

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: P721898

Luminaire Tested: **CST-CA8-430-727-U-T2-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721898
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-430-727-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 50258 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G5

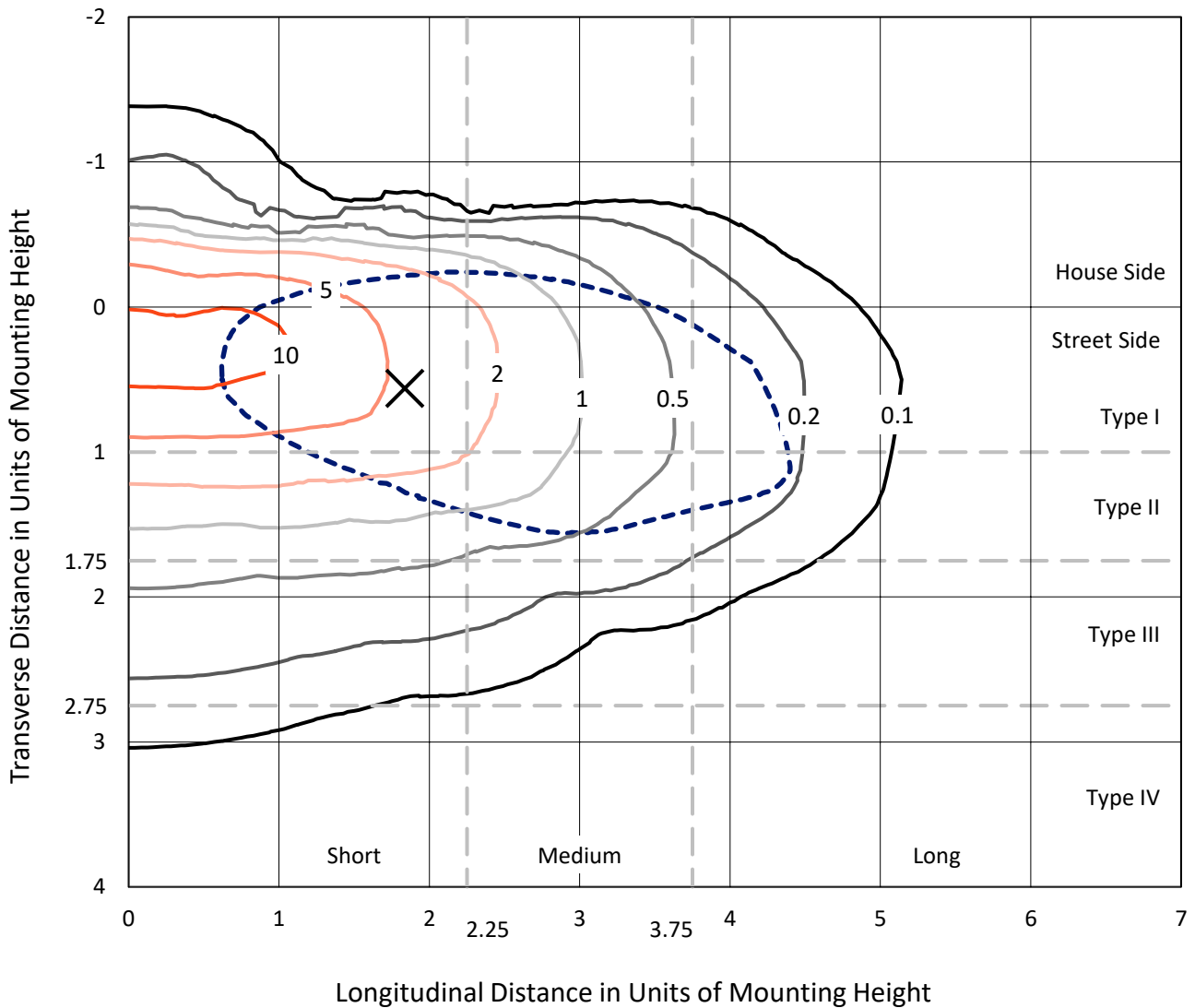
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

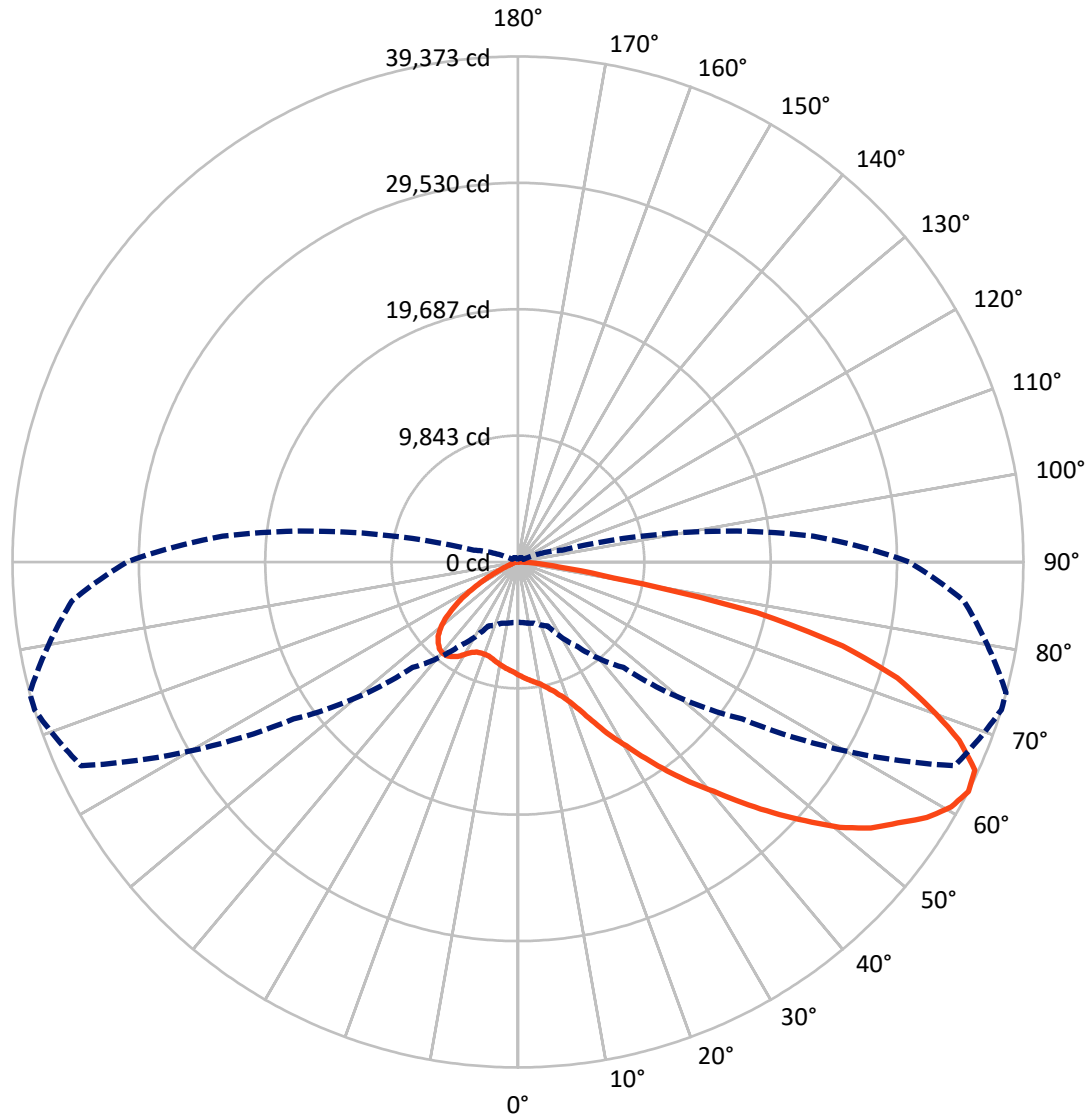
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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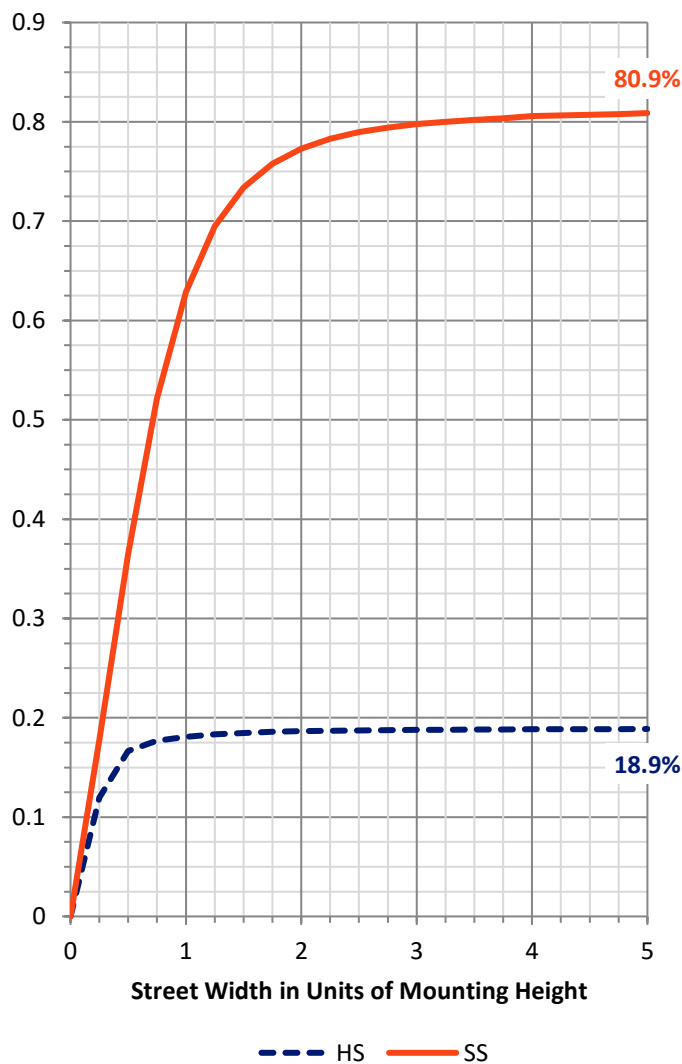
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9614.1	0.0	9614.1
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	40643.9	0.0	40643.9
	% Fixture	80.9	0.0	80.9
Total	Lumens	50258.0	0.0	50258.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	841.8	1.7
10°-20°	2532.1	5.0
20°-30°	4375.0	8.7
30°-40°	6578.9	13.1
40°-50°	8772.3	17.5
50°-60°	10331.2	20.6
60°-70°	10271.0	20.4
70°-80°	5896.8	11.7
80°-90°	658.7	1.3
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°	50258.0	100.0
0°-180°	50258.0	100.0

Coefficient of Utilization



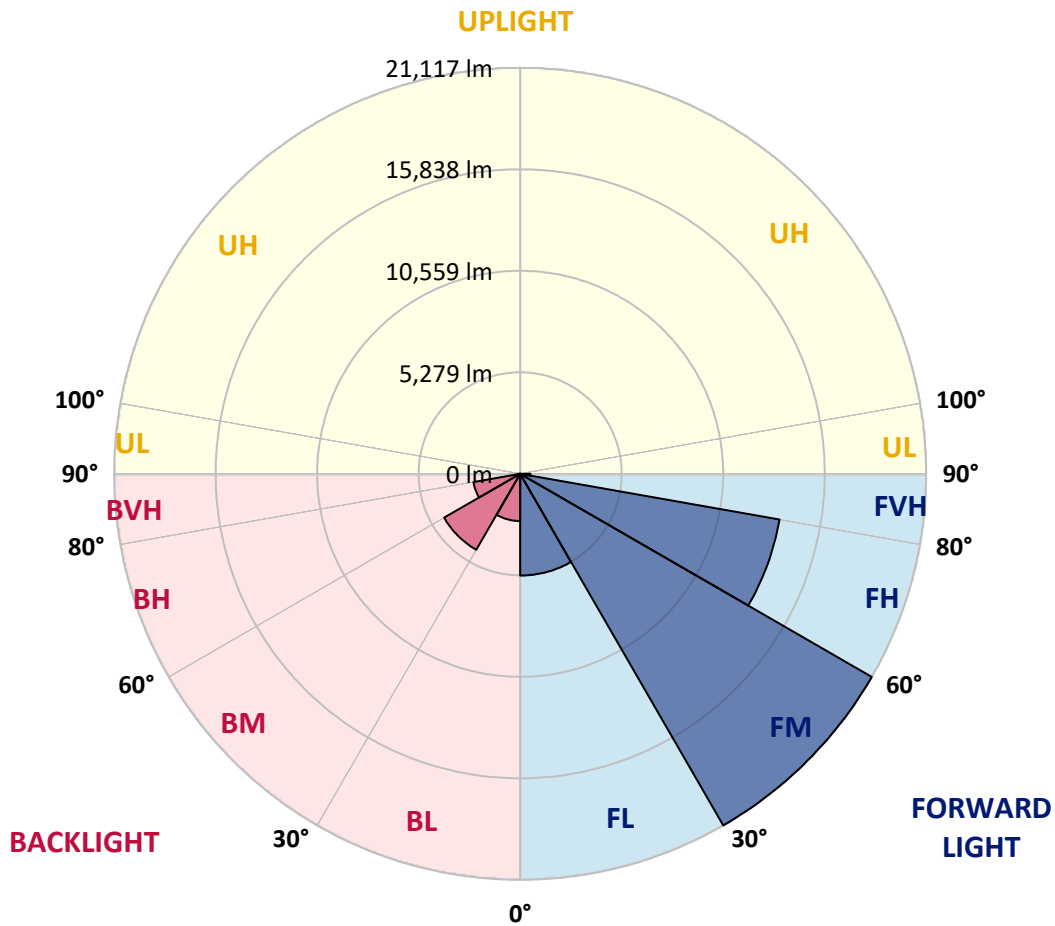
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5292.1	10.5			
FM (30°-60°)	21117.2	42.0			
FH (60°-80°)	13699.5	27.3			G5
FVH (80°-90°)	535.0	1.1			G4/750
BL (0°-30°)	2456.9	4.9	B3/2500		
BM (30°-60°)	4565.2	9.1	B3/5000		
BH (60°-80°)	2468.3	4.9	B3/2500		G3/2500
BVH (80°-90°)	123.7	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1
2.5°	9430.1	9453.8	9425.6	9413.1	9399.6	9311.6	9209.0	9104.0	9019.4	9005.9	8895.3
5°	10092.3	10104.7	10058.4	10005.4	9914.0	9768.5	9584.6	9403.0	9233.8	9188.6	8986.7
7.5°	10601.1	10577.4	10566.1	10521.0	10440.9	10280.7	10002.0	9704.2	9442.5	9379.3	9072.5
10°	11078.3	11068.1	10982.4	10926.0	10798.5	10650.7	10421.7	10043.8	9674.9	9573.3	9146.9
12.5°	11595.0	11572.4	11537.4	11415.6	11311.8	11062.5	10786.1	10442.0	10031.4	9896.0	9274.4
15°	12059.7	11998.8	11979.7	11852.2	11747.3	11556.6	11279.1	10879.7	10440.9	10324.7	9516.9
17.5°	12502.0	12473.8	12430.9	12344.0	12226.7	12080.1	11857.8	11430.3	10976.7	10807.5	9928.7
20°	12877.6	12842.7	12805.4	12829.1	12803.2	12709.6	12569.7	12205.3	11651.4	11487.8	10429.6
22.5°	13139.4	13138.2	13287.2	13374.0	13423.7	13420.3	13386.4	13180.0	12622.7	12456.9	11178.7
25°	13357.1	13374.0	13562.4	13893.0	14188.5	14215.6	14454.8	14356.6	13882.8	13710.2	12305.7
27.5°	13421.4	13455.3	13797.1	14317.1	14766.1	15197.1	15547.9	15727.3	15288.5	15082.0	13517.3
30°	13467.7	13481.2	13816.3	14439.0	15385.5	16068.0	16695.3	16998.7	16620.8	16469.6	14867.7
32.5°	13141.6	13146.1	13659.4	14602.6	15840.1	17023.5	17765.8	18337.8	18238.5	18038.9	16344.4
35°	12692.6	12776.1	13365.0	14444.6	16214.7	17901.2	18912.0	19764.9	19963.5	19820.2	17820.0
37.5°	12137.6	12203.0	12833.6	14210.0	16297.0	18504.8	19803.3	21215.7	21734.6	21710.9	19601.3
40°	11455.1	11535.2	12289.9	13704.6	16256.4	18943.6	20849.0	22822.1	23481.0	23406.5	21368.0
42.5°	10648.5	10765.8	11497.9	13054.8	15959.7	19212.1	21705.3	24457.9	25643.6	25595.1	22931.6
45°	9850.9	9914.0	10581.9	12150.0	15413.7	19299.0	22510.8	26712.0	27861.5	27807.4	24815.6
47.5°	9028.5	9083.7	9780.9	11196.7	14466.1	19124.1	23148.2	28647.8	30121.2	30067.0	26687.1
50°	7115.1	7323.8	8753.2	10358.5	13386.4	18628.9	23749.5	31059.8	32485.7	32255.6	28326.3
52.5°	6087.4	6163.0	6904.2	9513.6	12309.1	17783.9	24151.1	33294.6	34430.6	34099.0	30002.7
55°	5690.3	5741.1	6104.3	7955.6	11297.1	16505.7	24623.8	35535.1	35889.3	35804.7	31370.0
57.5°	5389.1	5445.5	5705.0	6644.7	10231.0	14714.2	24476.0	37111.1	37554.4	37283.7	32821.9
60°	4962.7	5031.5	5375.6	5965.6	9019.4	12895.7	23175.3	37756.4	38764.9	38460.3	33926.4
62.5°	4694.2	4739.3	4936.7	5508.7	8015.4	11616.4	21324.0	37548.8	39373.0	39361.7	34884.2
65°	4329.8	4396.3	4607.3	5071.0	7121.9	10624.8	19577.6	36523.3	39111.3	39121.4	35081.6
67.5°	3948.5	3975.5	4196.7	4568.9	6069.4	9716.6	17318.0	34769.1	37072.7	37305.1	33715.4
70°	3472.4	3458.9	3698.0	3969.9	4960.4	8250.0	13939.2	31648.7	34060.6	34156.5	30952.6
72.5°	2732.3	2744.7	2811.3	2999.7	3765.7	6492.4	10114.8	26739.0	30912.0	31082.3	27421.5
75°	1836.6	1856.9	2167.1	2351.0	2708.6	4666.0	6360.4	18049.0	26132.1	26612.7	22443.1
77.5°	1401.1	1413.6	1503.8	1704.6	1959.6	3325.7	3447.6	9835.1	19024.8	20165.4	17557.1
80°	992.8	997.3	908.1	807.7	1043.5	2256.3	2036.3	4188.8	7581.1	8958.5	10312.3
82.5°	444.5	437.7	515.6	428.7	601.3	873.2	961.2	2032.9	3148.6	3384.4	3684.5
85°	206.4	231.3	265.1	222.2	357.6	337.3	374.5	866.4	1475.6	1629.0	1620.0
87.5°	50.8	55.3	69.9	89.1	129.7	115.1	112.8	255.0	329.4	328.3	504.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1	8814.1
2.5°	8819.7	8761.1	8622.3	8488.1	8360.6	8276.0	8181.2	8082.0	8022.2	7994.0	8054.9
5°	8863.7	8752.1	8487.0	8220.7	7995.1	7802.2	7666.8	7551.7	7489.7	7495.3	7498.7
7.5°	8901.0	8744.2	8373.0	7997.3	7645.4	7406.2	7229.1	7105.0	7033.9	6979.8	7020.4
10°	8933.7	8711.4	8239.9	7739.0	7356.6	7002.3	6762.0	6612.0	6481.1	6407.8	6465.3
12.5°	8968.7	8699.0	8091.0	7507.7	7012.5	6616.5	6287.1	6138.2	6009.6	5954.3	5989.3
15°	9121.0	8746.4	7952.2	7235.8	6672.9	6160.7	5805.4	5622.6	5521.1	5454.5	5469.2
17.5°	9382.7	8871.6	7863.1	6951.6	6293.9	5752.4	5292.1	5078.9	4910.8	4863.4	4851.0
20°	9755.0	9109.7	7863.1	6711.3	5864.0	5298.8	4768.6	4408.7	4147.0	4048.9	4124.5
22.5°	10380.0	9514.7	7940.9	6493.5	5494.0	4828.4	4196.7	3647.3	3294.2	3150.9	3234.4
25°	11254.3	10140.8	8067.3	6302.9	5156.7	4286.9	3471.3	2839.5	2450.3	2280.0	2277.7
27.5°	12395.9	11098.6	8322.2	6147.2	4752.8	3586.3	2714.3	2106.2	1740.7	1638.1	1652.7
30°	13661.7	12136.5	8804.0	5921.6	4262.1	2802.3	1976.5	1547.8	1290.6	1155.2	1157.5
32.5°	14882.3	13211.6	9375.9	5774.9	3624.7	2113.0	1409.0	1104.4	944.2	864.2	876.6
35°	16191.0	14138.9	9801.2	5529.0	2876.7	1527.5	996.1	828.1	761.5	719.7	722.0
37.5°	17604.5	15158.7	10150.9	5199.6	2175.0	1049.2	735.5	709.6	681.4	628.4	623.9
40°	19081.3	16339.9	10359.7	4667.1	1511.7	726.5	625.0	654.3	638.5	569.7	564.1
42.5°	20333.5	17251.4	10411.5	3962.0	978.1	588.9	566.3	611.4	614.8	544.9	535.9
45°	21536.1	18063.7	10310.0	3033.6	678.0	553.9	530.2	592.3	596.8	533.6	518.9
47.5°	22881.9	19174.9	10126.1	2023.9	560.7	523.5	517.8	560.7	576.5	524.6	506.5
50°	24516.6	20078.5	9581.2	1243.2	529.1	504.3	504.3	530.2	551.7	506.5	497.5
52.5°	26193.0	20866.0	8774.6	852.9	509.9	484.0	498.6	509.9	517.8	477.2	485.1
55°	27394.5	21564.3	7572.0	685.9	498.6	470.4	505.4	482.8	471.6	436.6	428.7
57.5°	28727.9	22394.6	6342.4	608.1	484.0	478.3	482.8	440.0	408.4	372.3	364.4
60°	29658.6	22841.3	4837.4	572.0	467.0	470.4	445.6	388.1	330.5	304.6	299.0
62.5°	30470.9	23096.3	3545.7	525.7	451.3	450.1	403.9	331.7	271.9	243.7	239.2
65°	30347.9	22698.1	2298.0	488.5	438.8	424.2	362.1	284.3	226.8	205.3	203.1
67.5°	28995.3	20935.9	1447.4	450.1	417.4	391.5	324.9	253.8	208.7	183.9	181.6
70°	26155.8	18502.5	885.6	400.5	371.2	346.3	287.7	238.0	197.4	168.1	162.5
72.5°	22231.0	15846.9	626.1	353.1	323.8	294.4	243.7	226.8	188.4	151.2	146.7
75°	18264.5	11672.8	524.6	308.0	276.4	236.9	207.6	211.0	177.1	137.6	134.2
77.5°	12861.9	7277.6	488.5	251.6	217.7	188.4	179.4	192.9	162.5	126.4	123.0
80°	7506.6	4087.2	403.9	198.6	163.6	145.5	150.0	163.6	142.1	113.9	109.4
82.5°	3030.2	1617.7	284.3	154.6	119.6	116.2	123.0	133.1	117.3	95.9	93.6
85°	1081.9	505.4	161.3	101.5	76.7	80.1	79.0	94.8	84.6	69.9	68.8
87.5°	284.3	100.4	72.2	40.6	32.7	32.7	30.5	44.0	40.6	31.6	35.0
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)