

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: P510546

Luminaire Tested: **CST-CA10-630-740-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510546
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-CA10-630-740-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 83979 lumens
Efficiency: N/A
Efficacy: 133.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

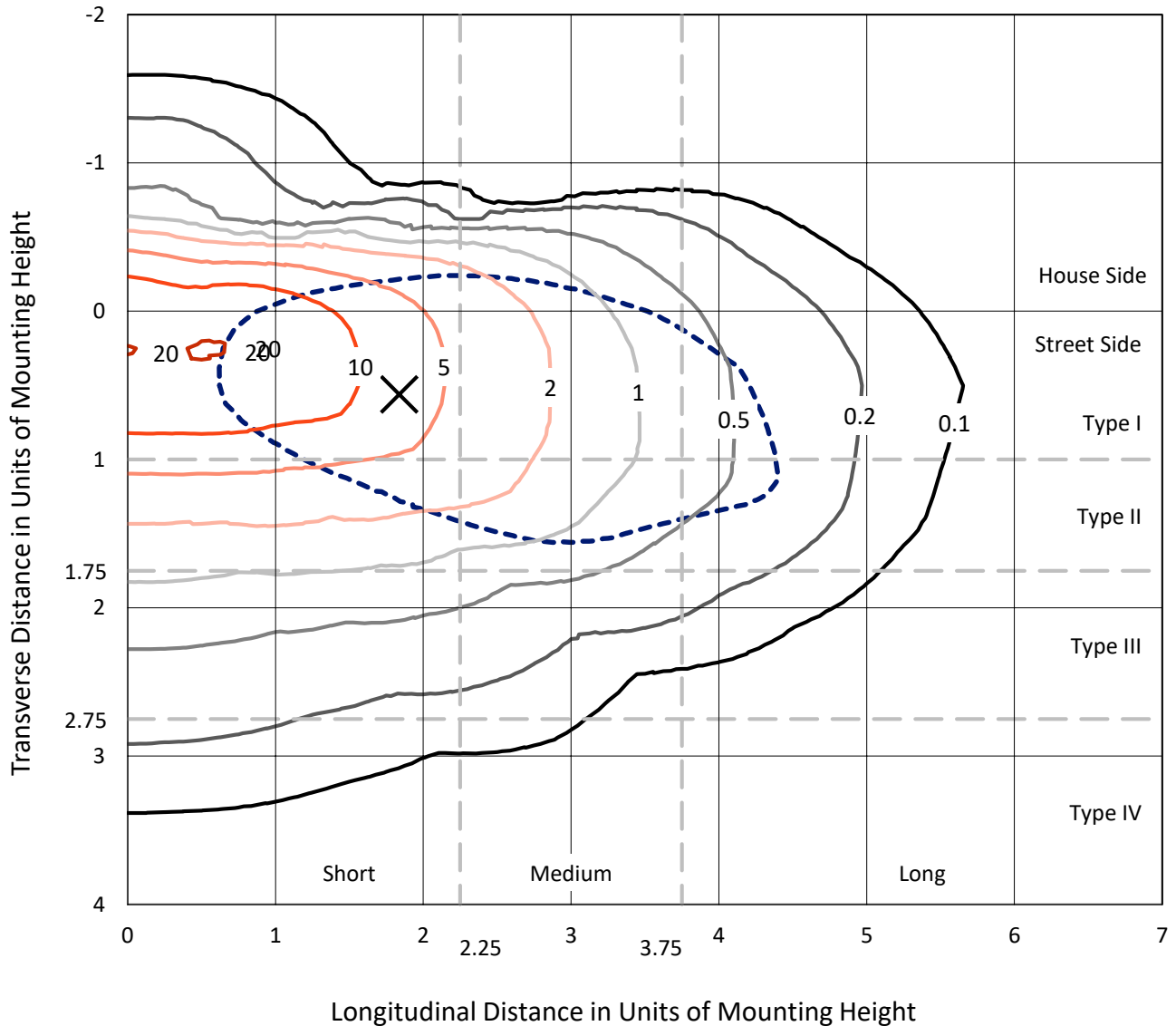
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

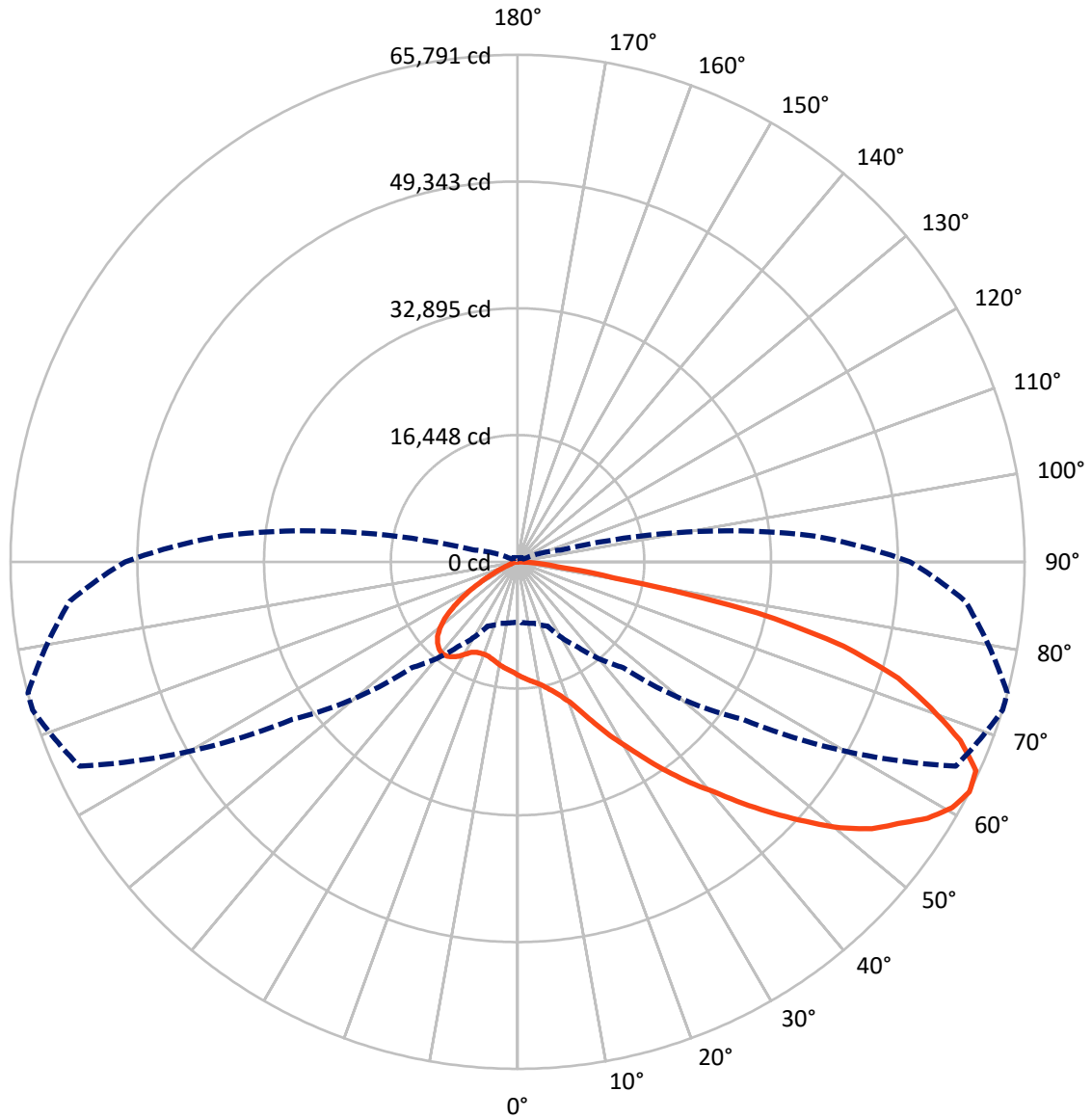
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 20.4 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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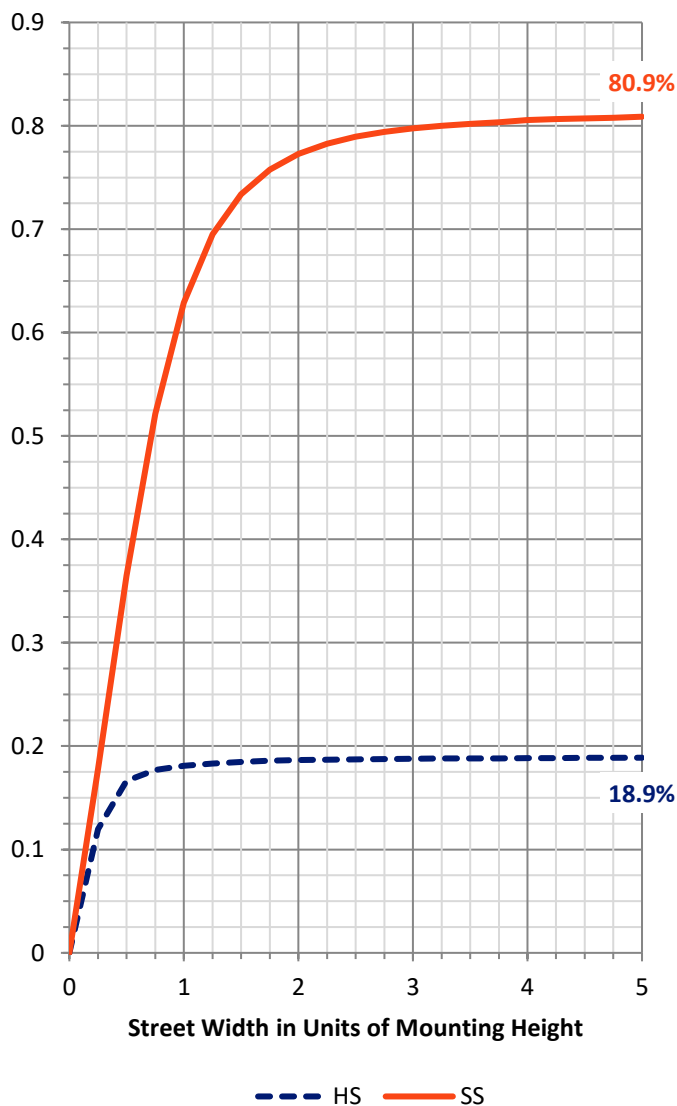
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16064.8	0.0	16064.8
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	67914.2	0.0	67914.2
	% Fixture	80.9	0.0	80.9
Total	Lumens	83979.0	0.0	83979.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1406.7	1.7
10°-20°	4231.1	5.0
20°-30°	7310.4	8.7
30°-40°	10993.1	13.1
40°-50°	14658.2	17.5
50°-60°	17263.0	20.6
60°-70°	17162.4	20.4
70°-80°	9853.4	11.7
80°-90°	1100.7	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°	83979.0	100.0
0°-180°	83979.0	100.0

Coefficient of Utilization

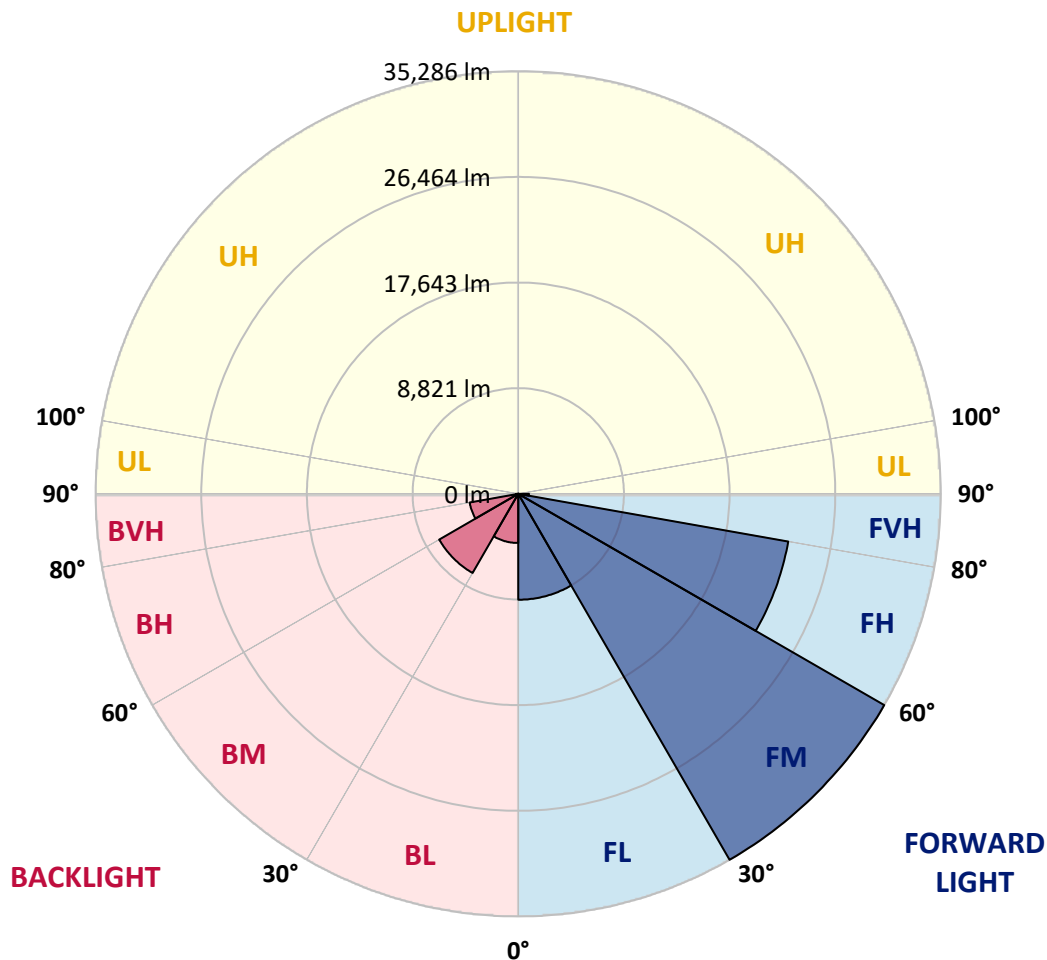


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	8842.9	10.5			
FM (30°-60°)	35286.0	42.0			
FH (60°-80°)	22891.4	27.3			G5
FVH (80°-90°)	894.0	1.1			G5
BL (0°-30°)	4105.3	4.9	B4/5000		
BM (30°-60°)	7628.3	9.1	B4/8500		
BH (60°-80°)	4124.4	4.9	B4/5000		G4/5000
BVH (80°-90°)	206.7	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0
2.5°	15757.2	15796.8	15749.7	15729.0	15706.4	15559.3	15387.8	15212.5	15071.1	15048.5	14863.7
5°	16863.8	16884.5	16807.2	16718.6	16565.9	16322.8	16015.5	15712.0	15429.2	15353.8	15016.4
7.5°	17713.9	17674.4	17655.5	17580.1	17446.3	17178.6	16713.0	16215.3	15778.0	15672.4	15159.7
10°	18511.3	18494.4	18351.1	18256.8	18043.8	17796.9	17414.2	16782.7	16166.3	15996.7	15284.1
12.5°	19374.7	19337.0	19278.5	19075.0	18901.5	18484.9	18023.1	17448.2	16762.0	16535.8	15497.1
15°	20151.3	20049.5	20017.5	19804.5	19629.2	19310.6	18846.9	18179.6	17446.3	17252.1	15902.4
17.5°	20890.3	20843.2	20771.5	20626.4	20430.3	20185.3	19813.9	19099.5	18341.7	18058.9	16590.4
20°	21518.0	21459.6	21397.4	21436.9	21393.6	21237.1	21003.4	20394.5	19468.9	19195.6	17427.4
22.5°	21955.3	21953.5	22202.3	22347.4	22430.4	22424.7	22368.2	22023.2	21092.0	20814.9	18679.1
25°	22319.2	22347.4	22662.2	23214.6	23708.4	23753.7	24153.3	23989.3	23197.6	22909.2	20562.3
27.5°	22426.6	22483.2	23054.3	23923.3	24673.6	25393.7	25980.0	26279.7	25546.4	25201.4	22586.8
30°	22503.9	22526.5	23086.4	24126.9	25708.5	26849.0	27897.1	28404.1	27772.6	27520.0	24843.3
32.5°	21959.1	21966.6	22824.4	24400.3	26468.2	28445.6	29686.0	30641.7	30475.8	30142.2	27310.8
35°	21208.9	21348.3	22332.4	24136.4	27094.0	29912.2	31601.2	33026.3	33358.1	33118.7	29776.5
37.5°	20281.4	20390.7	21444.5	23744.3	27231.6	30920.7	33090.4	35450.5	36317.6	36278.1	32753.0
40°	19140.9	19274.8	20535.9	22899.8	27163.8	31654.0	34837.9	38134.8	39235.7	39111.3	35705.0
42.5°	17793.1	17989.2	19212.6	21814.0	26668.0	32102.6	36268.6	40868.2	42849.4	42768.3	38317.7
45°	16460.4	16565.9	17681.9	20302.1	25755.6	32247.8	37614.6	44634.5	46555.4	46464.9	41465.8
47.5°	15086.2	15178.5	16343.5	18709.3	24172.2	31955.6	38679.6	47869.3	50331.2	50240.7	44593.1
50°	11889.1	12237.8	14626.2	17308.7	22368.2	31128.1	39684.4	51899.6	54282.3	53897.7	47332.1
52.5°	10171.8	10298.1	11536.6	15896.7	20567.9	29716.1	40355.4	55633.9	57532.2	56977.9	50133.3
55°	9508.3	9593.1	10200.1	13293.5	18877.0	27580.4	41145.3	59377.6	59969.5	59828.2	52418.0
57.5°	9005.0	9099.2	9532.8	11103.0	17095.6	24586.9	40898.3	62011.1	62751.9	62299.5	54844.0
60°	8292.4	8407.4	8982.3	9968.2	15071.1	21548.2	38724.9	63089.3	64774.6	64265.6	56689.5
62.5°	7843.8	7919.2	8249.0	9204.8	13393.4	19410.5	35631.5	62742.5	65790.6	65771.8	58289.9
65°	7234.9	7346.1	7698.6	8473.4	11900.4	17753.5	32713.4	61028.9	65353.3	65370.2	58619.8
67.5°	6597.7	6643.0	7012.4	7634.5	10141.6	16236.1	28937.6	58097.7	61947.0	62335.3	56337.0
70°	5802.2	5779.6	6179.2	6633.5	8288.6	13785.5	23291.8	52883.6	56913.8	57074.1	51720.5
72.5°	4565.6	4586.4	4697.6	5012.4	6292.3	10848.5	16901.5	44679.8	51652.6	51937.3	45820.2
75°	3068.9	3102.8	3621.2	3928.5	4526.0	7796.6	10628.0	30159.1	43665.6	44468.7	37501.5
77.5°	2341.2	2362.0	2512.8	2848.3	3274.4	5557.2	5760.8	16434.0	31789.7	33695.5	29337.2
80°	1658.9	1666.4	1517.5	1349.7	1743.7	3770.1	3402.5	6999.2	12667.6	14969.3	17231.4
82.5°	742.7	731.4	861.5	716.3	1004.7	1459.0	1606.1	3396.9	5261.2	5655.2	6156.6
85°	345.0	386.4	443.0	371.4	597.6	563.6	625.8	1447.7	2465.7	2722.0	2707.0
87.5°	84.8	92.4	116.9	148.9	216.8	192.3	188.5	426.0	550.4	548.6	842.6
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°	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0	14728.0
2.5°	14737.4	14639.4	14407.5	14183.2	13970.2	13828.8	13670.5	13504.6	13404.7	13357.6	13459.4
5°	14810.9	14624.3	14181.3	13736.5	13359.4	13037.1	12810.9	12618.6	12514.9	12524.4	12530.0
7.5°	14873.2	14611.1	13990.9	13363.2	12775.1	12375.4	12079.5	11872.1	11753.4	11662.9	11730.8
10°	14927.8	14556.5	13768.5	12931.5	12292.5	11700.6	11299.1	11048.4	10829.7	10707.2	10803.3
12.5°	14986.3	14535.7	13519.7	12545.1	11717.6	11055.9	10505.5	10256.6	10041.7	9949.4	10007.8
15°	15240.7	14614.9	13287.8	12090.8	11150.2	10294.3	9700.5	9395.2	9225.5	9114.3	9138.8
17.5°	15678.1	14824.1	13138.9	11615.8	10516.8	9611.9	8842.8	8486.6	8205.7	8126.5	8105.8
20°	16300.1	15221.9	13138.9	11214.2	9798.6	8854.1	7968.2	7366.8	6929.5	6765.5	6891.8
22.5°	17344.5	15898.6	13269.0	10850.4	9180.3	8068.1	7012.4	6094.4	5504.4	5265.0	5404.5
25°	18805.4	16944.8	13480.1	10531.9	8616.6	7163.2	5800.3	4744.7	4094.4	3809.7	3805.9
27.5°	20713.1	18545.3	13906.1	10271.7	7941.8	5992.6	4535.5	3519.4	2908.7	2737.1	2761.6
30°	22828.1	20279.5	14711.0	9894.7	7121.8	4682.5	3302.6	2586.3	2156.5	1930.3	1934.1
32.5°	24867.8	22076.0	15666.8	9649.6	6056.7	3530.7	2354.4	1845.5	1577.8	1444.0	1464.7
35°	27054.4	23625.5	16377.4	9238.7	4806.9	2552.4	1664.5	1383.6	1272.4	1202.7	1206.4
37.5°	29416.4	25329.6	16961.8	8688.3	3634.4	1753.1	1229.1	1185.7	1138.6	1050.0	1042.4
40°	31884.0	27303.3	17310.5	7798.5	2526.0	1214.0	1044.3	1093.3	1066.9	952.0	942.5
42.5°	33976.4	28826.4	17397.3	6620.3	1634.4	984.0	946.3	1021.7	1027.4	910.5	895.4
45°	35985.9	30183.6	17227.6	5068.9	1132.9	925.6	886.0	989.7	997.2	891.6	867.1
47.5°	38234.8	32040.4	16920.3	3381.8	936.9	874.7	865.2	936.9	963.3	876.6	846.4
50°	40966.2	33550.4	16009.8	2077.3	884.1	842.6	842.6	886.0	921.8	846.4	831.3
52.5°	43767.4	34866.1	14662.0	1425.1	852.0	808.7	833.2	852.0	865.2	797.4	810.6
55°	45775.0	36033.0	12652.5	1146.1	833.2	786.1	844.5	806.8	788.0	729.5	716.3
57.5°	48003.2	37420.4	10597.8	1016.0	808.7	799.3	806.8	735.2	682.4	622.1	608.9
60°	49558.3	38166.9	8083.2	955.7	780.4	786.1	744.6	648.5	552.3	509.0	499.5
62.5°	50915.6	38592.9	5924.8	878.4	754.0	752.1	674.9	554.2	454.3	407.2	399.6
65°	50710.1	37927.5	3839.9	816.2	733.3	708.8	605.1	475.0	378.9	343.1	339.3
67.5°	48449.9	34983.0	2418.5	752.1	697.5	654.1	542.9	424.1	348.7	307.3	303.5
70°	43705.2	30916.9	1479.8	669.2	620.2	578.7	480.7	397.7	329.9	280.9	271.4
72.5°	37147.1	26479.5	1046.2	590.0	541.0	492.0	407.2	378.9	314.8	252.6	245.1
75°	30519.2	19504.8	876.6	514.6	461.8	395.9	346.9	352.5	296.0	230.0	224.3
77.5°	21491.6	12160.5	816.2	420.4	363.8	314.8	299.7	322.3	271.4	211.1	205.5
80°	12543.2	6829.6	674.9	331.8	273.3	243.2	250.7	273.3	237.5	190.4	182.9
82.5°	5063.3	2703.2	475.0	258.3	199.8	194.2	205.5	222.4	196.0	160.2	156.5
85°	1807.8	844.5	269.6	169.7	128.2	133.8	132.0	158.3	141.4	116.9	115.0
87.5°	475.0	167.8	120.6	67.9	54.7	54.7	50.9	73.5	67.9	52.8	58.4
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)