0 | 332.0 | 368.0 | 400.0 | 448.0 | 624.0 | 504.0 | 436.0 | 380.0 | 332.0 |
| 80° | 240.0 | 244.0 | 288.0 | 312.0 | 304.0 | 412.0 | 364.0 | 360.0 | 312.0 | 260.0 |
| 82.5° | 140.0 | 152.0 | 208.0 | 224.0 | 216.0 | 244.0 | 264.0 | 280.0 | 244.0 | 180.0 |
| 85° | 80.0 | 84.0 | 120.0 | 124.0 | 124.0 | 116.0 | 152.0 | 168.0 | 164.0 | 112.0 |
| 87.5° | 24.0 | 24.0 | 32.0 | 32.0 | 36.0 | 40.0 | 60.0 | 72.0 | 80.0 | 56.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P574856

CATALOG NUMBER: EPH-VN-04-740-U-5NQ

CANDELA DISTRIBUTION (continued):

| 90° | | 95° | 105° | 115° | 125° | 135° | 136° | 145° | 155° | 165° | 175° |
|---------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4084.1 | 0° | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 | 4084.1 |
| 4168.1 | 2.5° | 4148.1 | 4088.1 | 4092.1 | 4108.1 | 4056.1 | 4076.1 | 4136.1 | 4092.1 | 4080.1 | 4056.1 |
| 4212.1 | 5° | 4128.1 | 4192.1 | 4168.1 | 4176.1 | 4164.1 | 4108.1 | 4100.1 | 4136.1 | 4156.1 | 4120.1 |
| 4300.1 | 7.5° | 4268.1 | 4240.1 | 4208.1 | 4220.1 | 4192.1 | 4240.1 | 4272.1 | 4200.1 | 4236.1 | 4216.1 |
| 4332.1 | 10° | 4348.1 | 4296.1 | 4320.1 | 4312.1 | 4292.1 | 4340.1 | 4308.1 | 4300.1 | 4268.1 | 4224.1 |
| 4412.1 | 12.5° | 4376.1 | 4436.1 | 4476.1 | 4408.1 | 4420.1 | 4396.1 | 4376.1 | 4376.1 | 4340.1 | 4328.1 |
| 4480.1 | 15° | 4500.1 | 4552.1 | 4536.1 | 4588.1 | 4520.1 | 4544.1 | 4568.1 | 4508.1 | 4540.1 | 4452.1 |
| 4648.1 | 17.5° | 4728.1 | 4684.1 | 4740.1 | 4672.1 | 4696.1 | 4744.1 | 4668.1 | 4668.1 | 4692.1 | 4644.1 |
| 4812.1 | 20° | 4872.1 | 4852.1 | 4832.1 | 4836.1 | 4796.1 | 4840.1 | 4816.1 | 4804.1 | 4768.1 | 4784.1 |
| 5028.1 | 22.5° | 5008.1 | 4980.1 | 4988.1 | 5000.1 | 5028.1 | 5008.1 | 4996.1 | 5008.1 | 4920.1 | 5000.1 |
| 5268.1 | 25° | 5176.1 | 5252.1 | 5228.1 | 5280.1 | 5200.1 | 5252.1 | 5248.1 | 5172.1 | 5220.1 | 5188.1 |
| 5456.1 | 27.5° | 5456.1 | 5416.1 | 5452.1 | 5388.1 | 5444.1 | 5448.1 | 5400.1 | 5528.1 | 5472.1 | 5464.1 |
| 5732.1 | 30° | 5816.1 | 5788.1 | 5764.1 | 5728.1 | 5772.1 | 5736.1 | 5776.1 | 5788.1 | 5736.1 | 5696.1 |
| 6004.1 | 32.5° | 6020.1 | 6096.1 | 6124.1 | 6036.1 | 6040.1 | 6060.1 | 6024.1 | 5988.1 | 6020.1 | 6032.1 |
| 6312.1 | 35° | 6308.1 | 6380.1 | 6396.1 | 6328.1 | 6292.1 | 6392.1 | 6320.1 | 6440.1 | 6336.1 | 6340.1 |
| 6640.1 | 37.5° | 6644.1 | 6664.1 | 6800.1 | 6724.1 | 6692.1 | 6644.1 | 6776.1 | 6760.1 | 6784.1 | 6592.1 |
| 7040.1 | 40° | 7024.1 | 7096.1 | 7172.1 | 6980.1 | 6976.1 | 7020.1 | 7012.1 | 7104.1 | 7060.1 | 7032.1 |
| 7452.1 | 42.5° | 7440.1 | 7592.1 | 7604.1 | 7476.1 | 7396.1 | 7388.1 | 7428.1 | 7632.1 | 7636.1 | 7452.1 |
| 8036.1 | 45° | 7992.1 | 8160.1 | 8116.1 | 7868.1 | 7780.1 | 7768.1 | 7964.1 | 8052.1 | 8128.1 | 8056.1 |
| 8744.1 | 47.5° | 8680.1 | 8792.1 | 8760.1 | 8532.1 | 8248.1 | 8328.1 | 8520.1 | 8796.1 | 8716.1 | 8620.1 |
| 9396.1 | 50° | 9416.1 | 9548.1 | 9480.1 | 9252.1 | 8980.1 | 8980.1 | 9216.1 | 9568.1 | 9544.1 | 9356.1 |
| 10080.1 | 52.5° | 10232.1 | 10424.2 | 10580.2 | 10256.1 | 10028.1 | 10064.1 | 10436.2 | 10564.2 | 10504.2 | 10372.2 |
| 10768.2 | 55° | 10840.2 | 11208.2 | 11528.2 | 11544.2 | 11556.2 | 11552.2 | 11648.2 | 11776.2 | 11348.2 | 11136.2 |
| 10548.2 | 57.5° | 10692.2 | 11388.2 | 12484.2 | 13228.2 | 13448.2 | 13564.2 | 13532.2 | 12940.2 | 11928.2 | 11232.2 |
| 9708.1 | 60° | 9636.1 | 10772.2 | 12540.2 | 14928.2 | 16528.2 | 16368.2 | 15784.2 | 13444.2 | 11608.2 | 10432.2 |
| 7648.1 | 62.5° | 7688.1 | 9056.1 | 11600.2 | 15408.2 | 19816.3 | 19768.3 | 16712.2 | 12280.2 | 9672.1 | 8184.1 |
| 5656.1 | 64° | 5792.1 | 7232.1 | 10348.1 | 15284.2 | 20968.3 | 21016.3 | 16476.2 | 10848.2 | 7568.1 | 5792.1 |
| 4264.1 | 65° | 4432.1 | 5768.1 | 9120.1 | 15028.2 | 20720.3 | 20748.3 | 15820.2 | 9368.1 | 5752.1 | 4112.1 |
| 1708.0 | 67.5° | 1764.0 | 2456.0 | 4948.1 | 11396.2 | 17792.3 | 17716.3 | 11288.2 | 4532.1 | 2200.0 | 1432.0 |
| 740.0 | 70° | 752.0 | 936.0 | 1736.0 | 5400.1 | 11912.2 | 11692.2 | 4860.1 | 1472.0 | 816.0 | 684.0 |
| 508.0 | 72.5° | 516.0 | 572.0 | 744.0 | 1668.0 | 4952.1 | 4836.1 | 1384.0 | 684.0 | 556.0 | 512.0 |
| 404.0 | 75° | 416.0 | 456.0 | 540.0 | 700.0 | 1312.0 | 1264.0 | 652.0 | 504.0 | 444.0 | 412.0 |
| 320.0 | 77.5° | 324.0 | 364.0 | 424.0 | 484.0 | 600.0 | 596.0 | 436.0 | 380.0 | 344.0 | 320.0 |
| 240.0 | 80° | 256.0 | 296.0 | 336.0 | 344.0 | 392.0 | 384.0 | 296.0 | 300.0 | 280.0 | 232.0 |
| 164.0 | 82.5° | 176.0 | 240.0 | 268.0 | 244.0 | 232.0 | 232.0 | 212.0 | 212.0 | 196.0 | 144.0 |
| 100.0 | 85° | 108.0 | 160.0 | 168.0 | 144.0 | 108.0 | 108.0 | 116.0 | 112.0 | 104.0 | 76.0 |
| 52.0 | 87.5° | 56.0 | 76.0 | 68.0 | 56.0 | 36.0 | 36.0 | 32.0 | 24.0 | 24.0 | 20.0 |
| 0.0 | 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END O



180°
4084.1
4044.1
4192.1
4176.1
4288.1
4340.1
4520.1
4584.1
4816.1
4888.1
5164.1
5448.1
5620.1
6020.1
6232.1
6688.1
6964.1
7372.1
7988.1
8540.1
9284.1
10312.1
10920.2
11304.2
10284.1
8092.1
5652.1
3960.1
1404.0
680.0
512.0
408.0
312.0
228.0
132.0
72.0
20.0
0.0

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