

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: P510852

Luminaire Tested: **CST-CA8-480-740-U-T5**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510852
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-480-740-U-T5
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 73314 lumens
Efficiency: N/A
Efficacy: 152.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G5

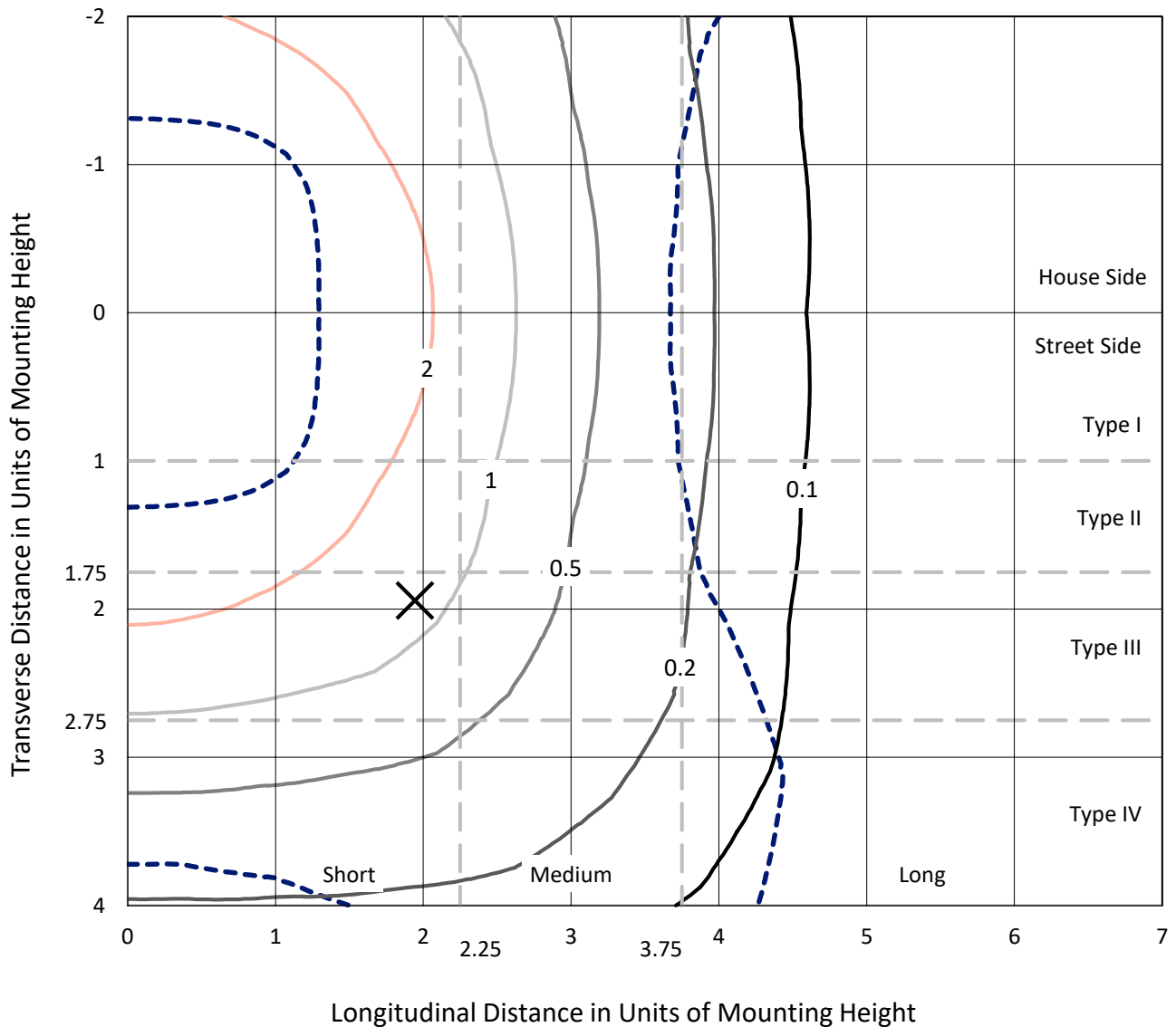
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

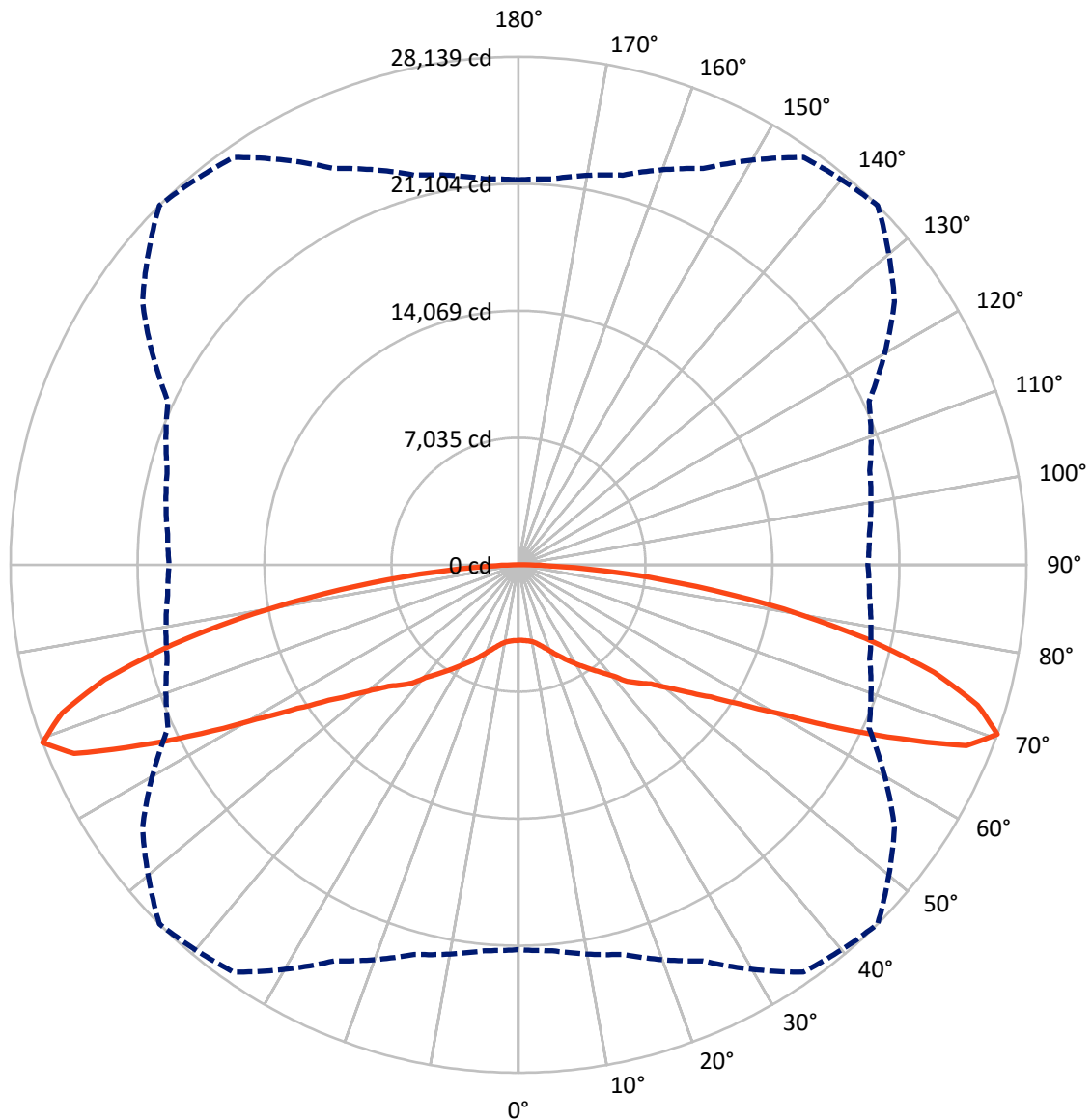
✕ Max cd
 - - - 1/2 Max cd



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 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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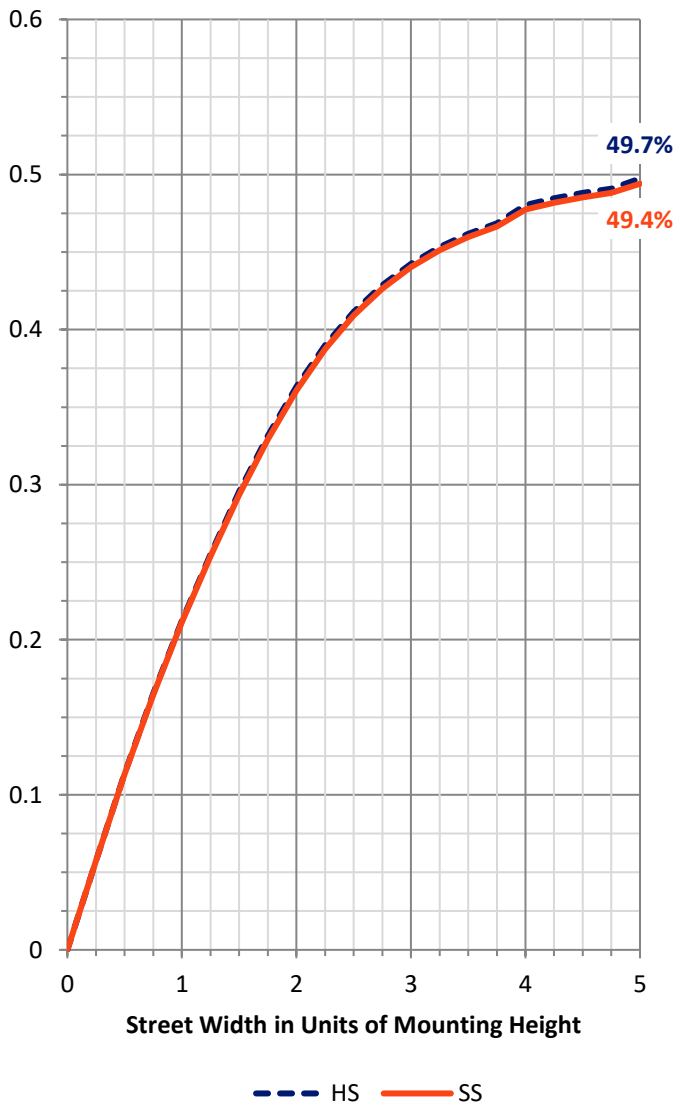
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 36657.0 | 0.0 | 36657.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 36657.0 | 0.0 | 36657.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 73314.0 | 0.0 | 73314.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 407.3 | 0.6 |
| 10°-20° | 1326.4 | 1.8 |
| 20°-30° | 2625.8 | 3.6 |
| 30°-40° | 4542.4 | 6.2 |
| 40°-50° | 7557.9 | 10.3 |
| 50°-60° | 13182.2 | 18.0 |
| 60°-70° | 21822.6 | 29.8 |
| 70°-80° | 18289.0 | 24.9 |
| 80°-90° | 3560.3 | 4.9 |
| 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° | 73314.0 | 100.0 |
| 0°-180° | 73314.0 | 100.0 |

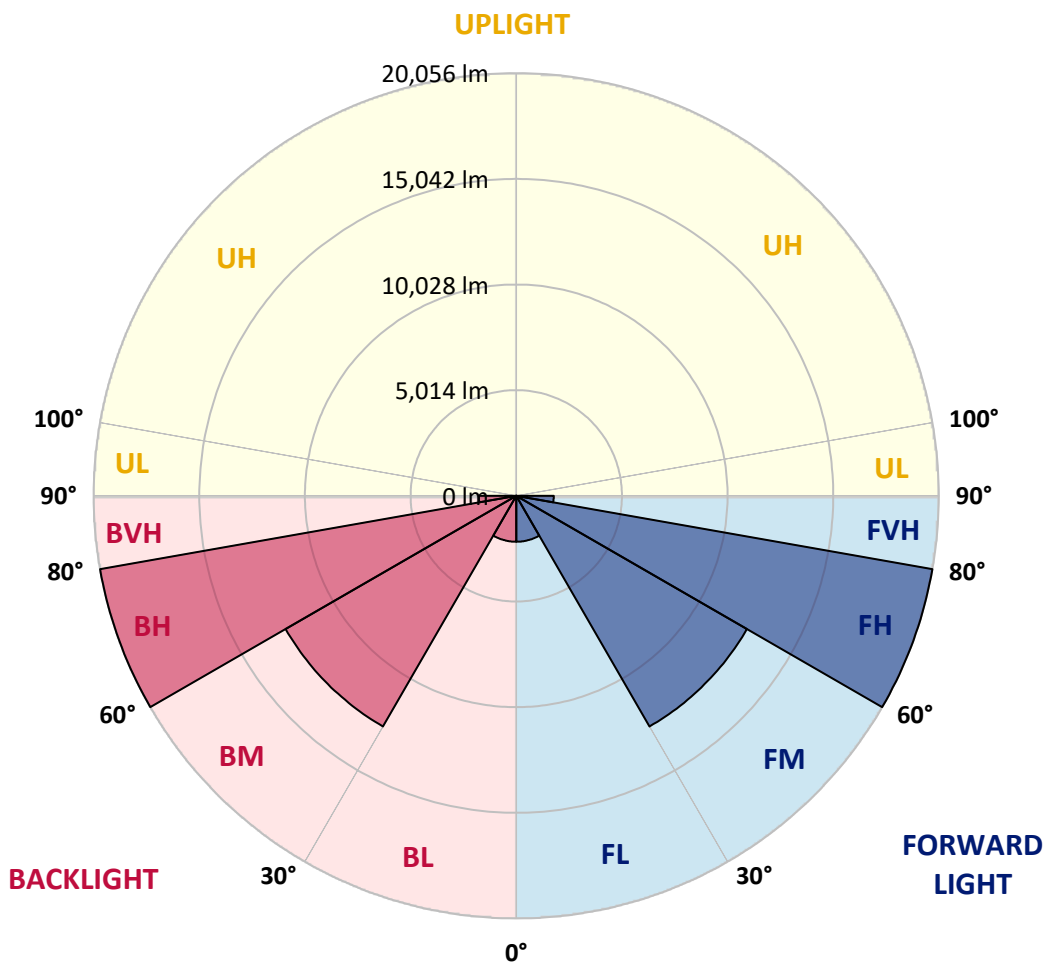


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----|
| | | | B | U | G |
| FL (0°-30°) | 2179.8 | 3.0 | | | |
| FM (30°-60°) | 12641.3 | 17.2 | | | |
| FH (60°-80°) | 20055.8 | 27.4 | | | G5 |
| FVH (80°-90°) | 1780.1 | 2.4 | | | G5 |
| BL (0°-30°) | 2179.8 | 3.0 | B3/2500 | | |
| BM (30°-60°) | 12641.3 | 17.2 | B5 | | |
| BH (60°-80°) | 20055.8 | 27.4 | B5 | | G5 |
| BVH (80°-90°) | 1780.1 | 2.4 | | | G5 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G5
 Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4190.1 | 4190.1 | 4190.1 | 4190.1 | 4190.1 | 4190.1 | 4190.1 | 4190.1 | 4190.1 | 4190.1 | 4190.1 |
| 2.5° | 4216.3 | 4203.2 | 4198.8 | 4194.5 | 4197.4 | 4195.9 | 4203.2 | 4206.1 | 4209.0 | 4222.1 | 4214.8 |
| 5° | 4242.4 | 4232.2 | 4230.8 | 4225.0 | 4223.5 | 4223.5 | 4233.7 | 4235.1 | 4236.6 | 4245.3 | 4236.6 |
| 7.5° | 4290.3 | 4280.1 | 4277.2 | 4274.3 | 4272.9 | 4267.1 | 4274.3 | 4271.4 | 4274.3 | 4278.7 | 4268.5 |
| 10° | 4365.8 | 4354.2 | 4351.3 | 4344.0 | 4348.4 | 4339.7 | 4345.5 | 4338.2 | 4325.2 | 4328.1 | 4313.5 |
| 12.5° | 4468.9 | 4458.7 | 4463.1 | 4461.6 | 4479.1 | 4474.7 | 4463.1 | 4448.6 | 4426.8 | 4412.3 | 4396.3 |
| 15° | 4621.3 | 4605.4 | 4617.0 | 4628.6 | 4646.0 | 4653.3 | 4644.6 | 4605.4 | 4573.4 | 4550.2 | 4537.1 |
| 17.5° | 4807.2 | 4781.0 | 4804.3 | 4827.5 | 4865.3 | 4872.5 | 4840.6 | 4792.7 | 4757.8 | 4747.7 | 4725.9 |
| 20° | 5023.5 | 5019.2 | 5020.6 | 5058.4 | 5116.4 | 5126.6 | 5084.5 | 5027.9 | 4993.0 | 4994.5 | 4969.8 |
| 22.5° | 5284.8 | 5261.6 | 5268.9 | 5306.6 | 5389.4 | 5417.0 | 5347.3 | 5284.8 | 5263.1 | 5268.9 | 5266.0 |
| 25° | 5583.9 | 5562.2 | 5552.0 | 5569.4 | 5676.9 | 5724.8 | 5658.0 | 5585.4 | 5575.2 | 5588.3 | 5568.0 |
| 27.5° | 5912.1 | 5891.7 | 5880.1 | 5888.8 | 5973.0 | 6063.1 | 5989.0 | 5928.0 | 5926.6 | 5945.5 | 5933.8 |
| 30° | 6285.2 | 6254.7 | 6241.6 | 6251.8 | 6309.9 | 6397.0 | 6337.5 | 6301.2 | 6331.7 | 6344.7 | 6340.4 |
| 32.5° | 6662.7 | 6648.2 | 6643.8 | 6640.9 | 6712.0 | 6761.4 | 6732.4 | 6739.6 | 6764.3 | 6823.8 | 6805.0 |
| 35° | 7092.4 | 7050.3 | 7061.9 | 7070.7 | 7163.6 | 7167.9 | 7170.8 | 7183.9 | 7249.2 | 7333.5 | 7284.1 |
| 37.5° | 7539.6 | 7529.5 | 7536.7 | 7512.0 | 7580.3 | 7607.9 | 7648.5 | 7692.1 | 7795.1 | 7892.4 | 7872.1 |
| 40° | 8092.8 | 8073.9 | 8081.2 | 8052.1 | 8085.5 | 8107.3 | 8190.1 | 8284.4 | 8416.6 | 8521.1 | 8473.2 |
| 42.5° | 8826.0 | 8778.1 | 8778.1 | 8786.8 | 8856.5 | 8833.2 | 9010.4 | 9036.5 | 9200.6 | 9289.1 | 9261.5 |
| 45° | 9688.4 | 9671.0 | 9579.5 | 9425.6 | 9338.5 | 9337.0 | 9479.3 | 9691.3 | 9962.8 | 10147.2 | 10145.7 |
| 47.5° | 10784.6 | 10730.9 | 10511.6 | 10141.4 | 9920.7 | 9867.0 | 10016.5 | 10428.9 | 10928.3 | 11215.8 | 11211.4 |
| 50° | 12221.9 | 12153.7 | 11821.2 | 11246.3 | 10816.5 | 10684.4 | 10924.0 | 11458.2 | 12130.5 | 12513.8 | 12545.7 |
| 52.5° | 13830.6 | 13836.4 | 13460.4 | 12590.7 | 11954.8 | 11716.7 | 11970.8 | 12734.4 | 13572.2 | 14097.8 | 14160.2 |
| 55° | 15699.2 | 15654.2 | 15298.5 | 14312.6 | 13437.2 | 12926.1 | 13310.8 | 14322.8 | 15285.4 | 15686.1 | 15796.5 |
| 57.5° | 17644.7 | 17469.0 | 17196.1 | 16274.1 | 15250.6 | 14597.2 | 15058.9 | 16049.1 | 16971.0 | 17482.1 | 17464.7 |
| 60° | 19369.5 | 19253.4 | 19096.6 | 18361.9 | 17576.5 | 16830.2 | 17185.9 | 18023.6 | 18813.5 | 19122.7 | 19135.8 |
| 62.5° | 21254.1 | 21156.8 | 21016.0 | 20613.8 | 20181.1 | 19903.8 | 19581.5 | 19969.2 | 20586.2 | 20924.5 | 21034.8 |
| 65° | 23103.8 | 23068.9 | 23150.2 | 23089.3 | 23272.2 | 23231.5 | 22459.1 | 22215.2 | 22225.4 | 22129.6 | 22080.2 |
| 67.5° | 22994.9 | 22981.8 | 23460.9 | 24416.3 | 26239.8 | 26756.7 | 24774.9 | 22568.0 | 21573.5 | 21320.9 | 21284.6 |
| 70° | 21318.0 | 21458.8 | 22345.9 | 24215.9 | 27543.6 | 28138.9 | 25425.3 | 21419.6 | 20147.8 | 19514.7 | 19357.9 |
| 72.5° | 18091.9 | 18367.7 | 19728.2 | 22482.4 | 26460.5 | 26597.0 | 23790.5 | 19691.9 | 17818.9 | 17064.0 | 16952.2 |
| 75° | 13959.8 | 13994.7 | 15387.0 | 18887.5 | 23614.8 | 23786.2 | 21222.1 | 16516.6 | 14674.2 | 13734.8 | 13705.8 |
| 77.5° | 8502.2 | 8997.3 | 11028.5 | 14161.6 | 18772.8 | 19664.3 | 17749.2 | 13155.5 | 10964.6 | 10132.7 | 9668.1 |
| 80° | 4171.3 | 4397.7 | 5861.2 | 8953.7 | 13418.3 | 14912.3 | 13171.5 | 9098.9 | 6762.9 | 5707.3 | 5591.2 |
| 82.5° | 1899.1 | 2019.6 | 2773.1 | 4680.9 | 8097.1 | 9948.3 | 8129.1 | 5210.8 | 3610.8 | 2823.9 | 2797.8 |
| 85° | 737.6 | 733.2 | 1122.3 | 1964.4 | 3876.5 | 5508.4 | 4116.1 | 2485.6 | 1652.2 | 1228.3 | 1158.6 |
| 87.5° | 214.9 | 229.4 | 329.6 | 644.6 | 1148.4 | 1547.7 | 1268.9 | 859.5 | 508.2 | 326.7 | 300.5 |
| 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)