

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: P510746

Luminaire Tested: **CST-CA8-230-760-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510746
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-230-760-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32519 lumens
Efficiency: N/A
Efficacy: 142.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

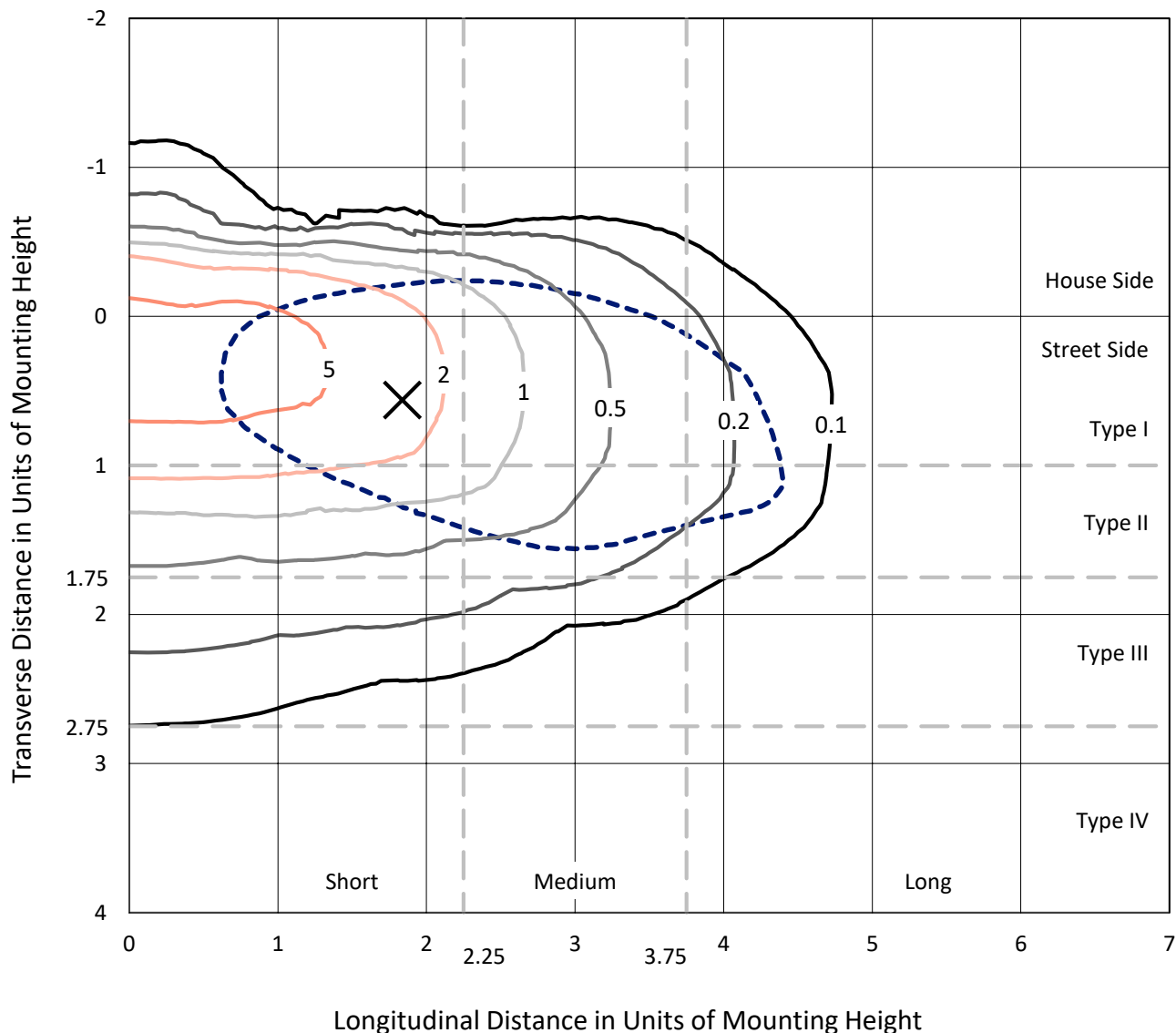
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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 CATALOG NUMBER: CST-CA8-230-760-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

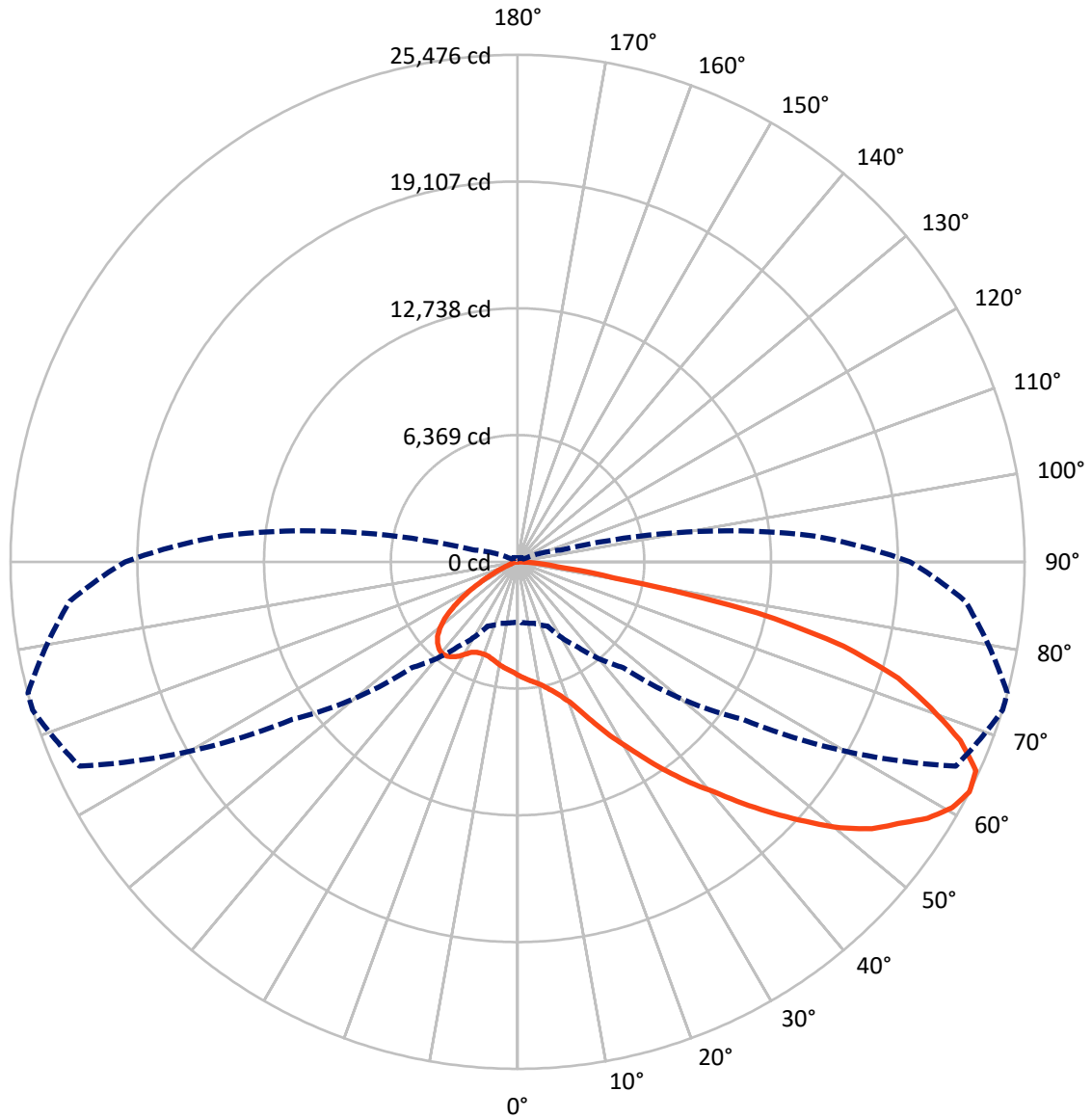
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Short - N/A

REPORT NUMBER: P510746
CATALOG NUMBER: CST-CA8-230-760-U-T2-HSS

Luminous Intensity Polar Plot



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

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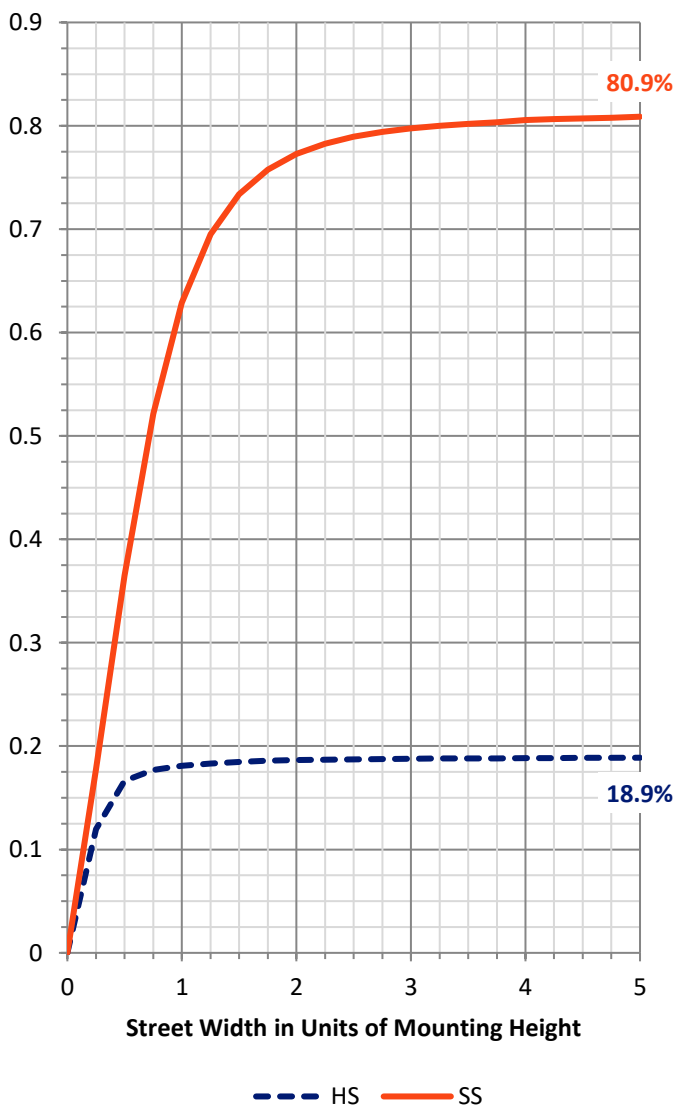
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6220.7	0.0	6220.7
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	26298.3	0.0	26298.3
	% Fixture	80.9	0.0	80.9
Total	Lumens	32519.0	0.0	32519.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	544.7	1.7
10°-20°	1638.4	5.0
20°-30°	2830.8	8.7
30°-40°	4256.8	13.1
40°-50°	5676.1	17.5
50°-60°	6684.7	20.6
60°-70°	6645.8	20.4
70°-80°	3815.5	11.7
80°-90°	426.2	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°	32519.0	100.0
0°-180°	32519.0	100.0

Coefficient of Utilization

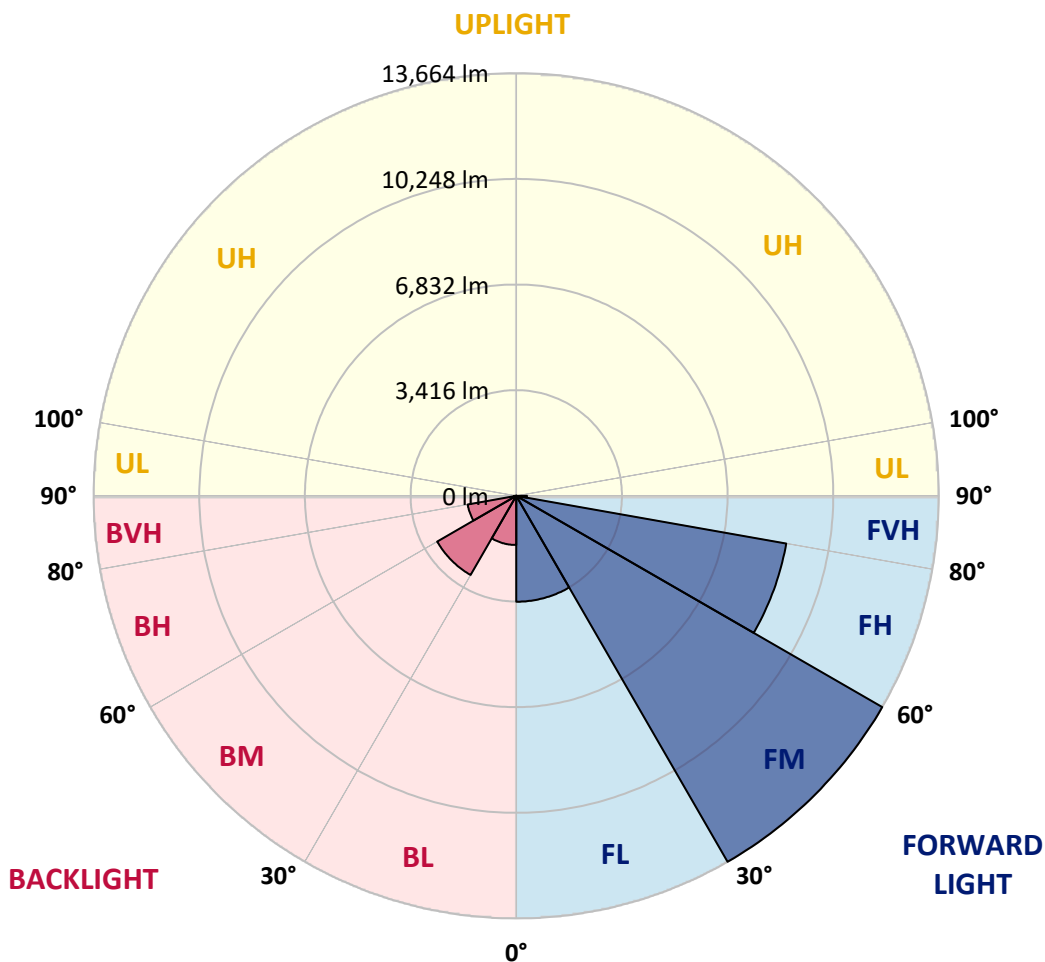


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 CATALOG NUMBER: CST-CA8-230-760-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3424.2	10.5			
FM (30°-60°)	13663.7	42.0			
FH (60°-80°)	8864.2	27.3			G4/12000
FVH (80°-90°)	346.2	1.1			G3/500
BL (0°-30°)	1589.7	4.9	B3/2500		
BM (30°-60°)	2953.9	9.1	B3/5000		
BH (60°-80°)	1597.1	4.9	B3/2500		G3/2500
BVH (80°-90°)	80.1	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type II Short





REPORT NUMBER: P510746

CATALOG NUMBER: CST-CA8-230-760-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1
2.5°	6101.6	6117.0	6098.7	6090.7	6081.9	6025.0	5958.6	5890.7	5835.9	5827.2	5755.6
5°	6530.1	6538.2	6508.2	6473.9	6414.8	6320.6	6201.6	6084.1	5974.6	5945.4	5814.8
7.5°	6859.3	6844.0	6836.7	6807.5	6755.7	6652.0	6471.7	6279.0	6109.7	6068.8	5870.3
10°	7168.1	7161.5	7106.1	7069.6	6987.1	6891.4	6743.3	6498.7	6260.0	6194.3	5918.4
12.5°	7502.4	7487.8	7465.2	7386.4	7319.2	7157.9	6979.0	6756.4	6490.7	6403.1	6000.9
15°	7803.2	7763.7	7751.3	7668.8	7601.0	7477.6	7298.0	7039.6	6755.7	6680.5	6157.9
17.5°	8089.3	8071.0	8043.3	7987.1	7911.2	7816.3	7672.5	7395.8	7102.4	6992.9	6424.3
20°	8332.4	8309.7	8285.7	8301.0	8284.2	8223.6	8133.1	7897.3	7538.9	7433.1	6748.4
22.5°	8501.7	8501.0	8597.3	8653.5	8685.7	8683.5	8661.6	8528.0	8167.4	8060.1	7233.1
25°	8642.6	8653.5	8775.4	8989.3	9180.6	9198.1	9352.8	9289.3	8982.8	8871.1	7962.3
27.5°	8684.2	8706.1	8927.3	9263.8	9554.3	9833.1	10060.2	10176.2	9892.3	9758.7	8746.2
30°	8714.1	8722.9	8939.7	9342.6	9955.0	10396.7	10802.5	10998.9	10754.3	10656.5	9620.0
32.5°	8503.2	8506.1	8838.2	9448.5	10249.2	11014.9	11495.2	11865.3	11801.1	11671.9	10575.5
35°	8212.7	8266.7	8647.7	9346.3	10491.6	11582.8	12236.9	12788.7	12917.2	12824.5	11530.3
37.5°	7853.5	7895.9	8303.9	9194.4	10544.8	11973.4	12813.5	13727.4	14063.2	14047.9	12682.9
40°	7411.9	7463.7	7952.1	8867.4	10518.6	12257.3	13490.2	14766.9	15193.2	15145.0	13826.0
42.5°	6890.0	6965.9	7439.6	8447.0	10326.6	12431.0	14044.2	15825.3	16592.5	16561.1	14837.7
45°	6373.9	6414.8	6846.9	7861.6	9973.3	12487.2	14565.4	17283.7	18027.6	17992.5	16056.7
47.5°	5841.8	5877.5	6328.7	7244.7	9360.1	12374.1	14977.8	18536.3	19489.6	19454.6	17267.7
50°	4603.8	4738.8	5663.7	6702.4	8661.6	12053.6	15366.9	20097.0	21019.6	20870.7	18328.3
52.5°	3938.8	3987.7	4467.3	6155.7	7964.5	11506.9	15626.7	21543.0	22278.0	22063.4	19413.0
55°	3681.9	3714.7	3949.8	5147.6	7309.7	10679.9	15932.6	22992.7	23221.9	23167.1	20297.7
57.5°	3487.0	3523.5	3691.4	4299.4	6619.9	9520.7	15837.0	24012.4	24299.3	24124.1	21237.1
60°	3211.0	3255.6	3478.2	3860.0	5835.9	8344.0	14995.3	24429.9	25082.5	24885.4	21951.8
62.5°	3037.3	3066.5	3194.3	3564.3	5186.3	7516.3	13797.5	24295.6	25476.0	25468.7	22571.5
65°	2801.5	2844.6	2981.1	3281.1	4608.2	6874.7	12667.5	23632.1	25306.6	25313.2	22699.2
67.5°	2554.8	2572.3	2715.4	2956.3	3927.1	6287.1	11205.4	22497.0	23987.6	24138.0	21815.3
70°	2246.8	2238.0	2392.8	2568.7	3209.6	5338.1	9019.3	20478.0	22038.6	22100.7	20027.6
72.5°	1767.9	1776.0	1819.0	1940.9	2436.6	4200.9	6544.7	17301.3	20001.3	20111.6	17742.9
75°	1188.4	1201.5	1402.2	1521.2	1752.6	3019.1	4115.5	11678.5	16908.5	17219.5	14521.6
77.5°	906.6	914.6	973.0	1103.0	1267.9	2151.9	2230.7	6363.7	12309.9	13047.8	11360.2
80°	642.4	645.3	587.6	522.6	675.2	1459.9	1317.6	2710.3	4905.3	5796.5	6672.5
82.5°	287.6	283.2	333.6	277.4	389.1	565.0	621.9	1315.4	2037.3	2189.8	2384.0
85°	133.6	149.6	171.5	143.8	231.4	218.3	242.3	560.6	954.8	1054.0	1048.2
87.5°	32.8	35.8	45.3	57.7	83.9	74.5	73.0	165.0	213.1	212.4	326.3
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: P510746

CATALOG NUMBER: CST-CA8-230-760-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1	5703.1
2.5°	5706.7	5668.8	5579.0	5492.1	5409.7	5354.9	5293.6	5229.4	5190.7	5172.4	5211.8
5°	5735.2	5662.9	5491.4	5319.1	5173.1	5048.3	4960.7	4886.3	4846.1	4849.8	4852.0
7.5°	5759.3	5657.8	5417.7	5174.6	4946.9	4792.1	4677.5	4597.2	4551.2	4516.2	4542.5
10°	5780.5	5636.7	5331.5	5007.5	4760.0	4530.8	4375.3	4278.2	4193.6	4146.1	4183.3
12.5°	5803.1	5628.6	5235.2	4857.8	4537.4	4281.2	4068.0	3971.7	3888.4	3852.7	3875.3
15°	5901.6	5659.3	5145.4	4681.9	4317.6	3986.3	3756.3	3638.1	3572.4	3529.3	3538.8
17.5°	6071.0	5740.3	5087.7	4497.9	4072.4	3722.0	3424.2	3286.2	3177.5	3146.8	3138.8
20°	6311.9	5894.3	5087.7	4342.5	3794.3	3428.6	3085.5	2852.6	2683.3	2619.8	2668.7
22.5°	6716.3	6156.4	5138.1	4201.6	3554.9	3124.2	2715.4	2359.9	2131.5	2038.7	2092.8
25°	7282.0	6561.5	5219.9	4078.2	3336.6	2773.8	2246.1	1837.3	1585.4	1475.2	1473.8
27.5°	8020.7	7181.2	5384.8	3977.5	3075.3	2320.5	1756.3	1362.8	1126.3	1059.9	1069.4
30°	8839.7	7852.8	5696.5	3831.5	2757.7	1813.2	1278.9	1001.5	835.1	747.5	748.9
32.5°	9629.5	8548.4	6066.6	3736.6	2345.3	1367.2	911.7	714.6	611.0	559.1	567.2
35°	10476.2	9148.5	6341.8	3577.5	1861.4	988.4	644.5	535.8	492.7	465.7	467.2
37.5°	11390.9	9808.3	6568.1	3364.3	1407.3	678.9	475.9	459.1	440.9	406.6	403.7
40°	12346.4	10572.6	6703.1	3019.8	978.1	470.1	404.4	423.4	413.2	368.6	365.0
42.5°	13156.6	11162.4	6736.7	2563.6	632.9	381.0	366.4	395.6	397.8	352.6	346.7
45°	13934.7	11687.9	6671.0	1962.8	438.7	358.4	343.1	383.2	386.1	345.3	335.8
47.5°	14805.6	12406.9	6552.0	1309.5	362.8	338.7	335.0	362.8	373.0	339.4	327.7
50°	15863.3	12991.6	6199.5	804.4	342.3	326.3	326.3	343.1	356.9	327.7	321.9
52.5°	16948.0	13501.1	5677.5	551.8	329.9	313.1	322.6	329.9	335.0	308.8	313.9
55°	17725.4	13953.0	4899.4	443.8	322.6	304.4	327.0	312.4	305.1	282.5	277.4
57.5°	18588.2	14490.2	4103.8	393.4	313.1	309.5	312.4	284.7	264.2	240.9	235.8
60°	19190.4	14779.3	3130.0	370.1	302.2	304.4	288.3	251.1	213.9	197.1	193.4
62.5°	19715.9	14944.2	2294.2	340.2	292.0	291.2	261.3	214.6	175.9	157.7	154.7
65°	19636.4	14686.6	1486.9	316.1	284.0	274.5	234.3	183.9	146.7	132.9	131.4
67.5°	18761.2	13546.4	936.5	291.2	270.1	253.3	210.2	164.2	135.0	119.0	117.5
70°	16923.9	11971.9	573.0	259.1	240.2	224.1	186.1	154.0	127.7	108.8	105.1
72.5°	14384.4	10253.6	405.1	228.5	209.5	190.5	157.7	146.7	121.9	97.8	94.9
75°	11817.9	7552.8	339.4	199.3	178.8	153.3	134.3	136.5	114.6	89.1	86.9
77.5°	8322.1	4708.9	316.1	162.8	140.9	121.9	116.1	124.8	105.1	81.8	79.6
80°	4857.1	2644.6	261.3	128.5	105.8	94.2	97.1	105.8	92.0	73.7	70.8
82.5°	1960.6	1046.7	183.9	100.0	77.4	75.2	79.6	86.1	75.9	62.0	60.6
85°	700.0	327.0	104.4	65.7	49.6	51.8	51.1	61.3	54.7	45.3	44.5
87.5°	183.9	65.0	46.7	26.3	21.2	21.2	19.7	28.5	26.3	20.4	22.6
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)