

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: P721874

Luminaire Tested: **CST-CA8-400-750-U-T5**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721874
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-750-U-T5
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 63809 lumens
Efficiency: N/A
Efficacy: 159.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G5

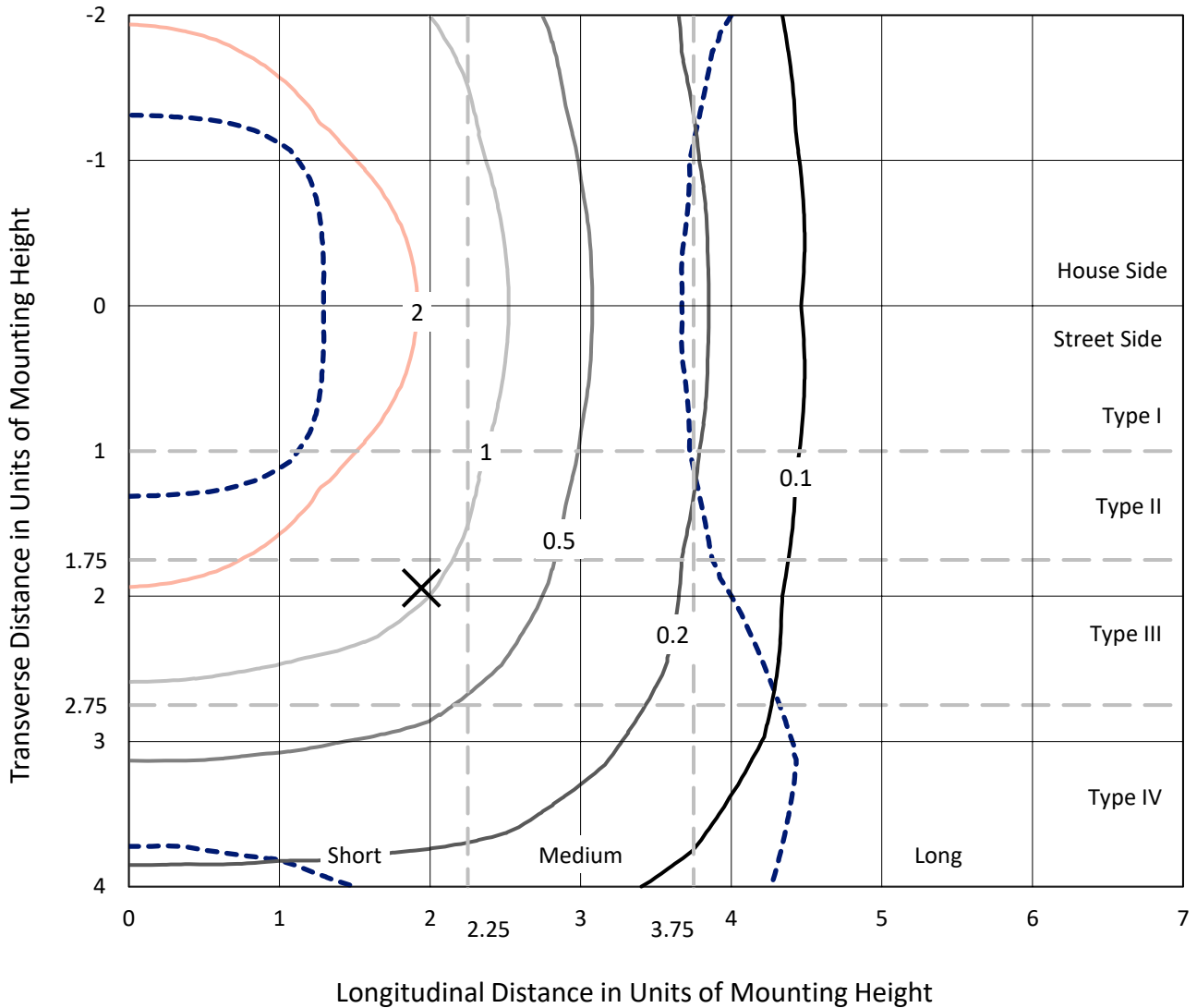
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

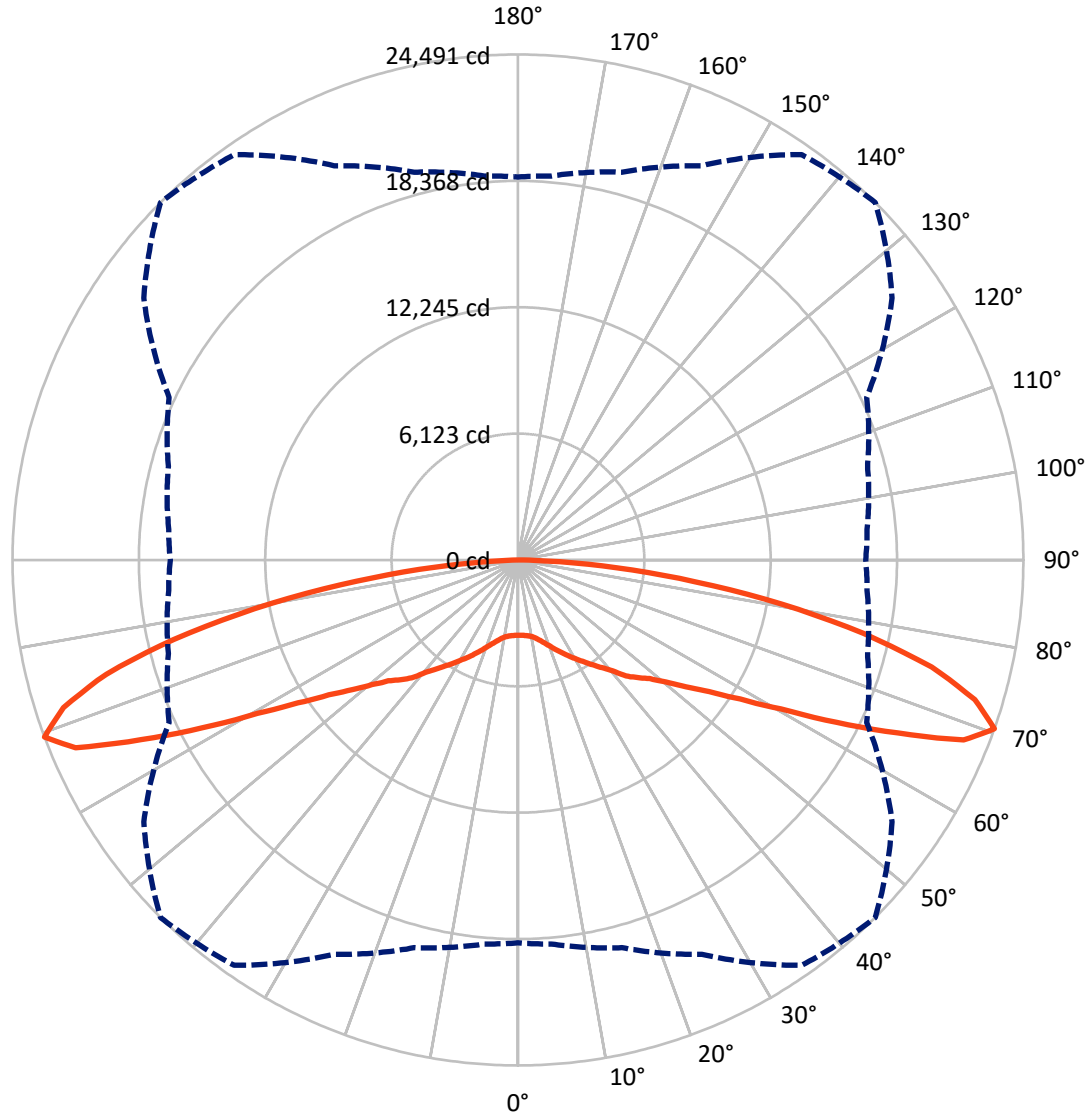
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.1 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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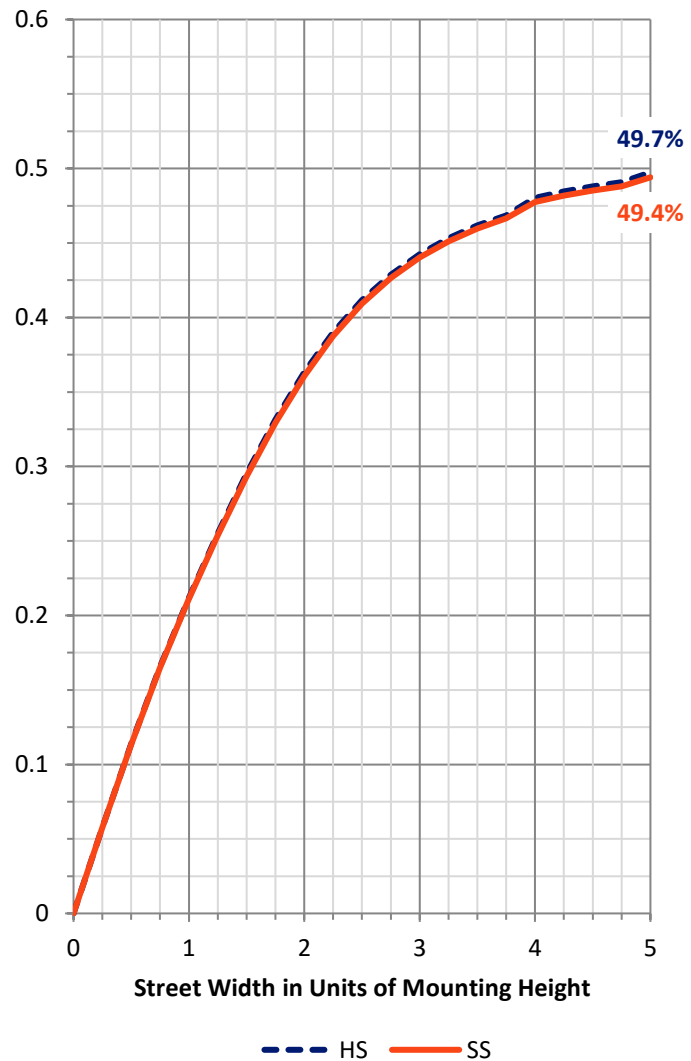
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 31904.5 | 0.0 | 31904.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 31904.5 | 0.0 | 31904.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 63809.0 | 0.0 | 63809.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 354.5 | 0.6 |
| 10°-20° | 1154.5 | 1.8 |
| 20°-30° | 2285.4 | 3.6 |
| 30°-40° | 3953.5 | 6.2 |
| 40°-50° | 6578.0 | 10.3 |
| 50°-60° | 11473.2 | 18.0 |
| 60°-70° | 18993.3 | 29.8 |
| 70°-80° | 15917.9 | 24.9 |
| 80°-90° | 3098.7 | 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° | 63809.0 | 100.0 |
| 0°-180° | 63809.0 | 100.0 |



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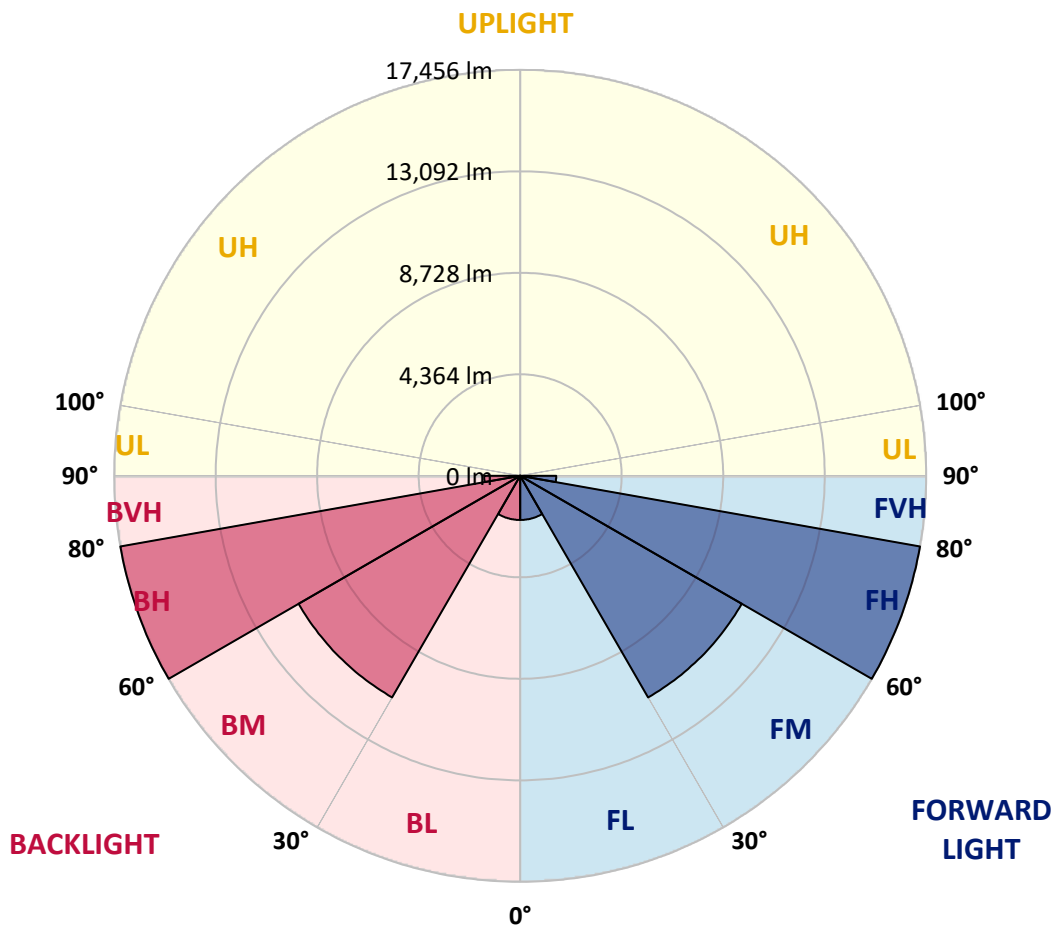
CATALOG NUMBER: CST-CA8-400-750-U-T5

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----|
| | | | B | U | G |
| FL (0°-30°) | 1897.2 | 3.0 | | | |
| FM (30°-60°) | 11002.4 | 17.2 | | | |
| FH (60°-80°) | 17455.6 | 27.4 | | | G5 |
| FVH (80°-90°) | 1549.3 | 2.4 | | | G5 |
| BL (0°-30°) | 1897.2 | 3.0 | B3/2500 | | |
| BM (30°-60°) | 11002.4 | 17.2 | B5 | | |
| BH (60°-80°) | 17455.6 | 27.4 | B5 | | G5 |
| BVH (80°-90°) | 1549.3 | 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° | 3646.9 | 3646.9 | 3646.9 | 3646.9 | 3646.9 | 3646.9 | 3646.9 | 3646.9 | 3646.9 | 3646.9 | 3646.9 |
| 2.5° | 3669.6 | 3658.3 | 3654.5 | 3650.7 | 3653.2 | 3651.9 | 3658.3 | 3660.8 | 3663.3 | 3674.7 | 3668.4 |
| 5° | 3692.4 | 3683.5 | 3682.3 | 3677.2 | 3676.0 | 3676.0 | 3684.8 | 3686.1 | 3687.3 | 3694.9 | 3687.3 |
| 7.5° | 3734.1 | 3725.2 | 3722.7 | 3720.2 | 3718.9 | 3713.9 | 3720.2 | 3717.7 | 3720.2 | 3724.0 | 3715.1 |
| 10° | 3799.8 | 3789.7 | 3787.2 | 3780.8 | 3784.6 | 3777.0 | 3782.1 | 3775.8 | 3764.4 | 3766.9 | 3754.3 |
| 12.5° | 3889.5 | 3880.7 | 3884.5 | 3883.2 | 3898.4 | 3894.6 | 3884.5 | 3871.8 | 3852.9 | 3840.2 | 3826.3 |
| 15° | 4022.2 | 4008.3 | 4018.4 | 4028.5 | 4043.7 | 4050.0 | 4042.4 | 4008.3 | 3980.5 | 3960.3 | 3948.9 |
| 17.5° | 4183.9 | 4161.2 | 4181.4 | 4201.6 | 4234.5 | 4240.8 | 4213.0 | 4171.3 | 4141.0 | 4132.1 | 4113.2 |
| 20° | 4372.2 | 4368.4 | 4369.7 | 4402.5 | 4453.1 | 4461.9 | 4425.3 | 4376.0 | 4345.7 | 4346.9 | 4325.5 |
| 22.5° | 4599.7 | 4579.5 | 4585.8 | 4618.6 | 4690.7 | 4714.7 | 4654.0 | 4599.7 | 4580.7 | 4585.8 | 4583.3 |
| 25° | 4860.0 | 4841.0 | 4832.2 | 4847.4 | 4940.9 | 4982.6 | 4924.4 | 4861.3 | 4852.4 | 4863.8 | 4846.1 |
| 27.5° | 5145.6 | 5127.9 | 5117.8 | 5125.4 | 5198.6 | 5277.0 | 5212.5 | 5159.5 | 5158.2 | 5174.6 | 5164.5 |
| 30° | 5470.3 | 5443.8 | 5432.4 | 5441.3 | 5491.8 | 5567.6 | 5515.8 | 5484.2 | 5510.8 | 5522.1 | 5518.3 |
| 32.5° | 5798.9 | 5786.2 | 5782.5 | 5779.9 | 5841.8 | 5884.8 | 5859.5 | 5865.9 | 5887.3 | 5939.1 | 5922.7 |
| 35° | 6172.9 | 6136.3 | 6146.4 | 6154.0 | 6234.8 | 6238.6 | 6241.2 | 6252.5 | 6309.4 | 6382.7 | 6339.7 |
| 37.5° | 6562.1 | 6553.3 | 6559.6 | 6538.1 | 6597.5 | 6621.5 | 6656.9 | 6694.8 | 6784.5 | 6869.2 | 6851.5 |
| 40° | 7043.6 | 7027.1 | 7033.5 | 7008.2 | 7037.3 | 7056.2 | 7128.2 | 7210.4 | 7325.4 | 7416.3 | 7374.6 |
| 42.5° | 7681.7 | 7640.0 | 7640.0 | 7647.6 | 7708.3 | 7688.0 | 7842.2 | 7864.9 | 8007.7 | 8084.8 | 8060.8 |
| 45° | 8432.3 | 8417.2 | 8337.5 | 8203.6 | 8127.8 | 8126.5 | 8250.4 | 8434.8 | 8671.2 | 8831.6 | 8830.4 |
| 47.5° | 9386.4 | 9339.6 | 9148.8 | 8826.6 | 8634.5 | 8587.7 | 8717.9 | 9076.8 | 9511.5 | 9761.7 | 9757.9 |
| 50° | 10637.4 | 10578.0 | 10288.6 | 9788.2 | 9414.2 | 9299.2 | 9507.7 | 9972.7 | 10557.8 | 10891.4 | 10919.2 |
| 52.5° | 12037.5 | 12042.6 | 11715.3 | 10958.4 | 10404.9 | 10197.6 | 10418.8 | 11083.5 | 11812.6 | 12270.0 | 12324.4 |
| 55° | 13663.8 | 13624.6 | 13315.1 | 12457.0 | 11695.1 | 11250.3 | 11585.1 | 12465.9 | 13303.7 | 13652.4 | 13748.5 |
| 57.5° | 15357.1 | 15204.2 | 14966.6 | 14164.2 | 13273.4 | 12704.7 | 13106.6 | 13968.4 | 14770.8 | 15215.6 | 15200.4 |
| 60° | 16858.3 | 16757.2 | 16620.8 | 15981.4 | 15297.7 | 14648.2 | 14957.8 | 15686.9 | 16374.3 | 16643.5 | 16654.9 |
| 62.5° | 18498.5 | 18413.9 | 18291.3 | 17941.3 | 17564.7 | 17323.3 | 17042.8 | 17380.2 | 17917.3 | 18211.7 | 18307.7 |
| 65° | 20108.4 | 20078.1 | 20148.9 | 20095.8 | 20255.0 | 20219.6 | 19547.4 | 19335.1 | 19343.9 | 19260.5 | 19217.6 |
| 67.5° | 20013.7 | 20002.3 | 20419.3 | 21250.8 | 22837.9 | 23287.8 | 21562.9 | 19642.1 | 18776.5 | 18556.7 | 18525.1 |
| 70° | 18554.1 | 18676.7 | 19448.8 | 21076.4 | 23972.7 | 24490.8 | 22129.0 | 18642.6 | 17535.6 | 16984.7 | 16848.2 |
| 72.5° | 15746.3 | 15986.4 | 17170.4 | 19567.6 | 23030.0 | 23148.8 | 20706.1 | 17138.9 | 15508.7 | 14851.7 | 14754.3 |
| 75° | 12150.0 | 12180.3 | 13392.1 | 16438.8 | 20553.2 | 20702.3 | 18470.7 | 14375.3 | 12771.7 | 11954.1 | 11928.8 |
| 77.5° | 7399.9 | 7830.8 | 9598.7 | 12325.6 | 16339.0 | 17114.8 | 15448.1 | 11449.9 | 9543.1 | 8819.0 | 8414.6 |
| 80° | 3630.5 | 3827.6 | 5101.3 | 7792.9 | 11678.6 | 12978.9 | 11463.8 | 7919.3 | 5886.1 | 4967.4 | 4866.3 |
| 82.5° | 1652.9 | 1757.7 | 2413.6 | 4074.0 | 7047.4 | 8658.5 | 7075.2 | 4535.2 | 3142.7 | 2457.8 | 2435.0 |
| 85° | 641.9 | 638.1 | 976.8 | 1709.7 | 3373.9 | 4794.3 | 3582.4 | 2163.4 | 1438.0 | 1069.0 | 1008.4 |
| 87.5° | 187.0 | 199.7 | 286.8 | 561.1 | 999.5 | 1347.0 | 1104.4 | 748.1 | 442.3 | 284.3 | 261.6 |
| 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)