

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: P510836

Luminaire Tested: **CST-CA8-480-730-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510836
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-CA8-480-730-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 63510 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

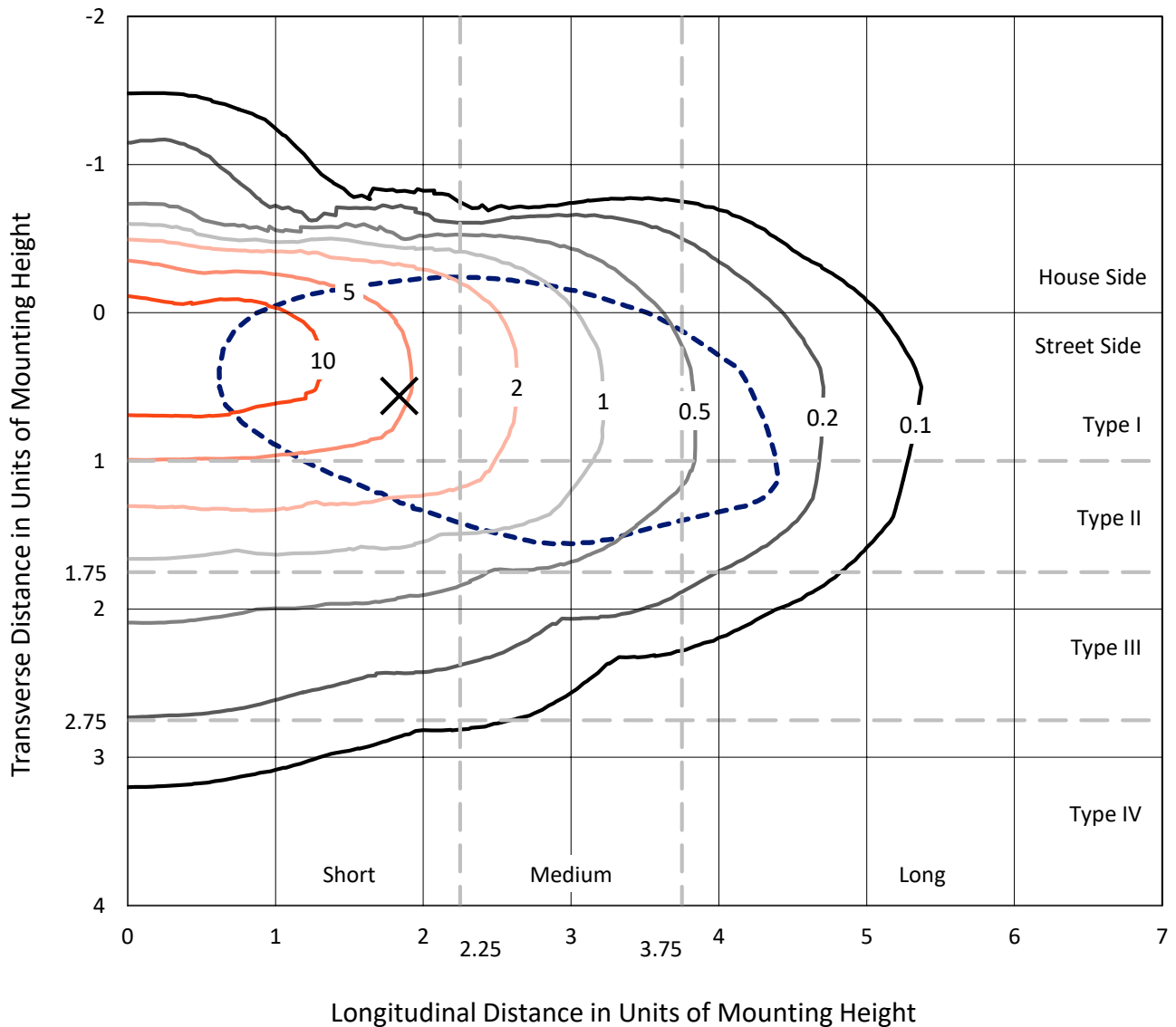
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510836
 CATALOG NUMBER: CST-CA8-480-730-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

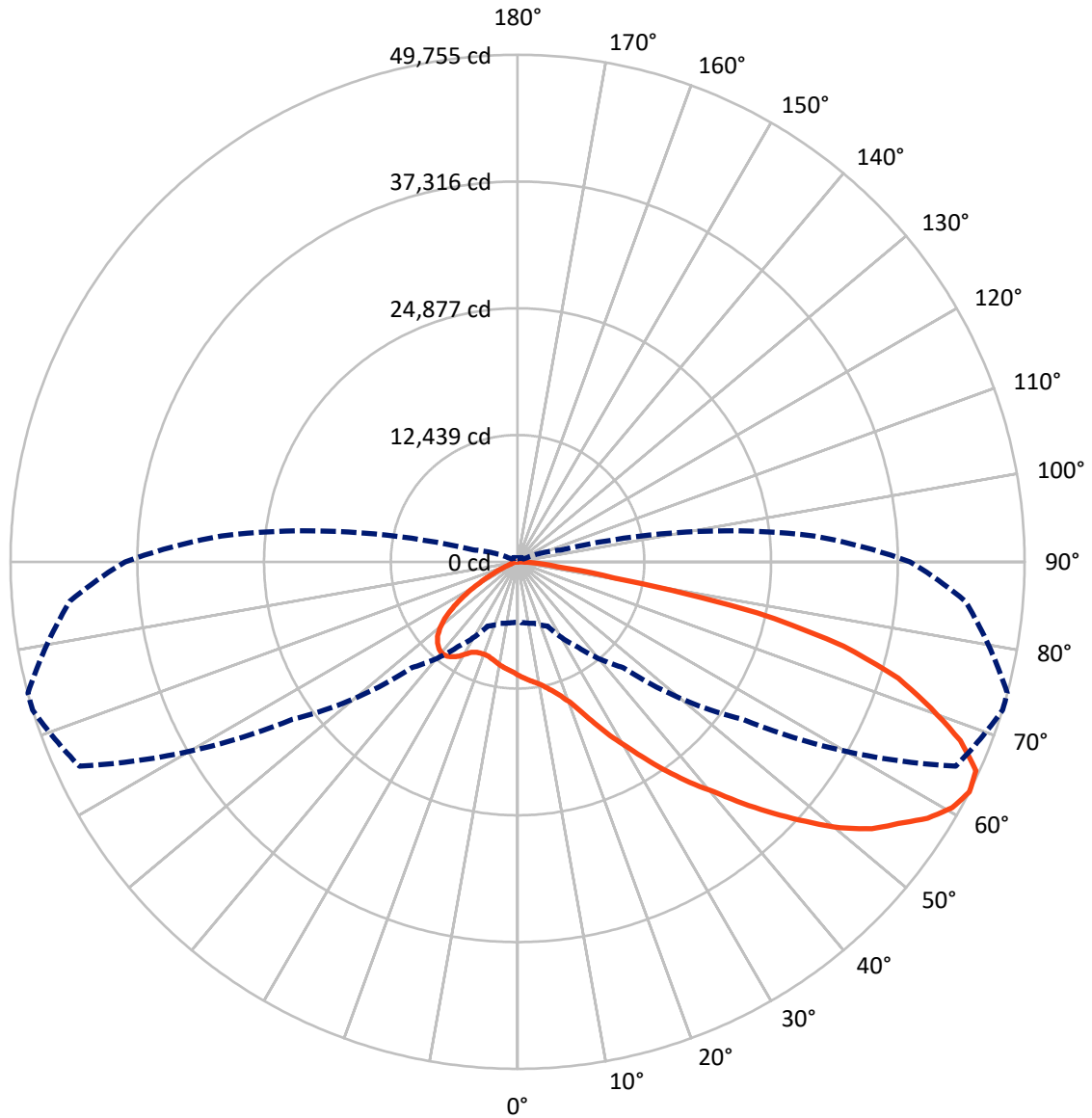
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15.5 fc
 Type II - Short - N/A

REPORT NUMBER: P510836
CATALOG NUMBER: CST-CA8-480-730-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510836
 CATALOG NUMBER: CST-CA8-480-730-U-T2-HSS

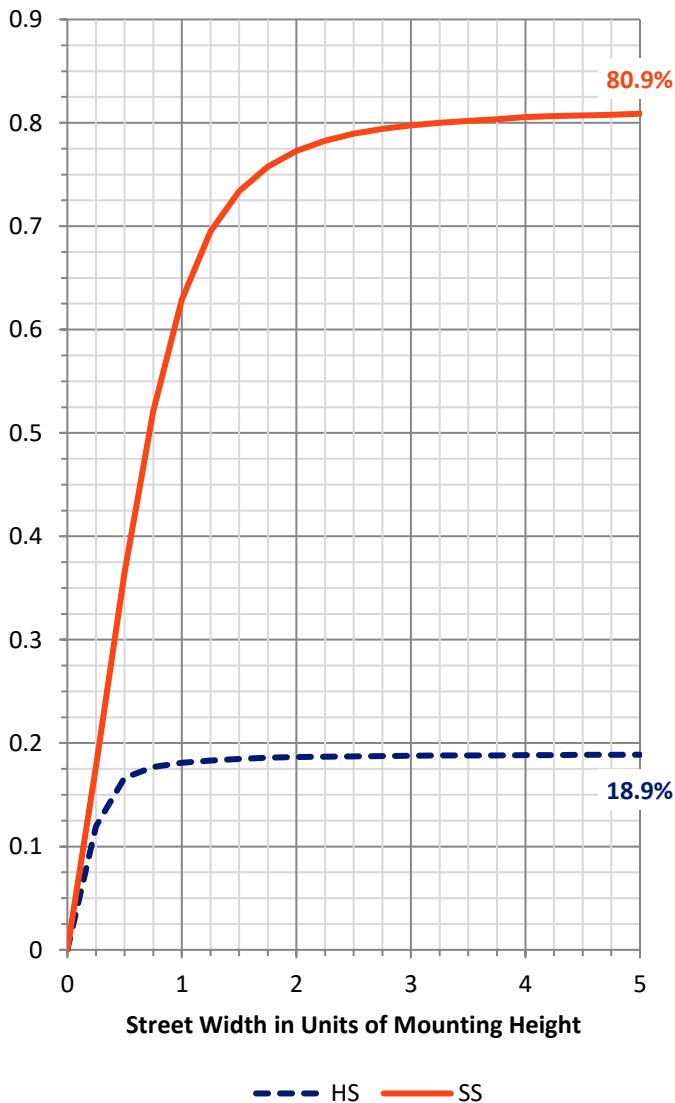
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12149.2	0.0	12149.2
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	51360.8	0.0	51360.8
	% Fixture	80.9	0.0	80.9
Total	Lumens	63510.0	0.0	63510.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1063.8	1.7
10°-20°	3199.8	5.0
20°-30°	5528.6	8.7
30°-40°	8313.6	13.1
40°-50°	11085.4	17.5
50°-60°	13055.3	20.6
60°-70°	12979.3	20.4
70°-80°	7451.7	11.7
80°-90°	832.4	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°	63510.0	100.0
0°-180°	63510.0	100.0

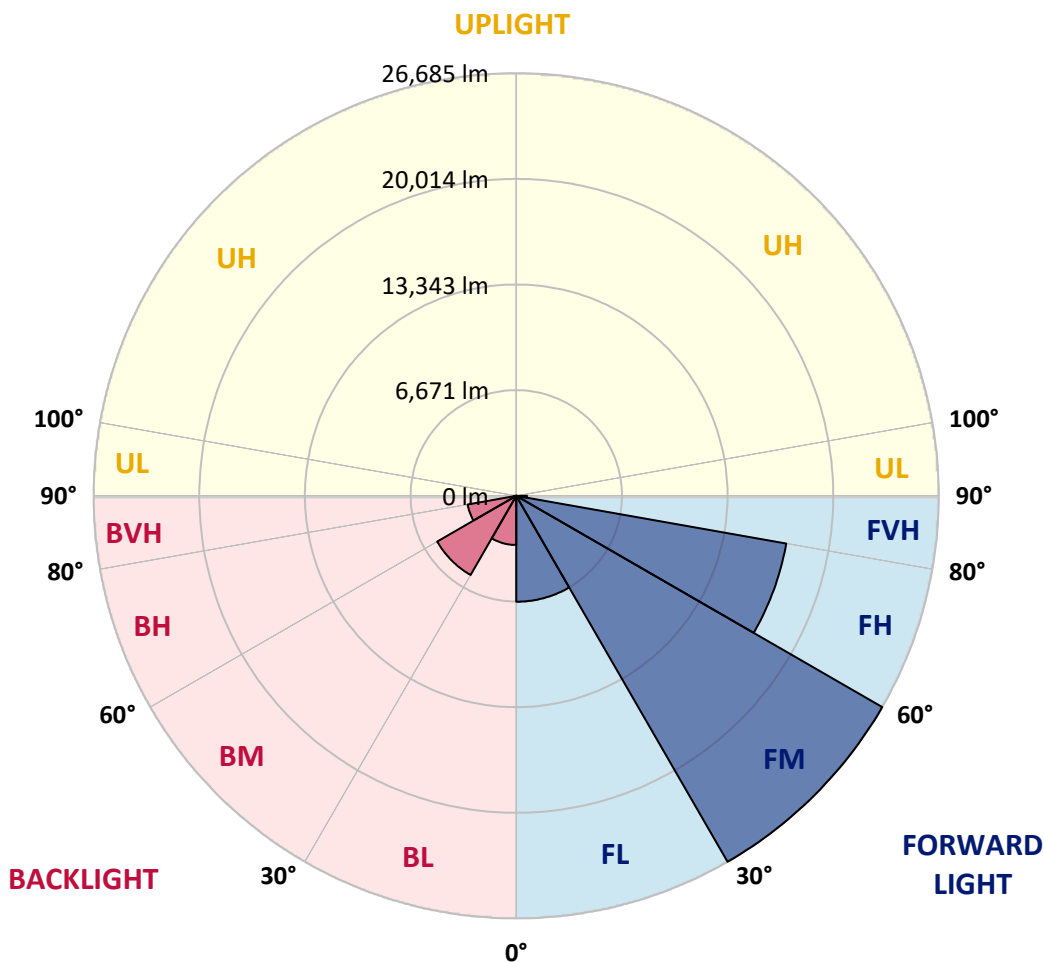


REPORT NUMBER: P510836
 CATALOG NUMBER: CST-CA8-480-730-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6687.5	10.5			
FM (30°-60°)	26685.4	42.0			
FH (60°-80°)	17311.8	27.3			G5
FVH (80°-90°)	676.1	1.1			G4/750
BL (0°-30°)	3104.7	4.9	B4/5000		
BM (30°-60°)	5769.0	9.1	B4/8500		
BH (60°-80°)	3119.1	4.9	B4/5000		G4/5000
BVH (80°-90°)	156.3	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 II Short





REPORT NUMBER: P510836

CATALOG NUMBER: CST-CA8-480-730-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2
2.5°	11916.6	11946.5	11910.9	11895.2	11878.1	11766.9	11637.2	11504.6	11397.7	11380.6	11240.9
5°	12753.4	12769.1	12710.6	12643.6	12528.2	12344.3	12111.9	11882.4	11668.5	11611.5	11356.3
7.5°	13396.4	13366.4	13352.2	13295.1	13193.9	12991.5	12639.4	12263.0	11932.3	11852.4	11464.7
10°	13999.4	13986.6	13878.2	13806.9	13645.8	13459.1	13169.7	12692.1	12225.9	12097.6	11558.8
12.5°	14652.3	14623.8	14579.6	14425.6	14294.5	13979.4	13630.2	13195.3	12676.4	12505.4	11719.9
15°	15239.7	15162.7	15138.4	14977.3	14844.8	14603.8	14253.1	13748.5	13193.9	13047.1	12026.4
17.5°	15798.5	15762.9	15708.7	15598.9	15450.6	15265.3	14984.5	14444.2	13871.1	13657.2	12546.7
20°	16273.2	16229.0	16182.0	16211.9	16179.1	16060.8	15884.0	15423.6	14723.6	14516.9	13179.7
22.5°	16604.0	16602.5	16790.7	16900.5	16963.2	16958.9	16916.2	16655.3	15951.0	15741.5	14126.3
25°	16879.1	16900.5	17138.6	17556.3	17929.8	17964.0	18266.2	18142.2	17543.4	17325.3	15550.4
27.5°	16960.4	17003.1	17435.1	18092.3	18659.7	19204.2	19647.6	19874.3	19319.7	19058.8	17081.5
30°	17018.8	17035.9	17459.3	18246.2	19442.3	20304.8	21097.4	21480.9	21003.4	20812.3	18788.0
32.5°	16606.8	16612.5	17261.2	18453.0	20016.8	21512.3	22450.3	23173.1	23047.7	22795.3	20654.1
35°	16039.4	16144.9	16889.1	18253.4	20490.1	22621.4	23898.7	24976.5	25227.4	25046.4	22518.8
37.5°	15338.0	15420.7	16217.6	17956.8	20594.2	23384.1	25025.0	26809.8	27465.6	27435.7	24769.8
40°	14475.5	14576.8	15530.5	17318.2	20542.9	23938.7	26346.5	28839.9	29672.4	29578.3	27002.3
42.5°	13456.2	13604.5	14529.7	16497.0	20168.0	24278.0	27428.5	30907.0	32405.3	32344.0	28978.2
45°	12448.3	12528.2	13372.1	15353.7	19478.0	24387.7	28446.4	33755.3	35208.0	35139.6	31358.9
47.5°	11409.1	11478.9	12359.9	14149.1	18280.5	24166.8	29251.9	36201.7	38063.5	37995.1	33724.0
50°	8991.3	9255.0	11061.2	13089.9	16916.2	23540.9	30011.7	39249.6	41051.6	40760.7	35795.4
52.5°	7692.5	7788.0	8724.7	12022.1	15554.7	22473.1	30519.2	42073.7	43509.3	43090.2	37913.8
55°	7190.7	7254.9	7713.9	10053.3	14276.0	20857.9	31116.6	44905.0	45352.6	45245.7	39641.6
57.5°	6810.1	6881.4	7209.3	8396.8	12928.8	18594.1	30929.8	46896.5	47456.8	47114.6	41476.4
60°	6271.2	6358.2	6793.0	7538.6	11397.7	16296.0	29286.1	47712.0	48986.4	48601.5	42872.0
62.5°	5931.9	5988.9	6238.4	6961.2	10128.9	14679.4	26946.7	47449.6	49754.8	49740.6	44082.4
65°	5471.5	5555.6	5822.1	6408.1	8999.8	13426.3	24739.9	46153.8	49424.1	49436.9	44331.9
67.5°	4989.6	5023.8	5303.2	5773.7	7669.7	12278.7	21884.4	43937.0	46848.0	47141.7	42605.5
70°	4388.0	4370.9	4673.1	5016.7	6268.4	10425.4	17614.7	39993.8	43041.7	43162.9	39114.2
72.5°	3452.8	3468.5	3552.6	3790.7	4758.7	8204.3	12781.9	33789.6	39062.8	39278.1	34652.0
75°	2320.9	2346.5	2738.6	2970.9	3422.9	5896.3	8037.5	22808.2	33022.6	33629.9	28360.9
77.5°	1770.6	1786.3	1900.3	2154.1	2476.3	4202.7	4356.6	12428.4	24041.3	25482.6	22186.6
80°	1254.5	1260.2	1147.6	1020.7	1318.7	2851.2	2573.2	5293.3	9580.0	11320.7	13031.4
82.5°	561.7	553.1	651.5	541.7	759.8	1103.4	1214.6	2568.9	3978.8	4276.8	4656.0
85°	260.9	292.2	335.0	280.8	451.9	426.3	473.3	1094.9	1864.7	2058.6	2047.2
87.5°	64.2	69.9	88.4	112.6	163.9	145.4	142.6	322.2	416.3	414.8	637.2
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: P510836
 CATALOG NUMBER: CST-CA8-480-730-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2	11138.2
2.5°	11145.3	11071.2	10895.9	10726.2	10565.1	10458.2	10338.4	10213.0	10137.4	10101.8	10178.8
5°	11200.9	11059.8	10724.8	10388.3	10103.2	9859.4	9688.4	9543.0	9464.6	9471.7	9476.0
7.5°	11248.0	11049.8	10580.8	10106.1	9661.3	9359.1	9135.2	8978.4	8888.6	8820.2	8871.5
10°	11289.3	11008.5	10412.6	9779.6	9296.3	8848.7	8545.0	8355.4	8190.1	8097.4	8170.1
12.5°	11333.5	10992.8	10224.4	9487.4	8861.5	8361.1	7944.9	7756.7	7594.2	7524.3	7568.5
15°	11526.0	11052.7	10049.0	9143.8	8432.4	7785.2	7336.1	7105.2	6976.9	6892.8	6911.3
17.5°	11856.7	11210.9	9936.4	8784.5	7953.4	7269.1	6687.5	6418.0	6205.6	6145.8	6130.1
20°	12327.2	11511.7	9936.4	8480.9	7410.3	6696.0	6026.0	5571.2	5240.5	5116.5	5212.0
22.5°	13116.9	12023.5	10034.8	8205.7	6942.7	6101.6	5303.2	4609.0	4162.8	3981.7	4087.2
25°	14221.8	12814.7	10194.5	7964.8	6516.4	5417.3	4386.6	3588.2	3096.4	2881.1	2878.3
27.5°	15664.5	14025.0	10516.6	7768.1	6006.1	4532.0	3430.0	2661.6	2199.7	2070.0	2088.5
30°	17264.0	15336.6	11125.4	7483.0	5385.9	3541.2	2497.7	1955.9	1630.9	1459.8	1462.7
32.5°	18806.5	16695.2	11848.2	7297.6	4580.5	2670.1	1780.6	1395.7	1193.2	1092.0	1107.7
35°	20460.2	17867.0	12385.6	6986.9	3635.3	1930.3	1258.8	1046.4	962.3	909.5	912.4
37.5°	22246.5	19155.8	12827.5	6570.6	2748.6	1325.8	929.5	896.7	861.1	794.1	788.4
40°	24112.6	20648.4	13091.3	5897.7	1910.3	918.1	789.8	826.8	806.9	719.9	712.8
42.5°	25695.0	21800.3	13156.9	5006.7	1236.0	744.2	715.7	772.7	777.0	688.6	677.2
45°	27214.7	22826.7	13028.6	3833.4	856.8	700.0	670.0	748.4	754.1	674.3	655.8
47.5°	28915.4	24230.9	12796.2	2557.5	708.5	661.5	654.4	708.5	728.5	662.9	640.1
50°	30981.1	25372.8	12107.6	1571.0	668.6	637.2	637.2	670.0	697.1	640.1	628.7
52.5°	33099.6	26367.9	11088.3	1077.8	644.4	611.6	630.1	644.4	654.4	603.0	613.0
55°	34617.8	27250.3	9568.6	866.8	630.1	594.5	638.7	610.2	595.9	551.7	541.7
57.5°	36302.9	28299.6	8014.7	768.4	611.6	604.5	610.2	556.0	516.1	470.4	460.5
60°	37479.0	28864.1	6113.0	722.8	590.2	594.5	563.1	490.4	417.7	384.9	377.8
62.5°	38505.4	29186.3	4480.7	664.3	570.2	568.8	510.4	419.1	343.6	307.9	302.2
65°	38350.0	28683.1	2903.9	617.3	554.6	536.0	457.6	359.3	286.5	259.5	256.6
67.5°	36640.8	26456.3	1829.0	568.8	527.5	494.7	410.6	320.8	263.7	232.4	229.5
70°	33052.5	23381.3	1119.1	506.1	469.0	437.7	363.5	300.8	249.5	212.4	205.3
72.5°	28092.9	20025.4	791.2	446.2	409.1	372.1	307.9	286.5	238.1	191.0	185.3
75°	23080.5	14750.7	662.9	389.2	349.3	299.4	262.3	266.6	223.8	173.9	169.6
77.5°	16253.3	9196.5	617.3	317.9	275.1	238.1	226.7	243.8	205.3	159.7	155.4
80°	9485.9	5164.9	510.4	250.9	206.7	183.9	189.6	206.7	179.6	144.0	138.3
82.5°	3829.2	2044.3	359.3	195.3	151.1	146.8	155.4	168.2	148.3	121.2	118.3
85°	1367.1	638.7	203.9	128.3	96.9	101.2	99.8	119.8	106.9	88.4	87.0
87.5°	359.3	126.9	91.2	51.3	41.3	41.3	38.5	55.6	51.3	39.9	44.2
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)