

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: P510588

Luminaire Tested: **CST-CA10-760-727-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510588
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-760-727-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 84132 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

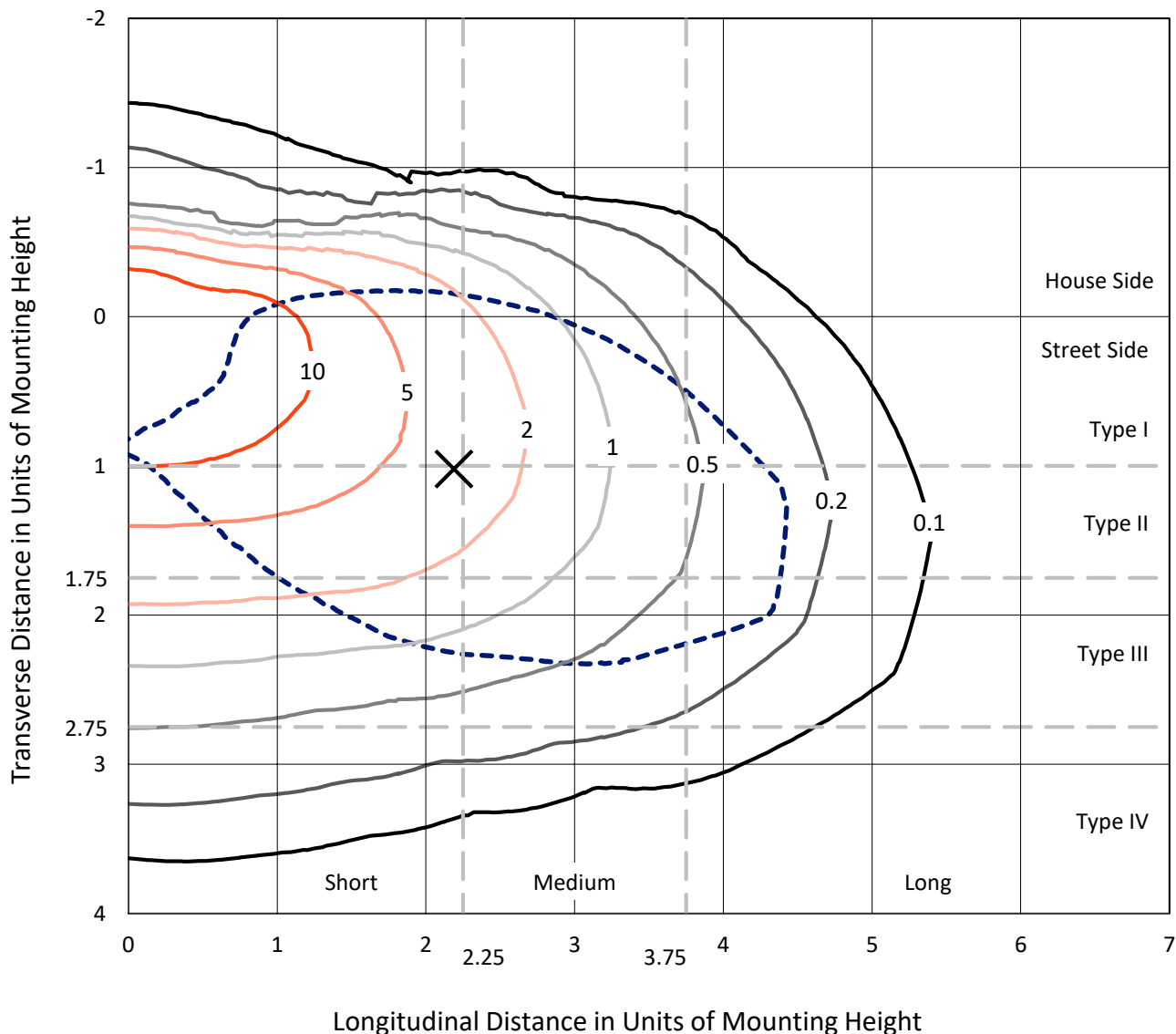
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

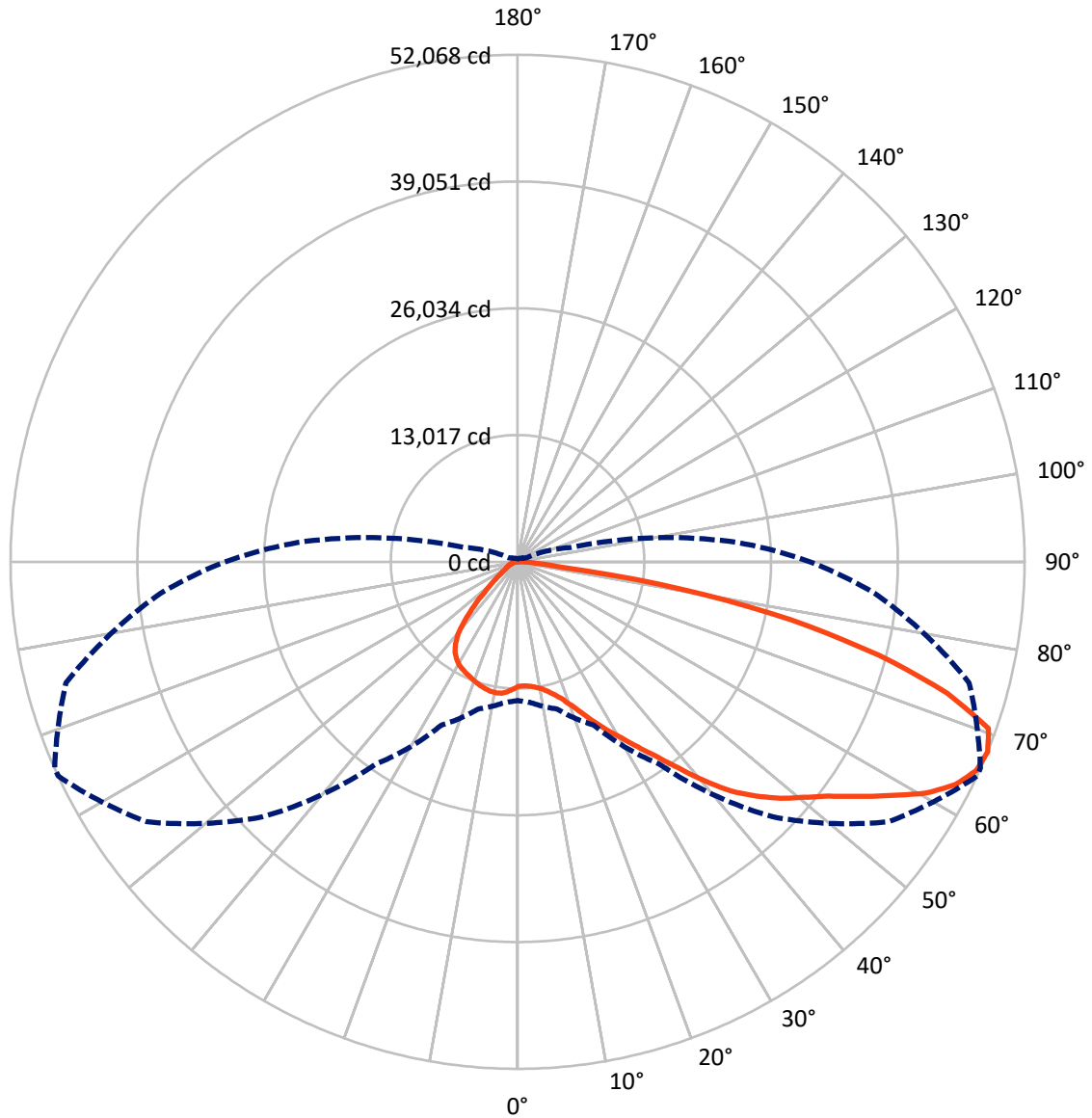
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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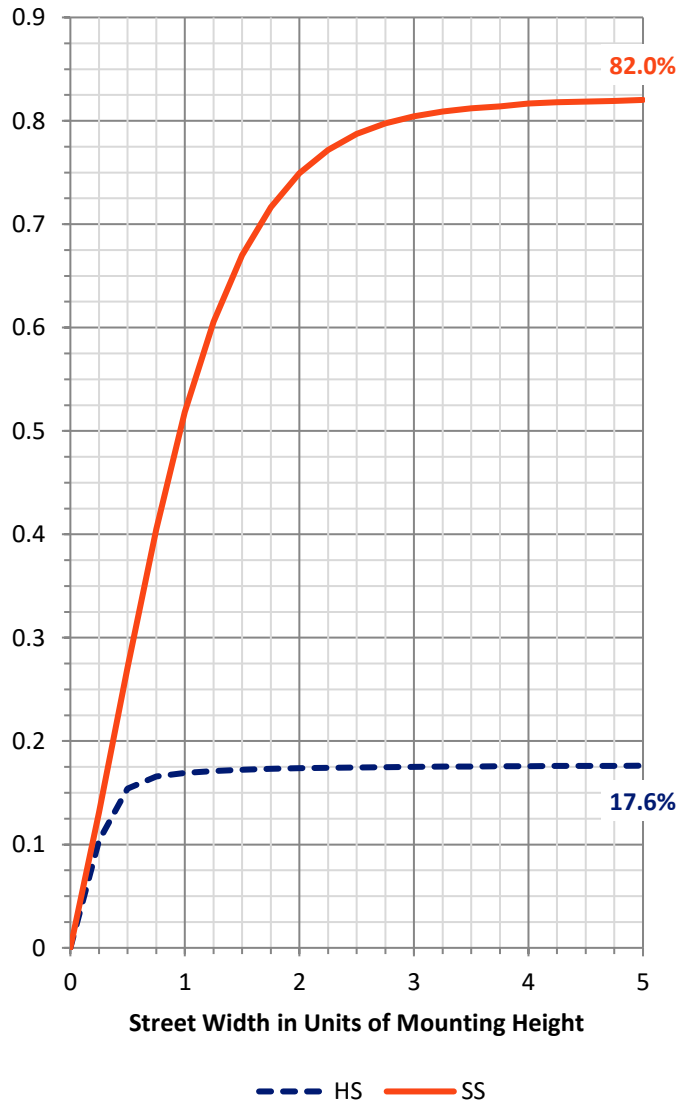
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15036.4	0.0	15036.4
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	69095.6	0.0	69095.6
	% Fixture	82.1	0.0	82.1
Total	Lumens	84132.0	0.0	84132.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1264.8	1.5
10°-20°	3904.9	4.6
20°-30°	6774.2	8.1
30°-40°	10218.8	12.1
40°-50°	14169.1	16.8
50°-60°	17489.9	20.8
60°-70°	18635.2	22.1
70°-80°	10663.4	12.7
80°-90°	1011.7	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°	84132.0	100.0
0°-180°	84132.0	100.0

Coefficient of Utilization

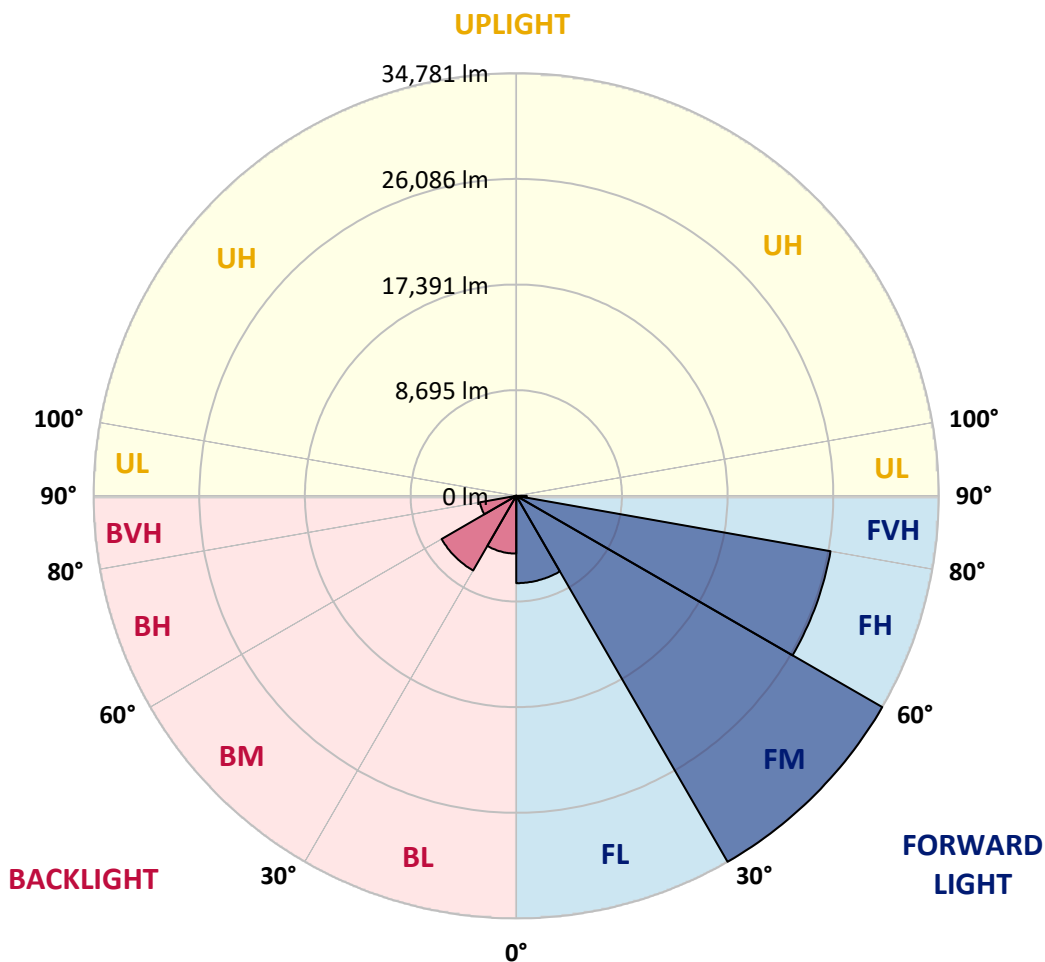


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7186.0	8.5			
FM (30°-60°)	34781.4	41.3			
FH (60°-80°)	26263.7	31.2			G5
FVH (80°-90°)	864.5	1.0			G5
BL (0°-30°)	4757.9	5.7	B4/5000		
BM (30°-60°)	7096.4	8.4	B4/8500		
BH (60°-80°)	3034.8	3.6	B4/5000		G4/5000
BVH (80°-90°)	147.3	0.2			G2/225
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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4
2.5°	12660.9	12644.3	12629.6	12655.4	12670.1	12694.1	12729.1	12753.1	12760.4	12782.6	12810.2
5°	12863.7	12861.8	12841.5	12830.5	12799.1	12788.1	12795.5	12825.0	12826.8	12854.4	12941.1
7.5°	13261.7	13258.0	13208.3	13186.2	13119.8	13046.1	12990.8	12996.3	12994.5	13022.1	13138.2
10°	13862.5	13833.0	13763.0	13694.8	13565.8	13427.6	13326.2	13234.1	13234.1	13274.6	13403.6
12.5°	14540.7	14581.3	14485.4	14382.2	14166.6	13917.8	13740.9	13637.7	13626.6	13646.9	13739.0
15°	15382.9	15382.9	15318.4	15171.0	14981.2	14634.7	14269.8	14139.0	14120.5	14162.9	14157.4
17.5°	16332.0	16359.7	16238.1	16164.3	15873.2	15489.8	15032.8	14806.1	14806.1	14778.5	14651.3
20°	17542.9	17391.7	17404.6	17283.0	17069.2	16512.7	16048.2	15718.4	15714.7	15659.4	15301.8
22.5°	18858.7	18775.8	18703.9	18597.0	18302.1	17804.5	17159.5	16833.3	16826.0	16689.6	16158.8
25°	20156.1	20218.8	20139.5	19944.2	19728.6	19186.7	18475.4	18154.7	18152.9	17926.2	17174.3
27.5°	21490.4	21558.6	21532.8	21355.9	21068.4	20644.5	19971.8	19553.5	19527.7	19380.3	18434.8
30°	22964.8	22903.9	22983.2	22907.6	22763.9	22072.8	21464.6	20978.1	21040.7	20996.5	19866.8
32.5°	24037.3	24076.0	24335.9	24343.3	24192.1	23679.8	22937.1	22638.6	22738.1	22679.1	21626.8
35°	25006.7	25069.4	25404.8	25734.7	25845.3	25285.0	24529.4	24511.0	24640.0	24999.3	24052.1
37.5°	25839.7	25884.0	26353.9	26783.3	27140.8	26757.5	26208.3	26862.5	27052.4	27787.7	26554.8
40°	26339.2	26396.3	27004.5	27608.9	28246.6	28110.2	28058.6	29606.7	29785.4	30432.3	28381.1
42.5°	26057.2	26169.6	27183.2	28289.0	29227.0	29499.8	30205.6	32196.0	32400.6	32455.8	30176.1
45°	25554.1	25694.1	26827.5	28617.0	30146.7	31022.0	32365.5	34306.1	34418.6	34261.9	31663.4
47.5°	25012.2	25161.5	26427.6	28519.3	30885.7	32793.1	34295.1	36292.8	36372.1	35891.1	33161.7
50°	24396.7	24534.9	25896.9	28290.8	31442.2	34464.6	36278.1	38010.4	38307.1	37356.2	34326.4
52.5°	23648.5	23795.9	25240.8	27933.3	31930.6	35704.9	38027.0	39951.0	39971.3	39188.1	35638.6
55°	22679.1	22935.3	24417.0	27314.1	32186.8	36770.1	39551.1	42518.2	42649.1	41891.6	36737.0
57.5°	21601.0	21824.0	23425.5	26488.4	31956.4	37579.2	42002.2	45271.6	45255.0	43734.6	37697.1
60°	20176.4	20334.9	22133.6	25408.5	31213.7	38557.8	44554.7	48222.1	48192.6	45540.6	38314.5
62.5°	18348.2	18506.7	20198.5	23714.8	30122.7	39213.9	46287.0	50431.8	50347.0	46854.7	38504.3
65°	16228.8	16512.7	17981.5	21516.2	28193.1	38782.6	47123.7	51732.9	51596.5	47857.2	38051.0
67.5°	14242.2	14483.6	15646.5	18490.1	25345.8	37033.7	46534.0	52068.3	52027.8	48002.8	36770.1
70°	11429.9	11518.3	12583.5	15018.0	21088.6	33288.8	44495.7	51294.3	51312.7	46661.1	34197.4
72.5°	7823.2	8038.9	8512.5	10434.7	15346.1	26473.7	38351.4	46163.6	46167.2	41840.0	29794.7
75°	4207.4	4541.0	5093.9	6046.7	8578.8	16988.1	30799.0	38305.3	38377.2	34884.8	23681.7
77.5°	2086.2	2206.0	2526.7	3234.3	3932.8	8014.9	19807.8	28753.4	28924.8	26777.8	16151.4
80°	954.6	974.9	998.9	993.3	1505.7	3516.3	8503.3	17268.3	17319.9	15926.6	7373.6
82.5°	746.4	742.7	753.8	685.6	689.3	1356.4	2943.2	4522.6	4822.9	3796.4	2338.7
85°	451.5	449.7	484.7	376.0	462.6	733.5	1485.4	1804.2	1826.3	1485.4	1210.8
87.5°	171.4	165.9	153.0	134.5	154.8	206.4	514.2	663.5	648.7	460.7	418.3
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°	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4	12784.4
2.5°	12834.2	12893.1	13001.9	13084.8	13112.4	13200.9	13285.7	13300.4	13361.2	13385.2	13464.4
5°	12994.5	13094.0	13263.6	13376.0	13425.7	13573.2	13669.0	13716.9	13700.3	13709.6	13798.0
7.5°	13228.6	13322.5	13458.9	13595.3	13619.3	13645.1	13635.8	13628.5	13564.0	13508.7	13591.6
10°	13442.3	13530.8	13615.6	13635.8	13514.2	13446.0	13324.4	13230.4	13105.1	13047.9	13114.3
12.5°	13742.7	13761.2	13678.2	13567.7	13306.0	13062.7	12865.5	12694.1	12539.3	12432.4	12520.9
15°	14059.7	13987.8	13746.4	13423.9	13018.5	12670.1	12347.6	12062.0	11805.8	11743.2	11767.1
17.5°	14479.9	14284.6	13798.0	13256.2	12625.9	12084.1	11669.4	11308.2	10972.8	10832.7	10819.8
20°	14992.2	14677.1	13903.1	13044.3	12161.5	11440.9	10799.6	10259.6	9797.0	9417.4	9426.6
22.5°	15659.4	15202.3	14061.6	12823.1	11647.3	10687.2	9754.6	8836.9	8075.7	7747.7	7666.6
25°	16540.3	15858.4	14286.4	12622.2	11072.3	9728.8	8411.1	7115.6	6310.2	5991.4	5956.4
27.5°	17636.8	16739.3	14629.2	12399.2	10456.8	8591.7	6697.2	5427.4	4688.4	4353.0	4240.6
30°	18882.7	17824.8	14981.2	12167.0	9712.2	7130.3	5106.8	3862.8	3105.3	2804.9	2766.2
32.5°	20495.2	19199.6	15504.6	11802.1	8624.9	5604.4	3562.4	2410.6	1896.4	1767.4	1730.5
35°	22786.0	21059.2	16151.4	11341.4	7228.0	3914.4	2207.8	1411.7	1137.1	1072.6	1059.7
37.5°	24921.9	22883.7	16803.8	10576.6	5488.2	2443.7	1262.4	904.9	844.1	845.9	849.6
40°	26615.6	24131.3	17330.9	9570.3	3610.3	1387.7	877.2	751.9	753.8	748.2	744.5
42.5°	28123.1	25126.5	17568.7	8083.1	2091.7	928.8	761.1	692.9	676.4	681.9	678.2
45°	29370.8	26142.0	17107.9	6411.6	1232.9	833.0	718.7	643.2	624.8	654.2	657.9
47.5°	30682.9	27105.8	16402.1	4830.3	1000.7	792.5	680.0	606.3	597.1	634.0	637.7
50°	31786.9	27804.3	15198.6	3639.8	954.6	748.2	645.0	569.5	567.6	600.8	600.8
52.5°	32710.2	28226.3	13770.4	2810.5	923.3	709.5	610.0	534.4	534.4	545.5	547.4
55°	33360.7	28141.5	12918.9	2211.5	890.1	672.7	573.2	501.3	479.2	471.8	475.5
57.5°	33478.7	27916.7	11931.1	1725.0	851.4	637.7	540.0	462.6	422.0	416.5	414.7
60°	33403.1	27422.8	10803.3	1441.2	807.2	604.5	506.8	422.0	381.5	368.6	372.3
62.5°	33088.0	26547.4	9500.3	1264.3	763.0	578.7	469.9	394.4	357.5	340.9	340.9
65°	32137.0	25294.2	7565.2	1107.6	707.7	551.0	440.5	383.3	342.8	324.4	320.7
67.5°	30047.1	22693.8	5685.4	971.2	654.2	521.5	436.8	381.5	335.4	309.6	305.9
70°	27244.0	19494.5	3881.2	853.3	595.3	493.9	434.9	383.3	328.0	294.9	291.2
72.5°	22743.6	15368.2	2235.5	742.7	536.3	468.1	427.6	385.2	315.1	274.6	269.1
75°	17089.5	10779.3	1312.2	637.7	479.2	429.4	407.3	374.1	294.9	250.6	245.1
77.5°	10278.0	5033.0	987.8	528.9	411.0	377.8	363.1	342.8	269.1	232.2	226.7
80°	3770.6	1911.1	775.9	423.9	326.2	328.0	313.3	300.4	245.1	213.8	210.1
82.5°	1643.9	1168.4	573.2	322.5	256.2	293.0	258.0	247.0	210.1	191.7	184.3
85°	997.0	696.6	368.6	219.3	176.9	199.0	180.6	189.8	162.2	151.1	145.6
87.5°	329.9	208.3	164.0	106.9	88.5	82.9	81.1	97.7	92.1	84.8	84.8
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)