

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: P510561

Luminaire Tested: **CST-CA10-630-750-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510561
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-630-750-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 92711 lumens
Efficiency: N/A
Efficacy: 146.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U0 - G5

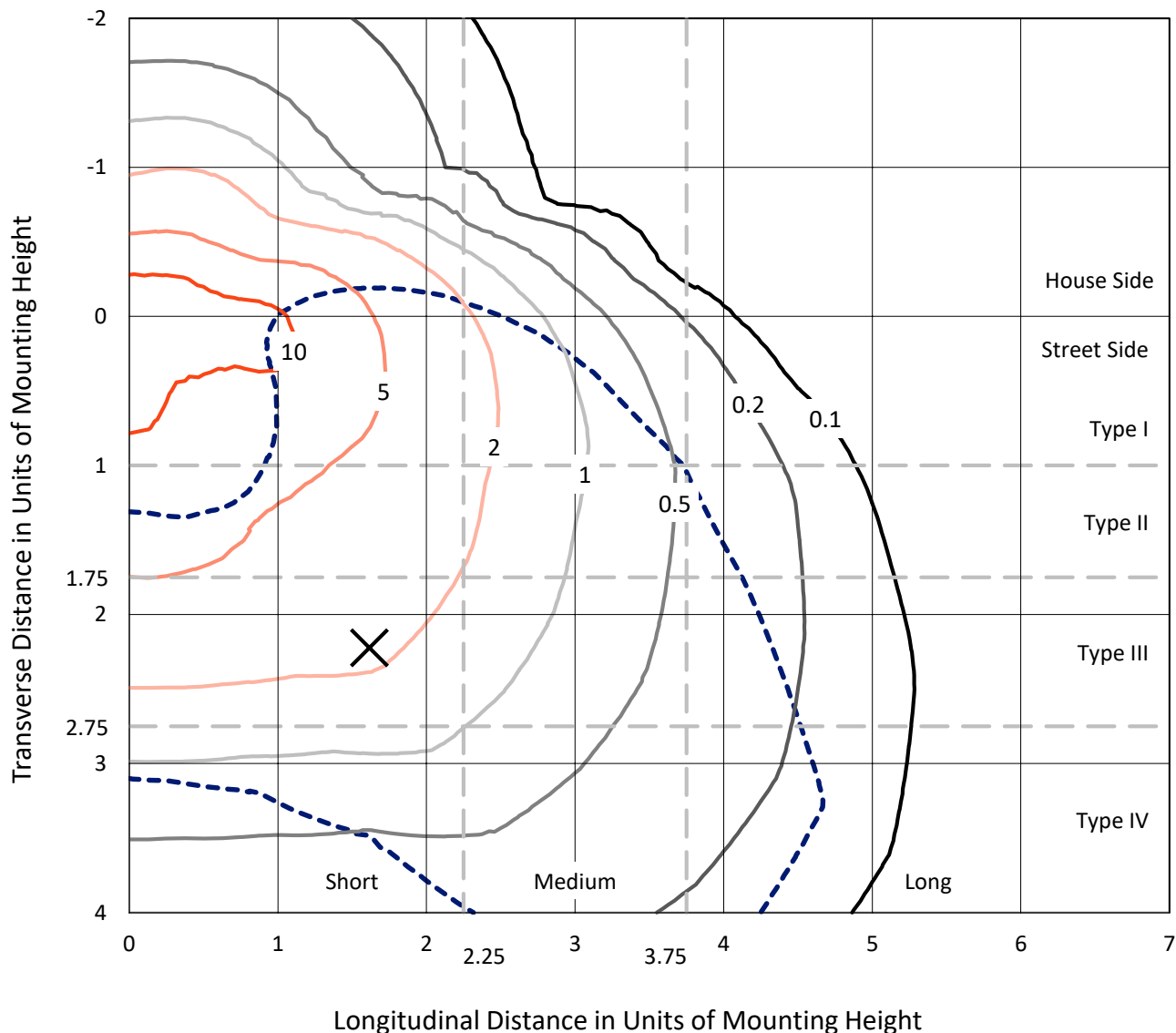
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

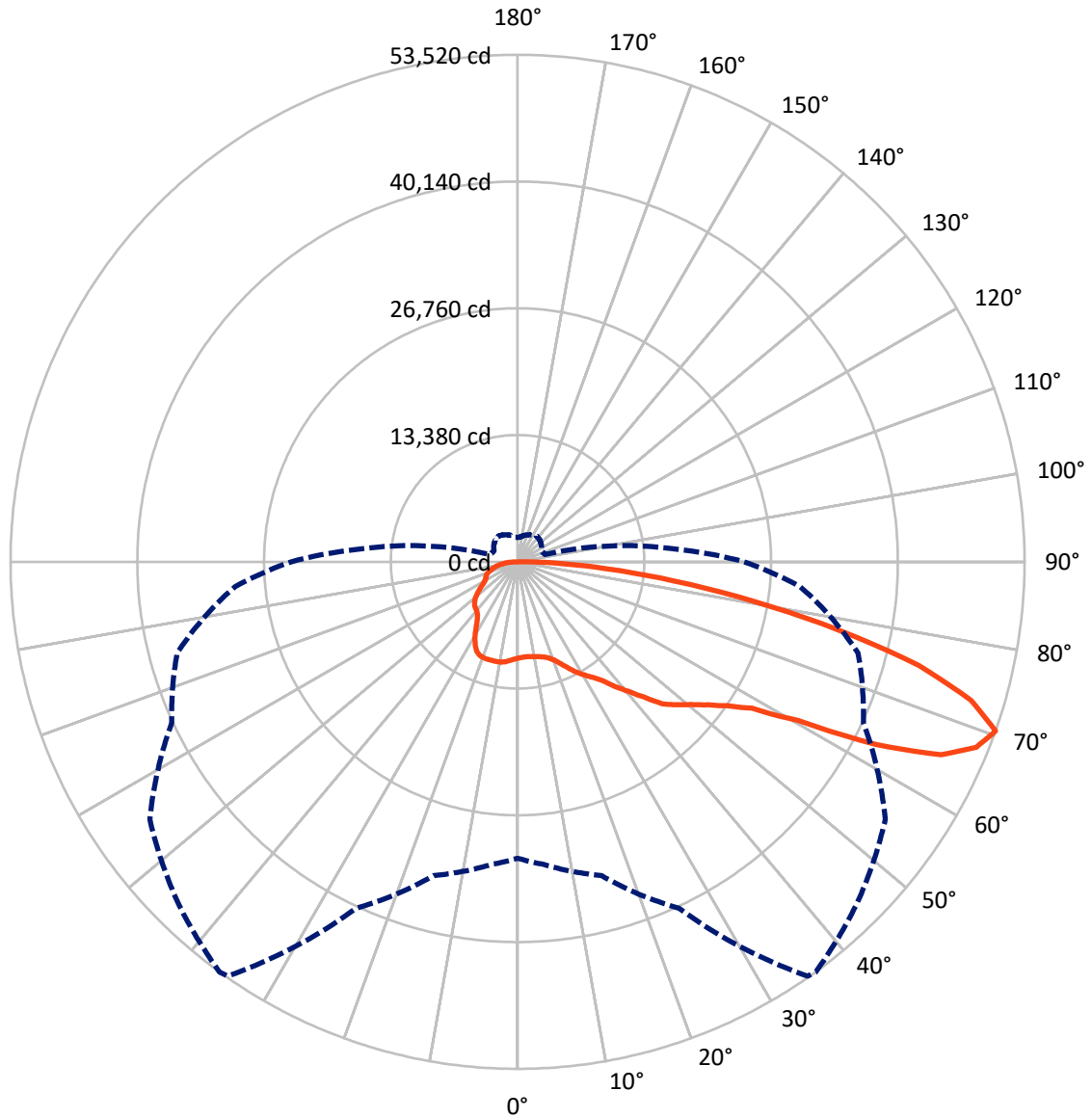
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.8 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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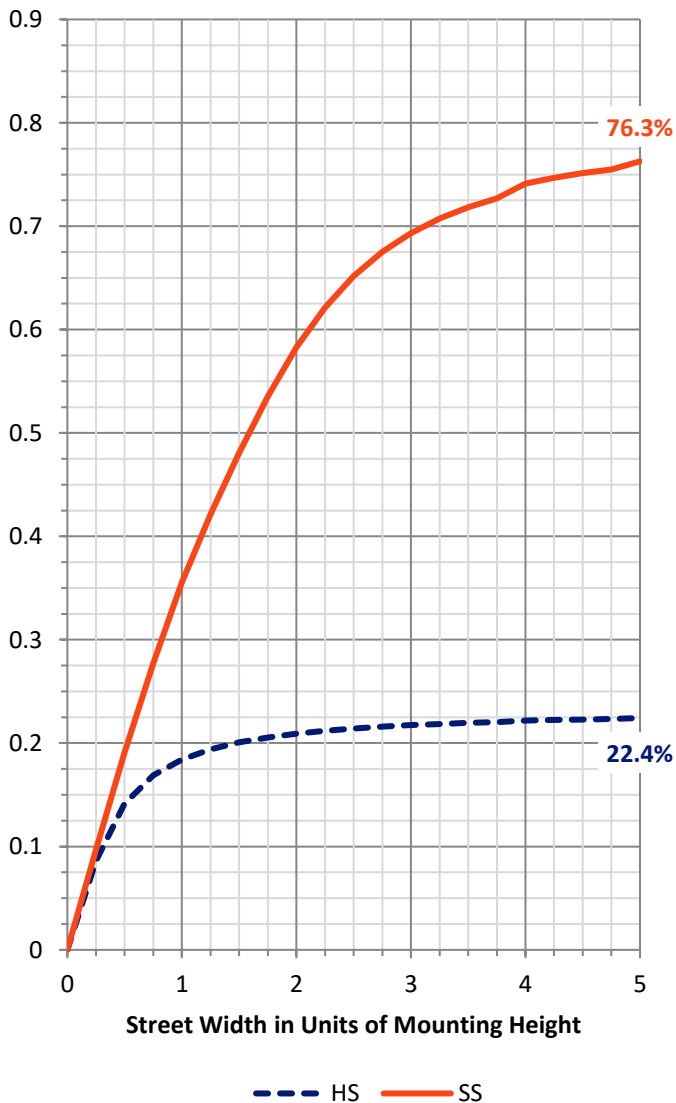
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21123.6	0.0	21123.6
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	71587.4	0.0	71587.4
	% Fixture	77.2	0.0	77.2
Total	Lumens	92711.0	0.0	92711.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	983.8	1.1
10°-20°	3041.4	3.3
20°-30°	5486.1	5.9
30°-40°	8496.9	9.2
40°-50°	12906.8	13.9
50°-60°	17889.6	19.3
60°-70°	23262.6	25.1
70°-80°	17179.2	18.5
80°-90°	3464.6	3.7
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°	92711.0	100.0
0°-180°	92711.0	100.0

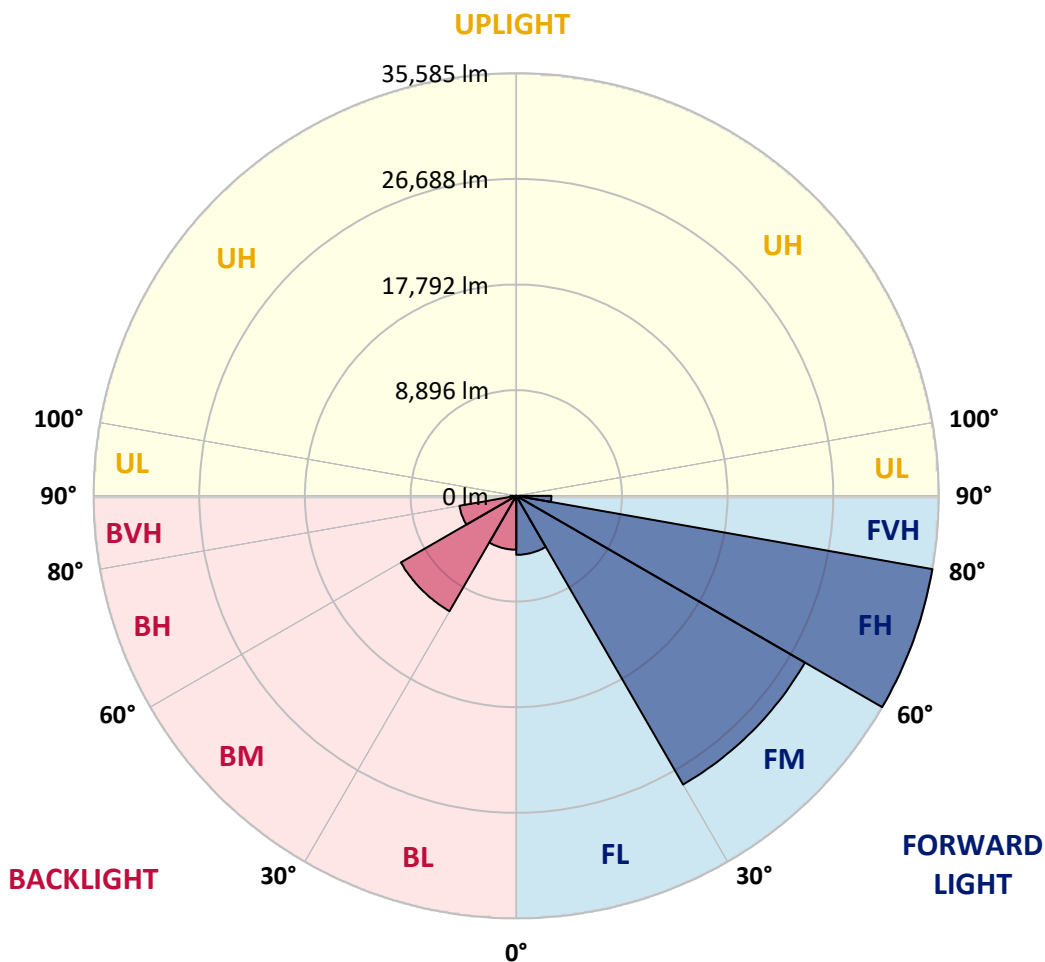


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4970.2	5.4			
FM (30°-60°)	28072.6	30.3			
FH (60°-80°)	35584.5	38.4			G5
FVH (80°-90°)	2959.9	3.2			G5
BL (0°-30°)	4541.0	4.9	B4/5000		
BM (30°-60°)	11220.6	12.1	B5		
BH (60°-80°)	4857.3	5.2	B4/5000		G4/5000
BVH (80°-90°)	504.7	0.5			G4/750
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6
2.5°	10093.2	10079.8	10072.1	10087.4	10093.2	10095.1	10099.0	10095.1	10085.5	10120.1	10162.3
5°	10095.1	10087.4	10072.1	10058.6	10058.6	10058.6	10060.6	10104.7	10123.9	10120.1	10171.9
7.5°	10110.5	10104.7	10075.9	10066.3	10089.4	10097.0	10135.4	10122.0	10143.1	10177.7	10221.8
10°	10112.4	10104.7	10079.8	10100.9	10166.1	10177.7	10194.9	10233.3	10241.0	10283.2	10327.4
12.5°	10131.6	10131.6	10141.2	10187.3	10256.4	10269.8	10335.1	10365.8	10411.8	10433.0	10486.7
15°	10233.3	10231.4	10254.4	10306.3	10417.6	10425.3	10505.9	10598.0	10632.6	10684.4	10770.8
17.5°	10475.2	10486.7	10488.6	10527.0	10659.5	10663.3	10795.8	10882.1	10960.8	11053.0	11250.7
20°	11049.1	11028.0	11005.0	11005.0	11056.8	11083.7	11185.4	11323.6	11484.9	11648.1	11880.3
22.5°	11770.9	11813.1	11728.7	11684.5	11709.5	11678.8	11755.6	11866.9	12055.0	12298.8	12592.5
25°	12632.8	12636.6	12630.9	12452.4	12396.7	12415.9	12479.2	12582.9	12832.4	13026.3	13452.5
27.5°	13473.6	13456.3	13394.9	13206.8	13153.0	13179.9	13178.0	13464.0	13719.3	13966.9	14467.9
30°	14237.6	14283.7	14174.2	13857.5	13863.3	13859.4	13947.7	14316.3	14782.7	15243.4	15757.9
32.5°	15585.1	15445.0	15297.2	14671.4	14556.2	14542.8	14594.6	15143.6	15834.7	16612.1	17230.2
35°	16854.0	16819.4	16673.5	16038.2	15372.1	15360.5	15289.5	15957.5	16928.8	18368.5	19140.2
37.5°	18151.6	18101.7	17957.7	17416.4	16754.2	16690.8	16093.8	16825.2	18138.2	20422.5	21522.4
40°	19698.8	19668.1	19445.4	18752.5	18072.9	17976.9	17356.9	17737.0	19664.3	23157.9	23933.4
42.5°	21056.0	21050.2	20794.9	20151.8	19574.0	19478.1	18950.2	19345.6	21785.4	25837.6	26294.5
45°	22052.2	22203.9	22215.4	21848.7	21449.5	21365.0	21224.9	21770.0	24238.6	28269.8	28202.6
47.5°	22893.0	23023.5	22887.2	22699.1	22562.8	22568.6	22785.5	23868.2	26661.2	30389.0	29866.9
50°	24298.1	24217.5	23509.2	23397.9	23570.6	23672.4	24302.0	26133.3	29435.0	32377.7	31360.3
52.5°	26325.2	26016.2	24626.4	24399.9	25054.5	25092.8	26094.9	28158.4	32206.8	34084.2	32727.0
55°	29099.0	28843.7	27273.5	26227.3	26557.5	26816.6	28227.5	30233.5	34470.0	35689.0	33779.0
57.5°	33199.3	33218.5	31938.1	29987.8	28864.8	29141.3	30243.1	32251.0	36339.7	37032.7	34435.5
60°	36485.6	37094.1	36712.1	35821.4	34209.0	34020.9	33182.0	34352.9	37936.8	38174.8	35063.2
62.5°	38764.2	39040.6	40353.6	40541.7	42384.5	42463.2	38445.5	36815.8	39691.3	38923.5	35195.6
65°	38649.0	38819.8	40894.9	43421.1	48865.0	49108.8	46757.3	40541.7	40893.0	39257.5	34809.8
67.5°	35957.7	36214.9	38852.5	43574.6	52318.4	52226.2	50734.7	45728.4	41288.4	38721.9	32970.8
70°	31283.5	32076.3	34291.5	40336.3	53397.2	53520.0	50771.2	47385.0	40269.1	37207.4	29905.3
72.5°	25783.9	26033.4	28125.8	34890.4	50243.3	50062.8	48690.3	45198.6	38426.3	34468.1	24540.0
75°	19608.6	19608.6	22142.4	27805.2	43146.6	43780.0	44313.7	40937.1	34042.0	28093.2	16710.0
77.5°	13016.7	13483.2	15523.7	20894.7	34153.3	34621.7	36464.5	34894.3	27872.4	20601.0	7632.3
80°	6904.8	6962.3	9150.7	13884.4	24428.7	25311.7	27845.5	26912.6	20048.2	9651.7	1929.2
82.5°	2414.8	2635.6	4023.5	8046.9	16095.7	16646.7	18472.2	15992.1	7081.4	2136.5	1067.3
85°	1199.7	1242.0	1771.8	3831.5	9062.4	9329.2	10791.9	6229.1	1140.2	932.9	725.6
87.5°	577.8	591.2	679.5	1370.6	3939.0	4121.4	4363.2	2027.1	422.3	355.1	314.8
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°	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6	10154.6
2.5°	10171.9	10189.2	10221.8	10231.4	10208.4	10250.6	10290.9	10327.4	10325.5	10338.9	10386.9
5°	10194.9	10231.4	10266.0	10327.4	10386.9	10421.4	10454.1	10484.8	10494.4	10523.2	10552.0
7.5°	10266.0	10302.4	10381.1	10488.6	10492.5	10578.8	10634.5	10644.1	10651.8	10651.8	10719.0
10°	10375.4	10442.6	10569.2	10644.1	10711.3	10682.5	10740.1	10703.6	10676.7	10688.3	10734.3
12.5°	10563.5	10623.0	10805.4	10887.9	10826.5	10815.0	10757.4	10674.8	10580.8	10571.2	10613.4
15°	10859.1	10970.4	11133.6	11212.3	11058.7	10922.5	10728.6	10559.7	10377.3	10310.1	10337.0
17.5°	11335.2	11469.5	11648.1	11594.3	11314.0	11045.3	10724.7	10367.7	10014.5	9768.8	9832.1
20°	12032.0	12131.8	12277.7	12060.8	11651.9	11208.5	10682.5	10118.1	9521.2	9073.9	9022.1
22.5°	12763.3	12915.0	12826.7	12425.5	11889.9	11271.8	10594.2	9755.3	8832.0	8271.5	8187.0
25°	13644.4	13694.3	13389.1	12784.5	11957.1	11172.0	10308.2	9225.5	8127.5	7599.6	7574.7
27.5°	14579.3	14466.0	13897.8	12949.5	11882.2	10876.4	9734.2	8388.6	7490.2	7023.8	6950.8
30°	15635.0	15372.1	14318.2	12966.8	11600.1	10300.5	9008.6	7734.0	6971.9	6503.6	6428.7
32.5°	16994.1	16374.1	14707.9	12788.3	11005.0	9455.9	8137.1	7175.4	6505.5	6035.2	5968.0
35°	18731.3	17685.2	15120.6	12465.8	10271.7	8611.3	7415.4	6701.3	6127.3	5561.0	5470.8
37.5°	20733.5	19514.5	15613.9	12058.8	9467.4	7868.4	6927.8	6399.9	5847.1	5205.9	5098.4
40°	23060.0	21345.8	16374.1	11573.2	8745.6	7332.8	6691.7	6296.2	5691.6	5023.6	4900.7
42.5°	25075.6	23282.7	17278.2	11051.1	8064.2	6887.5	6586.1	6227.1	5593.7	4887.3	4747.1
45°	26939.5	24881.7	18161.2	10417.6	7346.3	6582.3	6459.4	6054.4	5420.9	4718.3	4572.5
47.5°	28454.0	26173.6	18929.1	9836.0	6772.3	6302.0	6183.0	5726.1	5131.1	4514.9	4407.4
50°	29617.3	27144.9	19349.4	9373.3	6165.7	5983.4	5825.9	5355.6	4783.6	4251.9	4159.7
52.5°	30807.5	28118.1	19556.8	9396.4	5601.4	5509.2	5348.0	4944.9	4507.2	4098.3	3998.5
55°	31500.4	28517.4	19337.9	8837.8	5083.1	4975.6	4835.4	4626.2	4365.1	4002.3	3908.3
57.5°	31905.5	28765.0	18671.8	7208.1	4459.2	4357.5	4380.5	4363.2	4148.2	3766.2	3679.8
60°	32197.2	28227.5	17307.0	5298.1	3927.5	3850.7	4040.7	3979.3	3793.1	3495.6	3422.6
62.5°	31961.1	27204.4	14849.9	3983.1	3493.6	3656.8	3823.8	3710.6	3457.2	3186.5	3102.1
65°	30521.4	25196.5	11287.2	3200.0	3353.5	3578.1	3712.5	3530.1	3272.9	2952.3	2913.9
67.5°	27901.2	21557.0	6657.1	2933.1	3247.9	3486.0	3597.3	3355.4	3128.9	2821.8	2775.7
70°	23902.7	16138.0	2973.4	2731.6	3063.7	3299.8	3372.7	3144.3	2898.6	2610.6	2564.6
72.5°	17790.7	9730.4	2004.0	2522.3	2791.1	3000.3	3080.9	2839.1	2664.4	2533.9	2520.4
75°	9880.1	3378.5	1848.6	2284.3	2493.5	2681.7	2781.5	2610.6	2472.4	2293.9	2221.0
77.5°	3146.2	1435.9	1756.4	2042.4	2307.3	2462.8	2447.5	2190.2	2146.1	1929.2	1910.0
80°	1255.4	1251.6	1624.0	1672.0	1969.5	2100.0	2065.5	1741.1	1798.7	1672.0	1622.1
82.5°	984.7	1146.0	1301.5	1276.5	1531.8	1685.4	1637.4	1278.4	1445.4	1328.4	1215.1
85°	748.6	1003.9	835.0	831.2	1069.2	1251.6	1282.3	982.8	984.7	896.4	798.5
87.5°	385.8	370.5	320.6	318.7	357.0	508.7	623.9	558.6	441.5	332.1	318.7
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)