

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: P510530

Luminaire Tested: **CST-CA10-630-727-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510530
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-630-727-U-T4-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: 69141 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

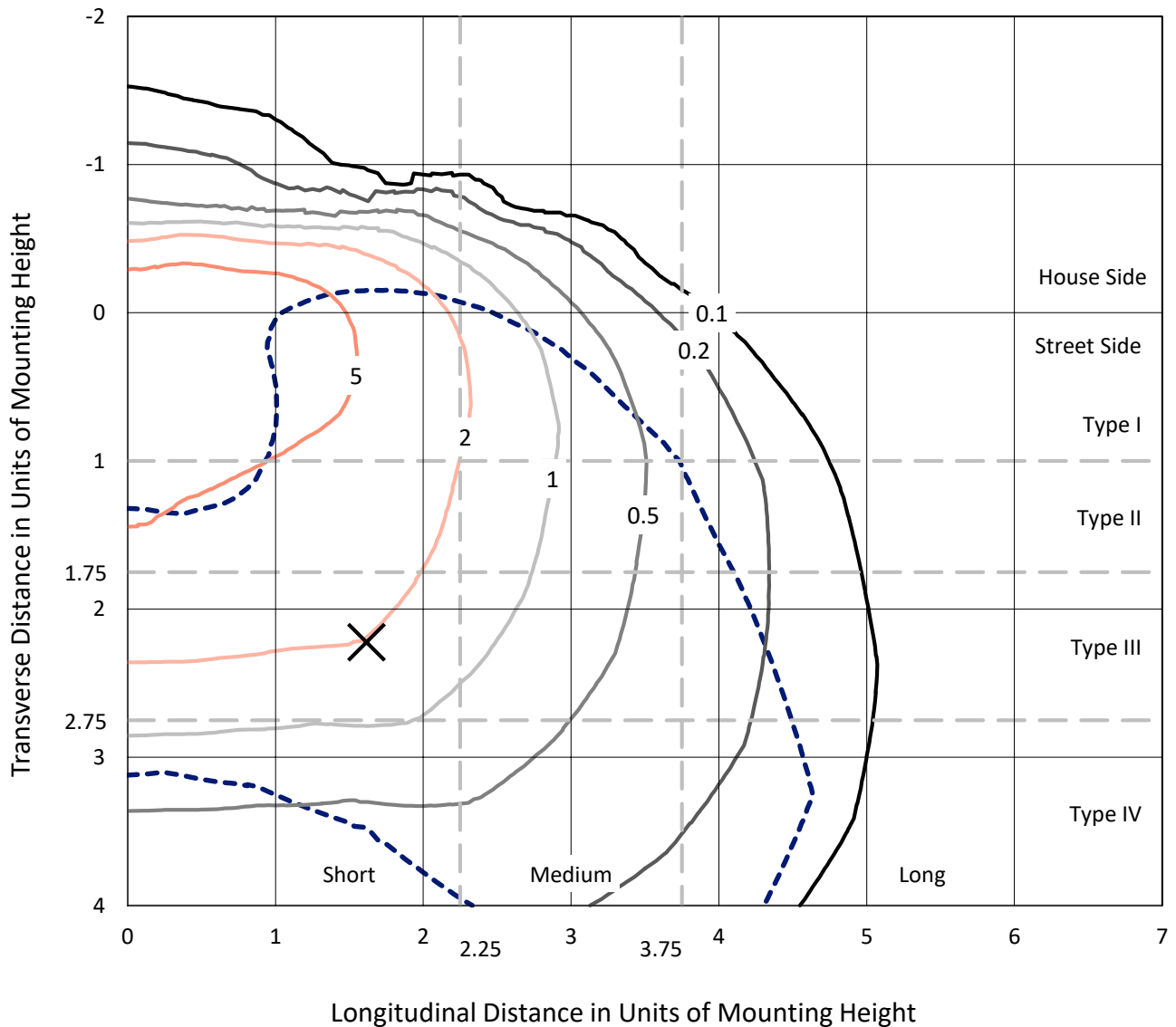
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

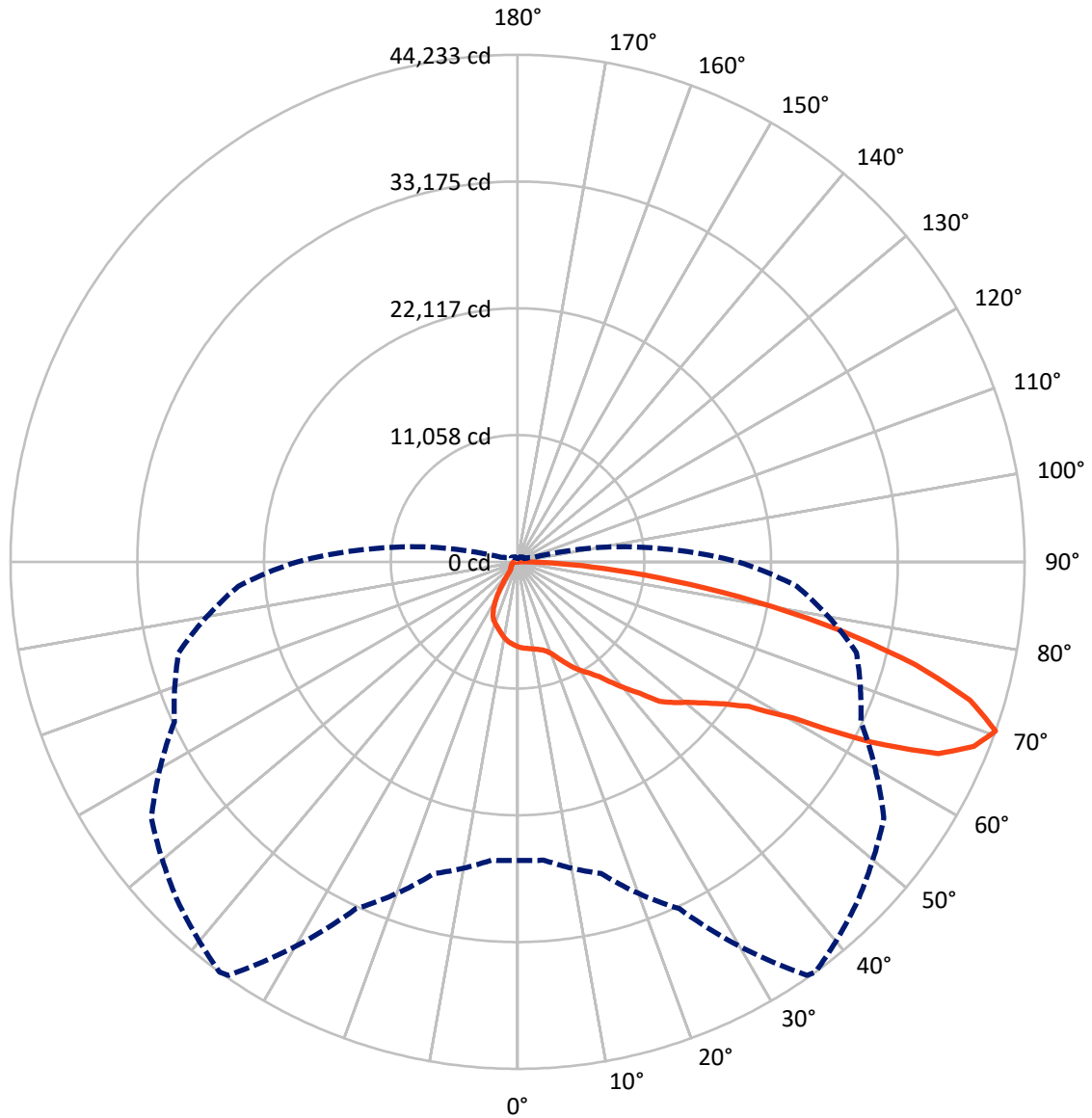
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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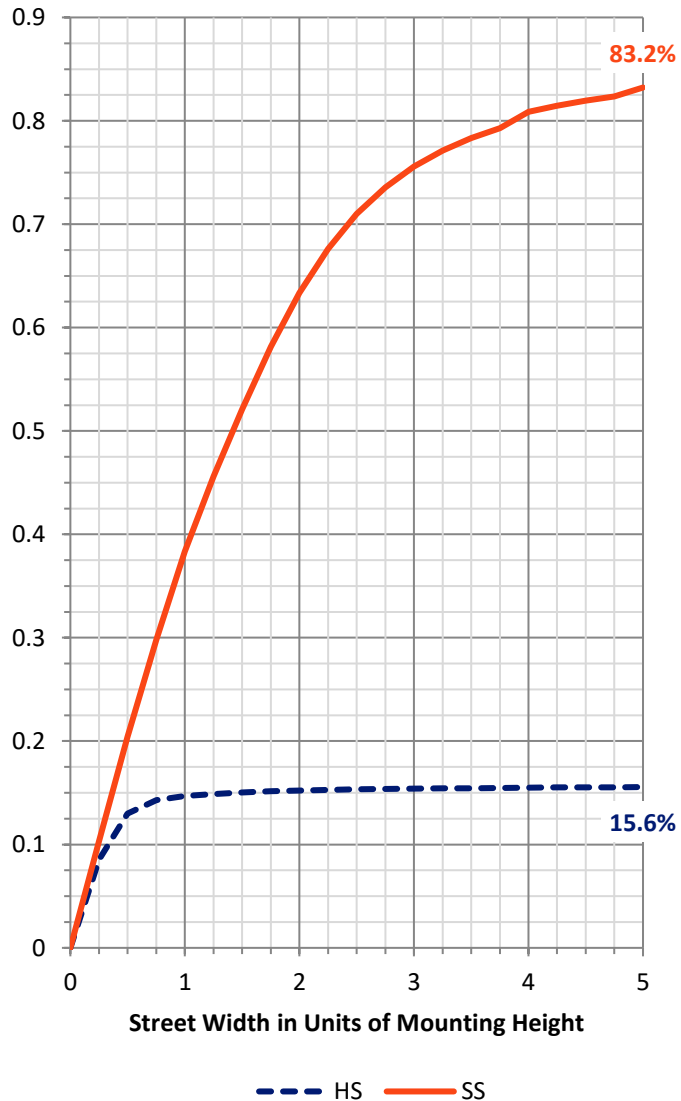
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10911.0	0.0	10911.0
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	58230.0	0.0	58230.0
	% Fixture	84.2	0.0	84.2
Total	Lumens	69141.0	0.0	69141.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	702.6	1.0
10°-20°	2089.4	3.0
20°-30°	3757.3	5.4
30°-40°	5945.9	8.6
40°-50°	9292.3	13.4
50°-60°	13343.6	19.3
60°-70°	18099.3	26.2
70°-80°	13395.4	19.4
80°-90°	2515.2	3.6
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°	69141.0	100.0
0°-180°	69141.0	100.0

Coefficient of Utilization

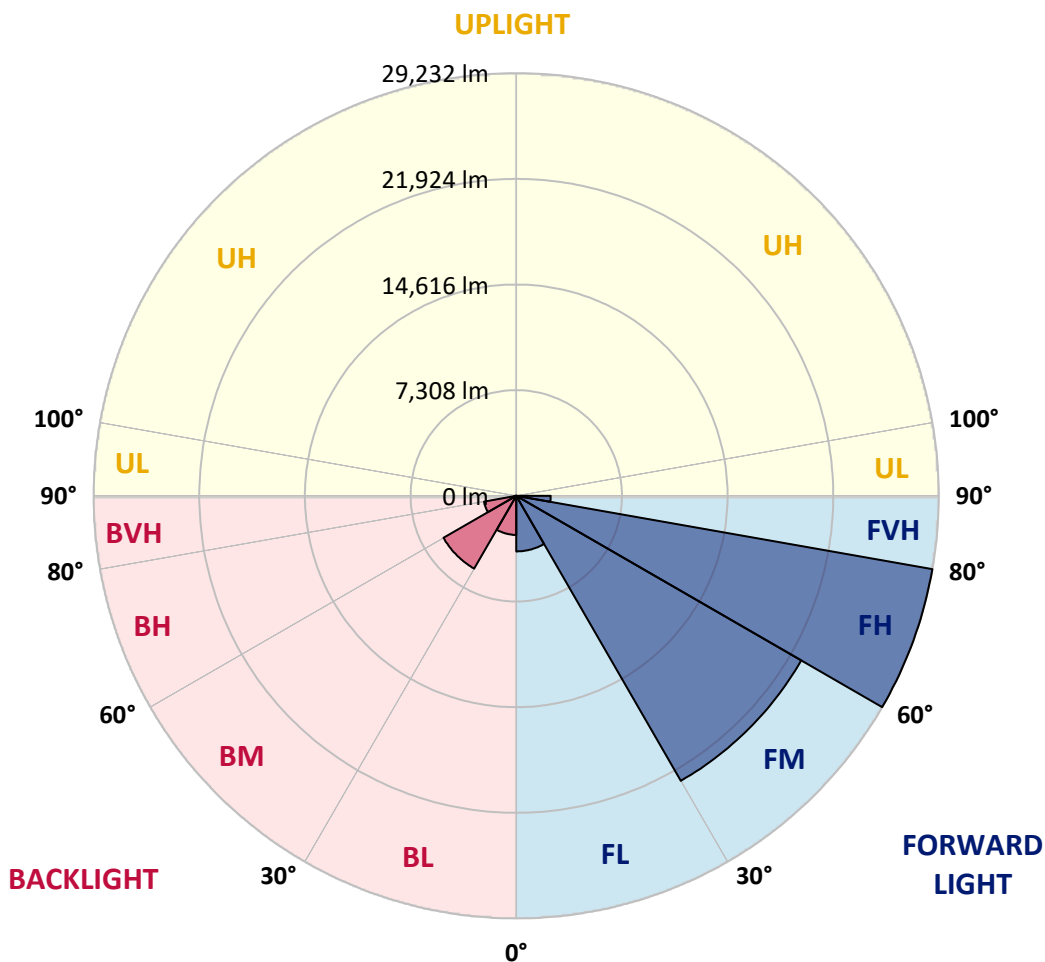


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3845.6	5.6			
FM (30°-60°)	22767.5	32.9			
FH (60°-80°)	29232.1	42.3			G5
FVH (80°-90°)	2384.8	3.4			G5
BL (0°-30°)	2703.7	3.9	B4/5000		
BM (30°-60°)	5814.2	8.4	B4/8500		
BH (60°-80°)	2262.6	3.3	B3/2500		G3/2500
BVH (80°-90°)	130.4	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1
2.5°	7558.2	7542.2	7529.4	7534.2	7524.6	7531.0	7516.7	7499.1	7457.6	7440.0	7432.1
5°	7625.2	7620.4	7607.6	7598.1	7580.5	7574.1	7558.2	7572.5	7550.2	7492.7	7459.2
7.5°	7665.1	7663.5	7649.1	7628.4	7638.0	7646.0	7661.9	7639.6	7610.8	7583.7	7515.1
10°	7682.7	7682.7	7665.1	7676.3	7725.8	7730.6	7738.5	7752.9	7725.8	7685.9	7617.2
12.5°	7727.4	7724.2	7730.6	7767.3	7818.3	7829.5	7869.4	7869.4	7872.6	7848.7	7768.9
15°	7839.1	7839.1	7853.5	7887.0	7974.8	7981.2	8040.2	8092.9	8099.3	8064.2	8003.5
17.5°	8097.7	8091.3	8083.3	8104.1	8198.2	8201.4	8303.6	8370.6	8388.2	8426.5	8416.9
20°	8589.3	8582.9	8581.3	8582.9	8576.6	8567.0	8667.5	8739.4	8828.8	8895.8	8929.3
22.5°	9293.3	9278.9	9278.9	9200.7	9140.0	9149.6	9165.6	9205.5	9323.6	9441.7	9567.8
25°	10051.5	10041.9	10049.9	9850.3	9768.9	9800.9	9780.1	9842.4	9997.2	10099.4	10233.4
27.5°	10670.8	10685.2	10640.5	10485.6	10433.0	10456.9	10409.0	10587.8	10758.6	10937.4	11140.1
30°	11441.8	11365.2	11255.0	11066.7	11047.5	11050.7	11047.5	11334.8	11689.2	11944.6	12225.5
32.5°	12449.0	12461.8	12214.4	11770.6	11607.8	11585.5	11649.3	12070.7	12549.6	13116.2	13486.6
35°	13467.4	13488.2	13307.8	12844.9	12380.4	12310.1	12216.0	12763.5	13454.6	14591.2	15149.8
37.5°	14548.1	14621.5	14407.6	13994.2	13443.5	13378.0	12932.7	13470.6	14492.2	16337.4	17070.1
40°	15994.2	15916.0	15657.4	15132.3	14619.9	14514.5	13997.4	14279.9	15826.6	18524.3	19055.8
42.5°	17060.5	17038.2	16819.5	16300.7	15785.1	15700.5	15283.9	15590.4	17507.5	20741.4	20979.3
45°	17906.5	18043.8	18039.0	17713.4	17422.9	17375.0	17129.2	17580.9	19539.5	22834.1	22717.6
47.5°	18658.4	18743.0	18607.3	18465.2	18329.5	18345.5	18527.5	19456.5	21616.2	24661.8	24146.2
50°	19889.1	19780.5	19172.3	19063.8	19255.3	19263.3	19817.2	21247.4	23903.6	26242.1	25356.1
52.5°	21530.0	21411.9	20162.0	19976.8	20430.2	20463.7	21384.7	23032.0	26262.8	27752.1	26559.7
55°	23972.2	23697.7	22358.4	21528.4	21735.9	21871.6	22987.3	24748.0	28109.6	29083.4	27471.2
57.5°	26971.5	27171.1	26484.7	24609.1	23745.6	23796.6	24821.4	26390.5	29739.4	30248.6	28004.3
60°	30141.7	30093.8	30381.1	29591.0	27937.3	27662.7	27140.7	28066.6	31002.0	31230.3	28553.4
62.5°	31878.4	32157.7	33115.4	33273.5	34765.9	34620.7	31062.7	30144.8	32461.0	31846.4	28703.4
65°	31868.8	31990.1	33773.1	35733.3	40395.8	40354.3	38700.6	33150.6	33548.0	32175.3	28403.4
67.5°	29809.6	29998.0	32082.7	35912.0	42997.7	42948.2	41805.3	37375.8	33889.6	31779.4	27003.5
70°	26055.3	26119.1	28152.7	33394.8	44043.2	44233.2	41912.3	38997.5	33040.4	30603.0	24451.1
72.5°	21494.9	21362.4	23351.3	28518.3	41380.7	41267.4	40140.5	37061.3	31610.2	28318.8	19941.7
75°	15826.6	16195.4	17980.0	22898.0	35430.0	35845.0	36344.6	34098.7	28074.5	23338.5	13789.8
77.5°	10450.5	10919.8	12723.6	17169.1	28049.0	28693.9	29988.4	29001.9	22838.9	16741.3	6566.9
80°	5400.1	5754.4	7377.8	11392.3	20107.7	21038.3	23411.9	21965.8	16192.2	7569.3	1470.1
82.5°	2043.2	1996.9	3305.8	6520.6	12892.8	13738.8	15464.3	13172.1	5762.4	1329.7	683.2
85°	897.1	949.8	1369.6	2973.8	7371.4	7481.5	8760.1	5135.1	844.4	635.3	464.5
87.5°	387.9	445.3	574.6	855.6	2486.9	2871.6	3553.2	1631.3	255.4	220.3	233.0
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°	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1	7408.1
2.5°	7417.7	7408.1	7392.2	7352.2	7286.8	7278.8	7272.4	7266.0	7253.3	7259.7	7296.4
5°	7433.7	7416.1	7358.6	7301.2	7243.7	7192.6	7130.4	7106.4	7074.5	7053.8	7092.1
7.5°	7487.9	7451.2	7366.6	7288.4	7132.0	7056.9	6977.1	6883.0	6815.9	6772.8	6811.1
10°	7578.9	7532.6	7427.3	7266.0	7082.5	6876.6	6736.1	6579.7	6452.0	6416.9	6452.0
12.5°	7727.4	7658.7	7535.8	7317.1	6991.5	6721.7	6455.2	6249.2	6043.3	5984.3	6001.8
15°	7968.4	7914.1	7725.8	7424.1	6993.1	6581.3	6185.4	5853.4	5583.6	5489.4	5483.1
17.5°	8354.7	8297.2	8080.1	7636.4	7050.6	6471.1	5920.4	5414.4	5005.8	4798.3	4764.8
20°	8908.6	8828.8	8499.9	7949.2	7175.1	6423.2	5674.6	4994.6	4359.3	3969.8	3910.8
22.5°	9524.7	9440.1	8954.9	8190.3	7264.5	6329.1	5440.0	4530.1	3693.7	3218.0	3151.0
25°	10290.9	10105.7	9390.6	8418.5	7243.7	6131.1	5058.5	3899.6	2992.9	2581.1	2536.4
27.5°	11047.5	10812.9	9834.4	8538.2	7152.7	5816.7	4499.8	3162.1	2343.3	2051.2	2014.4
30°	11986.1	11532.8	10228.7	8594.1	6922.9	5345.8	3751.1	2403.9	1754.3	1553.1	1518.0
32.5°	13101.9	12415.5	10599.0	8531.9	6539.8	4627.5	2916.3	1760.6	1304.1	1178.0	1176.4
35°	14573.6	13497.7	11006.0	8327.5	5952.3	3853.3	2044.8	1203.6	1016.8	973.7	981.7
37.5°	16294.3	14963.1	11419.4	7992.3	5288.3	2948.2	1363.2	927.4	893.9	895.5	897.1
40°	18109.3	16581.7	11976.5	7521.4	4482.2	2134.2	981.7	833.2	831.6	847.6	852.4
42.5°	19842.8	18153.9	12662.9	6894.1	3637.8	1411.1	850.8	794.9	774.2	780.6	785.3
45°	21453.4	19502.8	13247.1	6282.8	2732.7	1007.2	834.8	750.2	718.3	715.1	718.3
47.5°	22751.1	20583.4	13603.1	5564.5	1947.4	836.4	801.3	708.7	664.0	654.5	649.7
50°	23739.2	21386.3	13732.4	4750.4	1316.9	798.1	756.6	660.8	606.6	608.2	608.2
52.5°	24703.3	22115.8	13582.3	3929.9	968.9	764.6	726.3	622.5	565.1	595.4	603.4
55°	25397.7	22422.3	13145.0	3042.4	807.7	723.1	692.8	577.8	537.9	587.4	603.4
57.5°	25803.1	22663.3	12342.1	2196.4	740.7	683.2	649.7	536.3	499.6	512.4	520.4
60°	26055.3	22326.5	11280.6	1502.1	705.5	651.3	606.6	509.2	459.7	429.4	424.6
62.5°	25916.4	21483.7	9882.3	1032.8	668.8	616.1	569.9	483.7	418.2	378.3	375.1
65°	24784.7	19924.2	7586.9	836.4	646.5	600.2	547.5	459.7	389.5	351.2	346.4
67.5°	22685.7	17121.2	4431.1	743.8	636.9	584.2	529.9	437.4	373.5	332.0	325.6
70°	19236.2	12878.4	1484.5	664.0	635.3	582.6	515.6	421.4	356.0	312.9	306.5
72.5°	13877.6	7770.5	723.1	584.2	593.8	558.7	504.4	408.6	344.8	290.5	279.3
75°	7887.0	2530.0	652.9	504.4	552.3	533.1	498.0	410.2	349.6	263.4	250.6
77.5°	2244.3	739.1	630.5	429.4	522.0	550.7	466.1	370.3	357.6	244.2	228.3
80°	758.2	657.6	608.2	333.6	421.4	454.9	403.8	325.6	360.7	221.9	205.9
82.5°	608.2	660.8	510.8	266.6	320.8	344.8	320.8	292.1	292.1	197.9	185.2
85°	486.9	613.0	324.0	212.3	239.4	265.0	226.7	218.7	204.3	166.0	161.2
87.5°	282.5	191.5	134.1	108.5	100.6	102.2	87.8	105.4	129.3	113.3	111.7
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)