

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: P721830

Luminaire Tested: **CST-CA8-400-722-U-T3-HSS**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721830  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-400-722-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

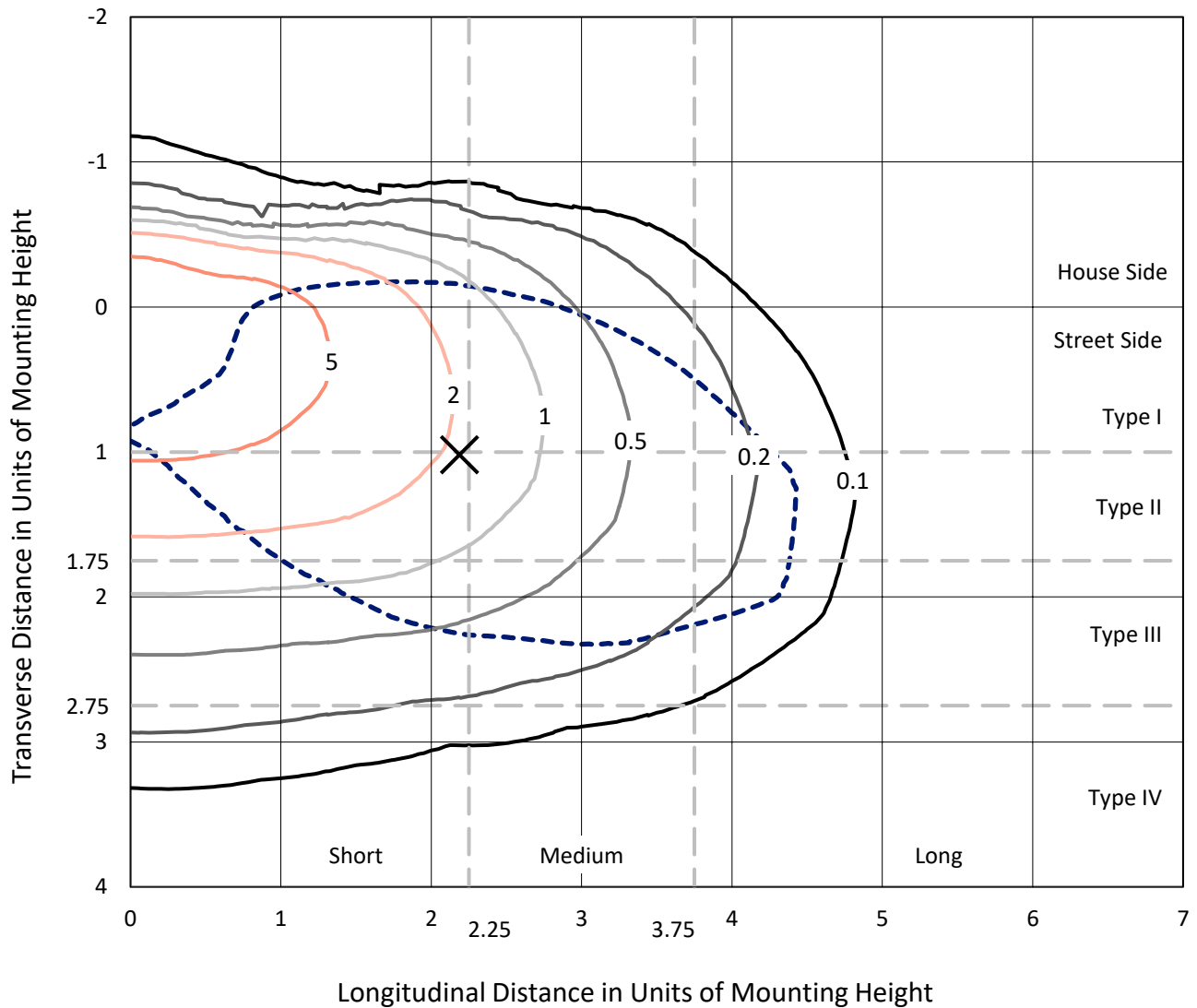
Lumens per Lamp: N/A  
Luminaire Lumens: 46168 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 400.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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



REPORT NUMBER: P721830  
 CATALOG NUMBER: CST-CA8-400-722-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

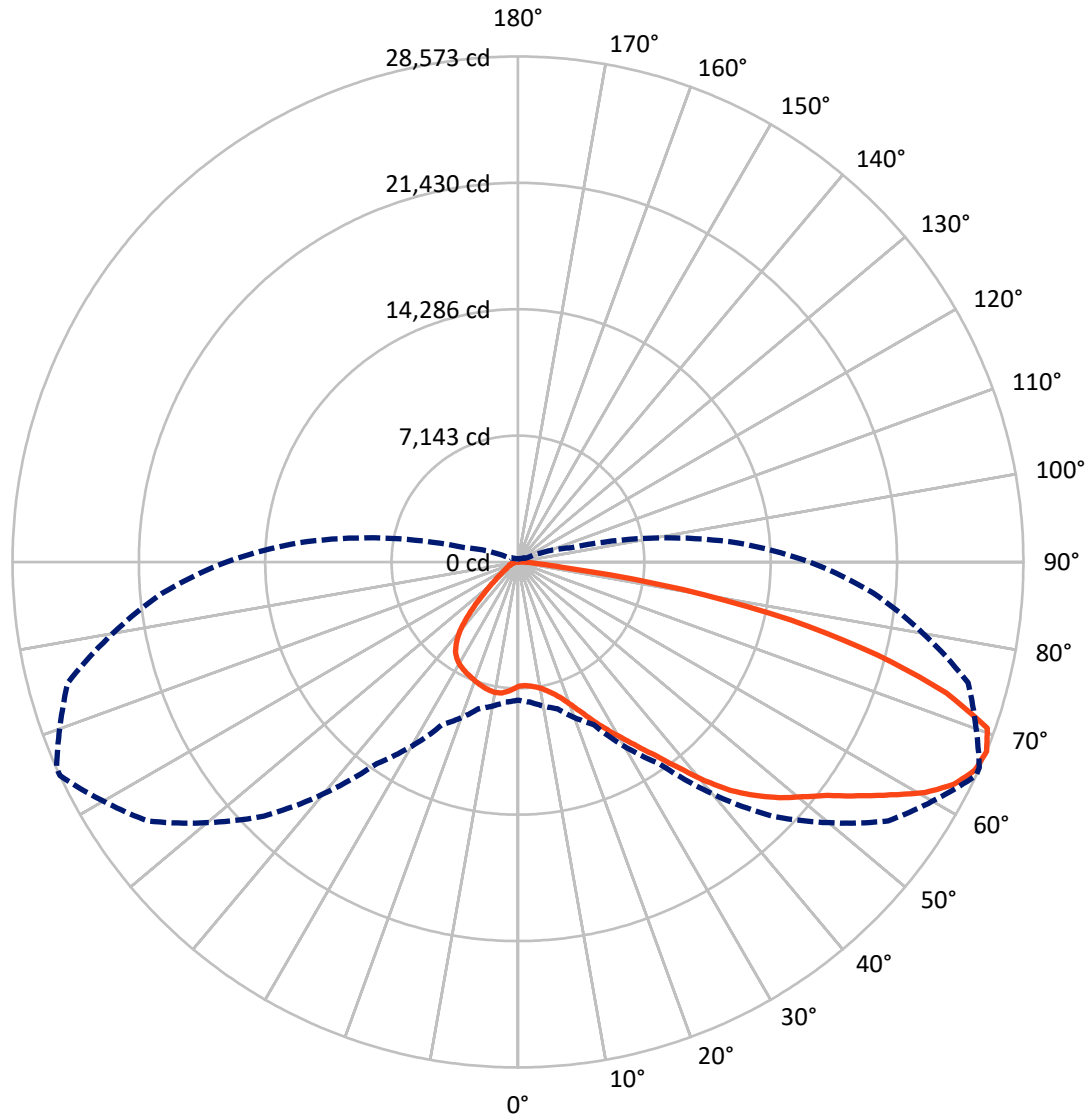
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.2 fc  
 Type III - Short - N/A

REPORT NUMBER: P721830  
CATALOG NUMBER: CST-CA8-400-722-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P721830  
 CATALOG NUMBER: CST-CA8-400-722-U-T3-HSS

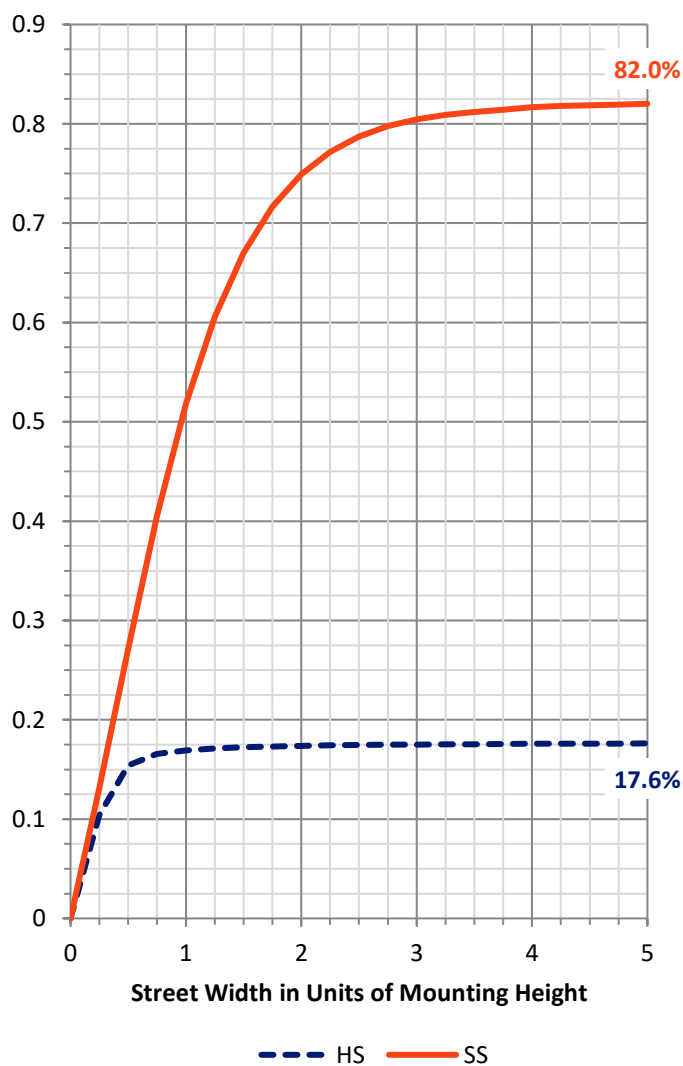
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8251.4	0.0	8251.4
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	37916.7	0.0	37916.7
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	46168.0	0.0	46168.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	694.1	1.5
10°-20°	2142.8	4.6
20°-30°	3717.4	8.1
30°-40°	5607.6	12.1
40°-50°	7775.4	16.8
50°-60°	9597.7	20.8
60°-70°	10226.2	22.1
70°-80°	5851.6	12.7
80°-90°	555.2	1.2
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°	46168.0	100.0
0°-180°	46168.0	100.0

**Coefficient of Utilization**

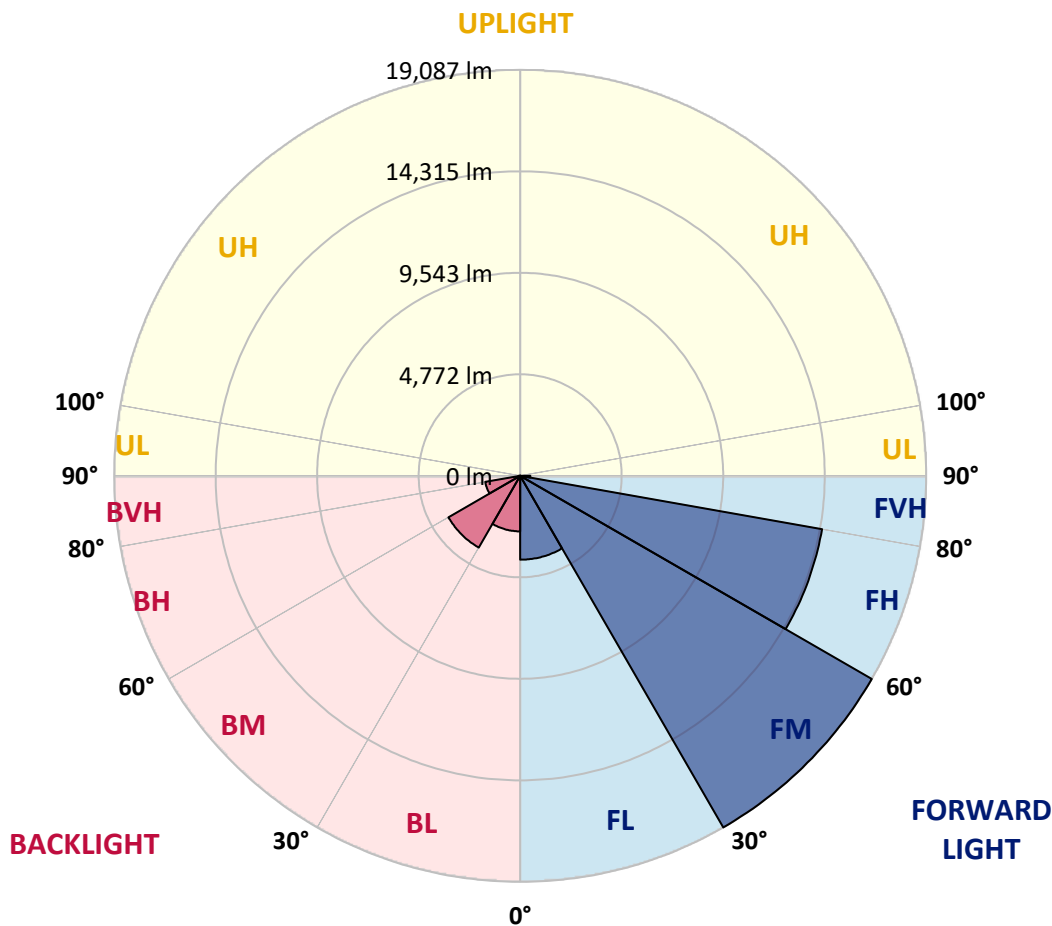


REPORT NUMBER: P721830  
 CATALOG NUMBER: CST-CA8-400-722-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3943.4	8.5			
FM (30°-60°)	19086.5	41.3			
FH (60°-80°)	14412.4	31.2			G5
FVH (80°-90°)	474.4	1.0			G3/500
BL (0°-30°)	2610.9	5.7	B4/5000		
BM (30°-60°)	3894.2	8.4	B3/5000		
BH (60°-80°)	1665.4	3.6	B3/2500		G3/2500
BVH (80°-90°)	80.8	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**  
 Type III Short





REPORT NUMBER: P721830

CATALOG NUMBER: CST-CA8-400-722-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5
2.5°	6947.8	6938.7	6930.6	6944.7	6952.8	6966.0	6985.2	6998.3	7002.4	7014.5	7029.7
5°	7059.0	7058.0	7046.9	7040.8	7023.6	7017.6	7021.6	7037.8	7038.8	7054.0	7101.5
7.5°	7277.5	7275.4	7248.1	7236.0	7199.6	7159.1	7128.8	7131.8	7130.8	7146.0	7209.7
10°	7607.2	7591.0	7552.5	7515.1	7444.3	7368.5	7312.9	7262.3	7262.3	7284.5	7355.3
12.5°	7979.3	8001.6	7949.0	7892.3	7774.0	7637.5	7540.4	7483.8	7477.7	7488.8	7539.4
15°	8441.5	8441.5	8406.1	8325.2	8221.0	8030.9	7830.7	7758.8	7748.7	7772.0	7769.0
17.5°	8962.3	8977.5	8910.7	8870.3	8710.5	8500.1	8249.3	8124.9	8124.9	8109.8	8040.0
20°	9626.8	9543.8	9550.9	9484.2	9366.8	9061.4	8806.6	8625.6	8623.5	8593.2	8397.0
22.5°	10348.8	10303.3	10263.9	10205.2	10043.4	9770.4	9416.4	9237.4	9233.4	9158.5	8867.3
25°	11060.8	11095.2	11051.7	10944.5	10826.2	10528.9	10138.5	9962.5	9961.5	9837.1	9424.5
27.5°	11793.0	11830.4	11816.3	11719.2	11561.4	11328.8	10959.7	10730.1	10715.9	10635.0	10116.2
30°	12602.1	12568.7	12612.2	12570.7	12491.8	12112.6	11778.8	11511.9	11546.2	11522.0	10902.0
32.5°	13190.7	13211.9	13354.5	13358.5	13275.6	12994.5	12586.9	12423.1	12477.7	12445.3	11867.8
35°	13722.6	13757.0	13941.1	14122.1	14182.8	13875.3	13460.7	13450.6	13521.4	13718.6	13198.7
37.5°	14179.7	14204.0	14461.9	14697.5	14893.7	14683.4	14382.0	14741.0	14845.2	15248.7	14572.1
40°	14453.8	14485.1	14818.9	15150.6	15500.5	15425.7	15397.4	16246.9	16345.0	16699.9	15574.3
42.5°	14299.1	14360.7	14917.0	15523.8	16038.5	16188.2	16575.5	17667.8	17780.0	17810.4	16559.4
45°	14023.0	14099.8	14721.8	15703.8	16543.2	17023.6	17760.8	18825.7	18887.4	18801.5	17375.5
47.5°	13725.6	13807.6	14502.3	15650.2	16948.7	17995.4	18819.7	19915.9	19959.4	19695.5	18197.7
50°	13387.9	13463.7	14211.1	15524.8	17254.1	18912.7	19907.8	20858.5	21021.3	20499.5	18836.9
52.5°	12977.3	13058.2	13851.0	15328.6	17522.1	19593.3	20867.6	21923.4	21934.5	21504.7	19556.9
55°	12445.3	12585.9	13399.0	14988.8	17662.7	20177.9	21703.9	23332.2	23404.0	22988.3	20159.7
57.5°	11853.7	11976.1	12854.9	14535.7	17536.3	20621.8	23049.0	24843.1	24834.0	23999.6	20686.6
60°	11071.9	11158.9	12146.0	13943.1	17128.7	21158.8	24449.7	26462.2	26446.0	24990.7	21025.3
62.5°	10068.7	10155.7	11084.1	13013.7	16530.0	21518.9	25400.3	27674.8	27628.3	25711.8	21129.5
65°	8905.7	9061.4	9867.5	11807.2	15471.2	21282.2	25859.5	28388.8	28313.9	26262.0	20880.7
67.5°	7815.5	7948.0	8586.1	10146.6	13908.7	20322.5	25535.8	28572.8	28550.6	26341.9	20177.9
70°	6272.2	6320.8	6905.3	8241.2	11572.5	18267.5	24417.3	28148.1	28158.2	25605.6	18766.1
72.5°	4293.1	4411.4	4671.3	5726.1	8421.3	14527.6	21045.6	25332.6	25334.6	22960.0	16350.0
75°	2308.8	2491.9	2795.3	3318.1	4707.7	9322.4	16901.2	21020.3	21059.7	19143.3	12995.5
77.5°	1144.8	1210.6	1386.5	1774.9	2158.2	4398.2	10869.7	15778.6	15872.7	14694.5	8863.2
80°	523.9	535.0	548.1	545.1	826.2	1929.6	4666.2	9476.1	9504.4	8739.8	4046.3
82.5°	409.6	407.6	413.6	376.2	378.2	744.3	1615.1	2481.8	2646.6	2083.3	1283.4
85°	247.8	246.8	266.0	206.3	253.8	402.5	815.1	990.1	1002.2	815.1	664.4
87.5°	94.1	91.0	83.9	73.8	85.0	113.3	282.2	364.1	356.0	252.8	229.6
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: P721830

CATALOG NUMBER: CST-CA8-400-722-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5	7015.5
2.5°	7042.8	7075.2	7134.9	7180.4	7195.5	7244.1	7290.6	7298.7	7332.1	7345.2	7388.7
5°	7130.8	7185.4	7278.5	7340.2	7367.5	7448.4	7501.0	7527.3	7518.2	7523.2	7571.8
7.5°	7259.3	7310.8	7385.7	7460.5	7473.7	7487.8	7482.8	7478.7	7443.3	7413.0	7458.5
10°	7376.6	7425.1	7471.6	7482.8	7416.0	7378.6	7311.8	7260.3	7191.5	7160.1	7196.6
12.5°	7541.4	7551.5	7506.0	7445.3	7301.7	7168.2	7060.0	6966.0	6881.0	6822.4	6870.9
15°	7715.4	7675.9	7543.4	7366.5	7144.0	6952.8	6775.8	6619.1	6478.5	6444.1	6457.3
17.5°	7945.9	7838.7	7571.8	7274.4	6928.6	6631.2	6403.7	6205.5	6021.4	5944.5	5937.5
20°	8227.1	8054.2	7629.4	7158.1	6673.7	6278.3	5926.3	5630.0	5376.2	5167.8	5172.9
22.5°	8593.2	8342.4	7716.4	7036.8	6391.5	5864.6	5352.9	4849.3	4431.6	4251.6	4207.1
25°	9076.6	8702.4	7839.8	6926.5	6076.0	5338.8	4615.7	3904.7	3462.8	3287.8	3268.6
27.5°	9678.3	9185.8	8027.9	6804.2	5738.2	4714.8	3675.1	2978.3	2572.8	2388.7	2327.0
30°	10362.0	9781.5	8221.0	6676.7	5329.7	3912.8	2802.4	2119.7	1704.1	1539.2	1518.0
32.5°	11246.9	10535.9	8508.2	6476.5	4733.0	3075.4	1954.9	1322.8	1040.6	969.9	949.6
35°	12504.0	11556.4	8863.2	6223.7	3966.4	2148.0	1211.6	774.7	624.0	588.6	581.5
37.5°	13676.1	12557.6	9221.2	5804.0	3011.7	1341.0	692.8	496.6	463.2	464.2	466.2
40°	14605.5	13242.2	9510.5	5251.8	1981.2	761.5	481.4	412.6	413.6	410.6	408.6
42.5°	15432.7	13788.3	9640.9	4435.7	1147.8	509.7	417.7	380.3	371.2	374.2	372.2
45°	16117.4	14345.6	9388.1	3518.4	676.6	457.1	394.4	353.0	342.8	359.0	361.0
47.5°	16837.5	14874.5	9000.8	2650.7	549.1	434.9	373.2	332.7	327.7	347.9	349.9
50°	17443.3	15257.8	8340.4	1997.4	523.9	410.6	354.0	312.5	311.5	329.7	329.7
52.5°	17949.9	15489.4	7556.6	1542.3	506.7	389.4	334.7	293.3	293.3	299.4	300.4
55°	18306.9	15442.9	7089.4	1213.6	488.5	369.1	314.5	275.1	262.9	258.9	260.9
57.5°	18371.6	15319.5	6547.3	946.6	467.2	349.9	296.3	253.8	231.6	228.6	227.5
60°	18330.2	15048.4	5928.4	790.9	443.0	331.7	278.1	231.6	209.3	202.3	204.3
62.5°	18157.2	14568.1	5213.4	693.8	418.7	317.6	257.9	216.4	196.2	187.1	187.1
65°	17635.4	13880.4	4151.5	607.8	388.3	302.4	241.7	210.4	188.1	178.0	176.0
67.5°	16488.6	12453.4	3119.9	533.0	359.0	286.2	239.7	209.3	184.1	169.9	167.9
70°	14950.3	10697.7	2129.8	468.2	326.7	271.0	238.7	210.4	180.0	161.8	159.8
72.5°	12480.7	8433.4	1226.7	407.6	294.3	256.9	234.6	211.4	172.9	150.7	147.7
75°	9378.0	5915.2	720.1	349.9	262.9	235.6	223.5	205.3	161.8	137.5	134.5
77.5°	5640.1	2761.9	542.1	290.2	225.5	207.3	199.2	188.1	147.7	127.4	124.4
80°	2069.2	1048.7	425.8	232.6	179.0	180.0	171.9	164.8	134.5	117.3	115.3
82.5°	902.1	641.2	314.5	177.0	140.6	160.8	141.6	135.5	115.3	105.2	101.1
85°	547.1	382.3	202.3	120.3	97.1	109.2	99.1	104.2	89.0	82.9	79.9
87.5°	181.0	114.3	90.0	58.7	48.5	45.5	44.5	53.6	50.6	46.5	46.5
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)