

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: P510848

Luminaire Tested: **CST-CA8-480-740-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510848  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-480-740-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 66280 lumens  
Efficiency: N/A  
Efficacy: 137.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

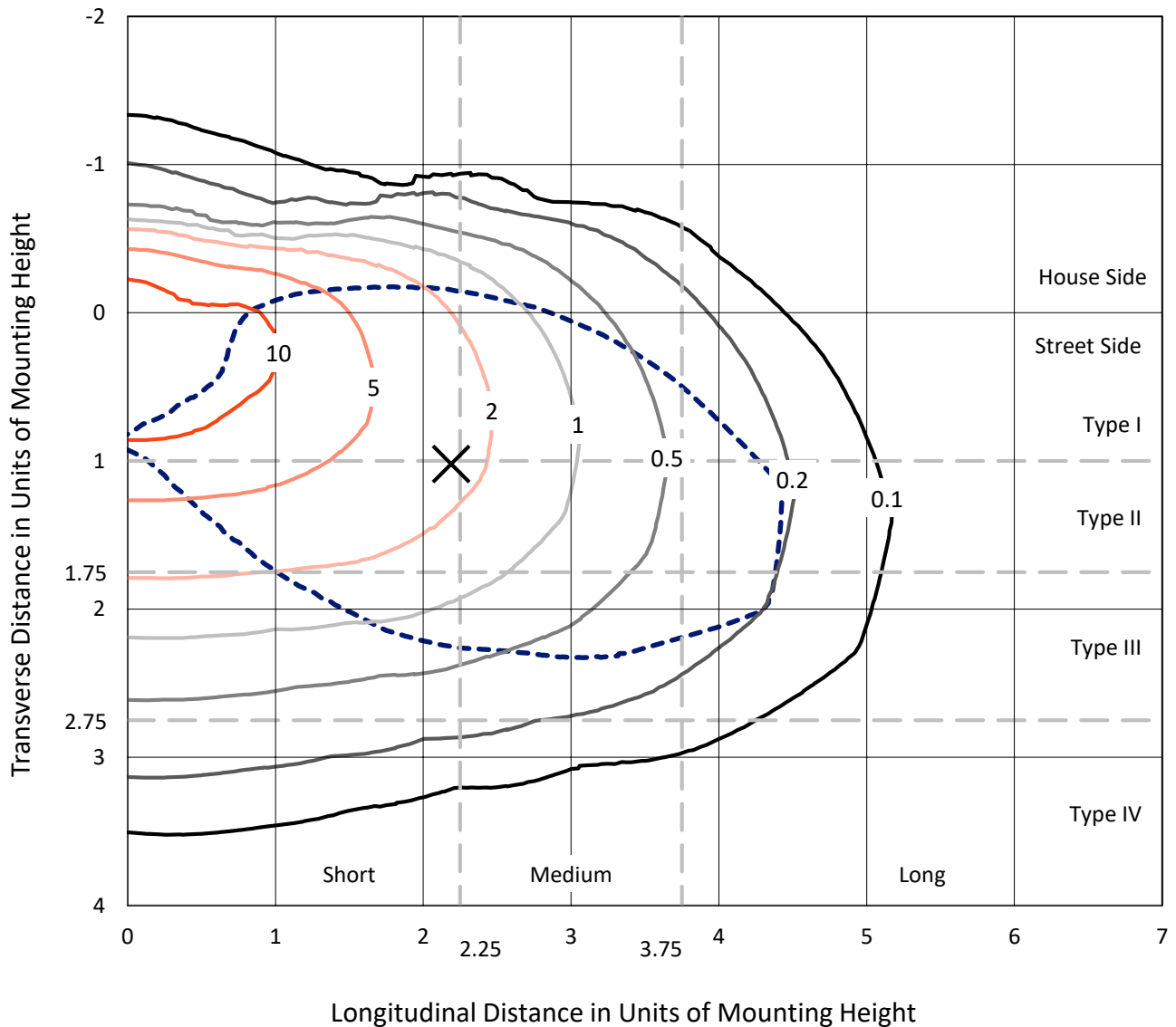
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

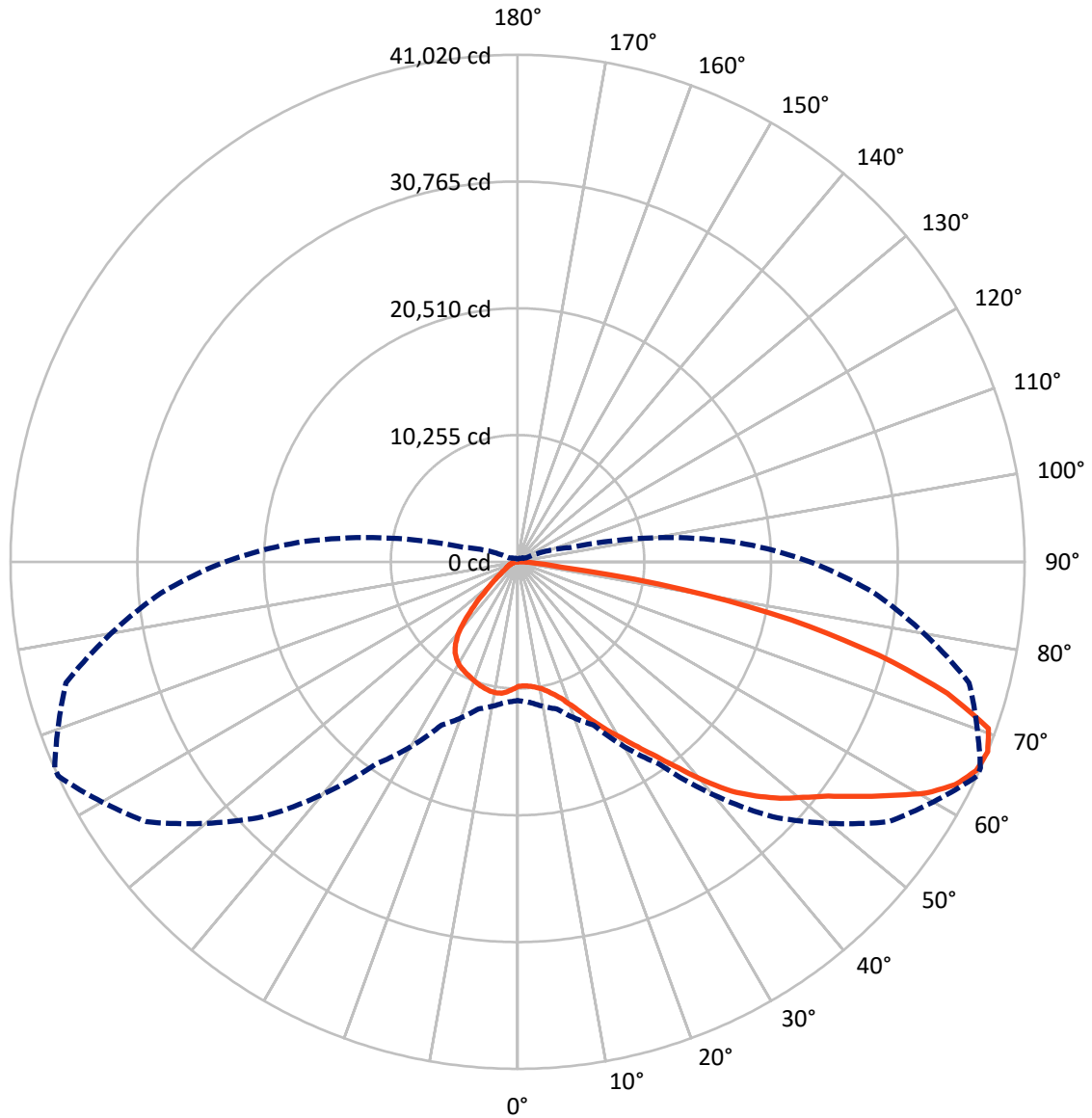
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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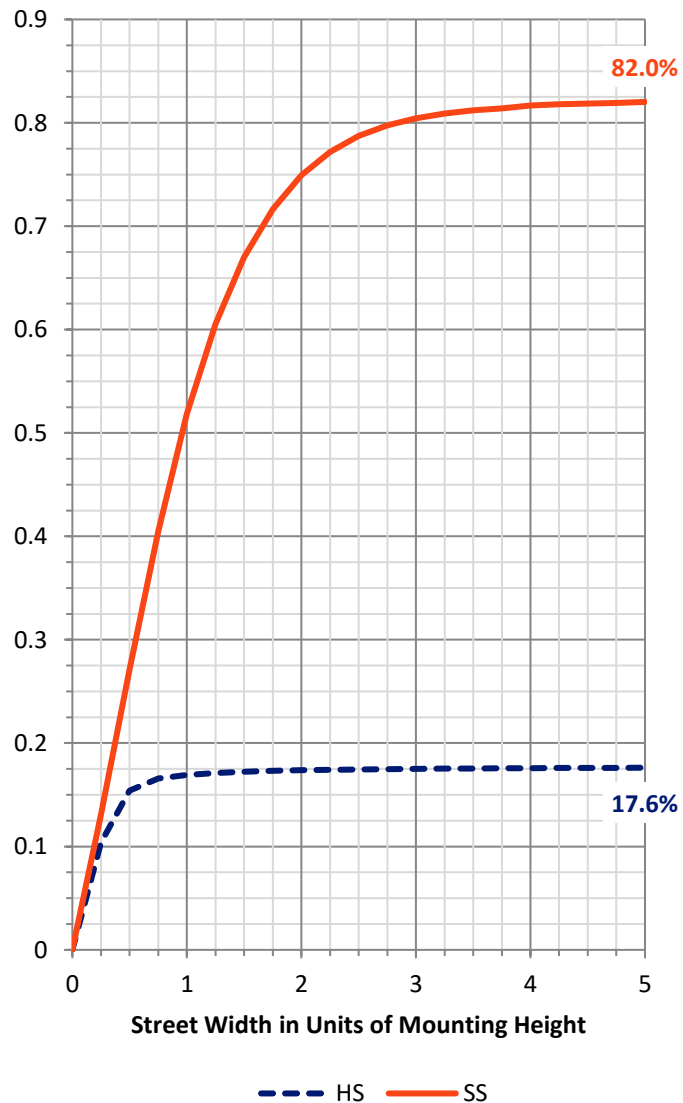
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11845.9	0.0	11845.9
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	54434.1	0.0	54434.1
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	66280.0	0.0	66280.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	996.4	1.5
10°-20°	3076.3	4.6
20°-30°	5336.8	8.1
30°-40°	8050.5	12.1
40°-50°	11162.5	16.8
50°-60°	13778.7	20.8
60°-70°	14681.0	22.1
70°-80°	8400.7	12.7
80°-90°	797.1	1.2
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°	66280.0	100.0
0°-180°	66280.0	100.0

**Coefficient of Utilization**

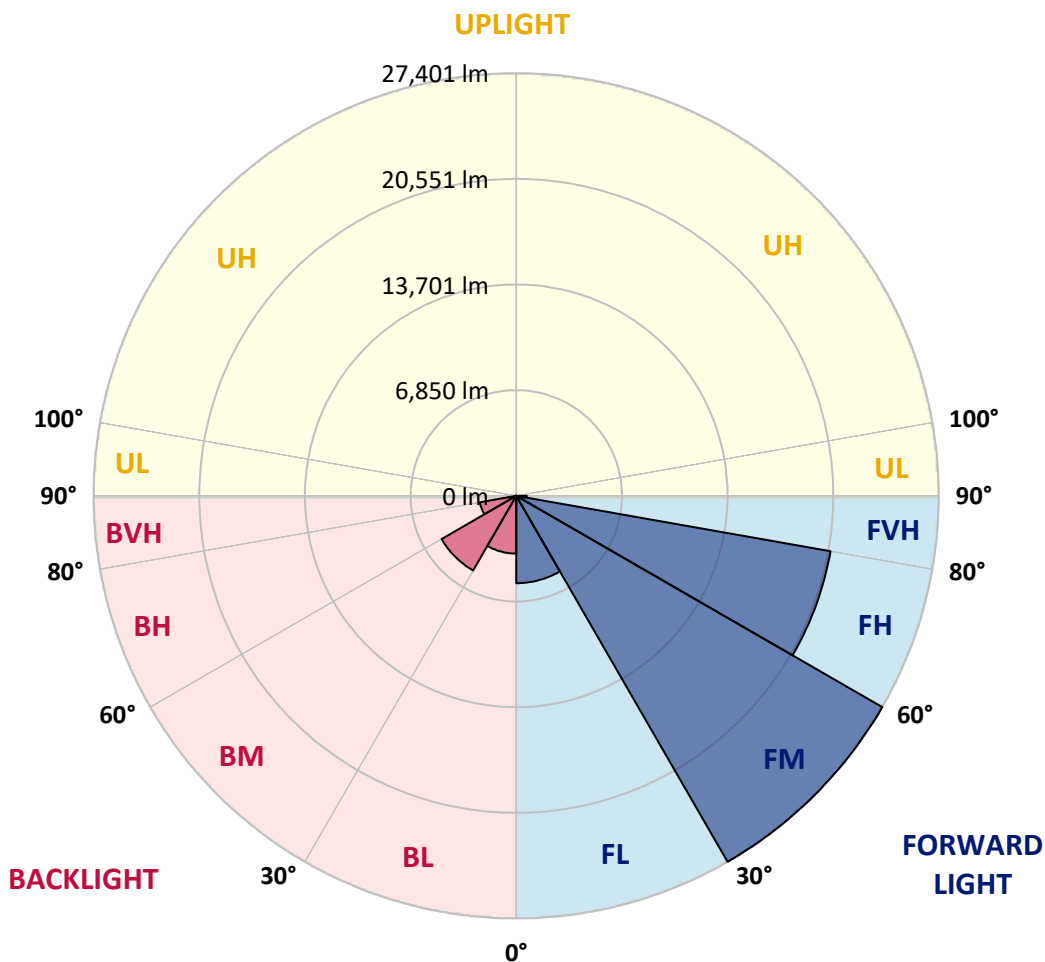


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5661.2	8.5			
FM (30°-60°)	27401.1	41.3			
FH (60°-80°)	20690.8	31.2			G5
FVH (80°-90°)	681.1	1.0			G4/750
BL (0°-30°)	3748.3	5.7	B4/5000		
BM (30°-60°)	5590.6	8.4	B4/8500		
BH (60°-80°)	2390.9	3.6	B3/2500		G3/2500
BVH (80°-90°)	116.0	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7
2.5°	9974.4	9961.3	9949.7	9970.0	9981.7	10000.5	10028.1	10047.0	10052.8	10070.2	10092.0
5°	10134.1	10132.7	10116.7	10108.0	10083.3	10074.6	10080.4	10103.6	10105.1	10126.8	10195.1
7.5°	10447.7	10444.8	10405.6	10388.2	10335.9	10277.8	10234.3	10238.6	10237.2	10259.0	10350.4
10°	10921.0	10897.8	10842.6	10788.9	10687.3	10578.4	10498.5	10425.9	10425.9	10457.9	10559.5
12.5°	11455.3	11487.3	11411.8	11330.5	11160.6	10964.6	10825.2	10743.9	10735.2	10751.2	10823.8
15°	12118.8	12118.8	12068.0	11951.9	11802.3	11529.4	11241.9	11138.8	11124.3	11157.7	11153.3
17.5°	12866.5	12888.3	12792.5	12734.4	12505.0	12203.0	11843.0	11664.4	11664.4	11642.6	11542.4
20°	13820.4	13701.4	13711.5	13615.7	13447.3	13008.8	12643.0	12383.1	12380.2	12336.6	12054.9
22.5°	14857.1	14791.7	14735.1	14650.9	14418.6	14026.6	13518.4	13261.5	13255.6	13148.2	12730.1
25°	15879.2	15928.6	15866.1	15712.2	15542.4	15115.5	14555.1	14302.5	14301.0	14122.4	13530.1
27.5°	16930.4	16984.1	16963.7	16824.4	16597.9	16263.9	15734.0	15404.4	15384.1	15268.0	14523.1
30°	18091.9	18043.9	18106.4	18046.8	17933.6	17389.1	16910.0	16526.7	16576.1	16541.2	15651.2
32.5°	18936.8	18967.3	19172.1	19177.9	19058.8	18655.2	18070.1	17834.9	17913.3	17866.8	17037.8
35°	19700.5	19749.9	20014.1	20274.0	20361.1	19919.8	19324.5	19310.0	19411.6	19694.7	18948.5
37.5°	20356.8	20391.6	20761.9	21100.1	21381.8	21079.8	20647.2	21162.6	21312.1	21891.4	20920.1
40°	20750.2	20795.3	21274.4	21750.6	22252.9	22145.5	22104.8	23324.4	23465.3	23974.9	22358.9
42.5°	20528.1	20616.7	21415.2	22286.3	23025.3	23240.2	23796.3	25364.3	25525.5	25569.0	23773.1
45°	20131.7	20242.1	21135.0	22544.8	23749.8	24439.5	25497.9	27026.7	27115.3	26991.9	24944.7
47.5°	19704.9	19822.5	20819.9	22467.8	24332.0	25834.7	27018.0	28591.8	28654.3	28275.3	26125.1
50°	19220.0	19328.9	20401.8	22287.8	24770.5	27151.6	28580.2	29945.0	30178.7	29429.6	27042.7
52.5°	18630.5	18746.7	19884.9	22006.1	25155.2	28128.7	29958.1	31473.8	31489.8	30872.7	28076.4
55°	17866.8	18068.6	19235.9	21518.3	25357.1	28967.9	31158.8	33496.3	33599.4	33002.6	28941.7
57.5°	17017.5	17193.1	18454.8	20867.8	25175.6	29605.2	33089.8	35665.4	35652.3	34454.5	29698.2
60°	15895.2	16020.0	17437.1	20017.0	24590.5	30376.2	35100.6	37989.8	37966.6	35877.4	30184.5
62.5°	14454.9	14579.8	15912.6	18682.8	23730.9	30893.1	36465.4	39730.6	39663.9	36912.5	30334.1
65°	12785.2	13008.8	14166.0	16950.7	22210.8	30553.3	37124.5	40755.7	40648.2	37702.4	29976.9
67.5°	11220.1	11410.3	12326.4	14566.7	19967.7	29175.5	36659.9	41019.9	40988.0	37817.1	28967.9
70°	9004.5	9074.2	9913.4	11831.4	16613.8	26225.3	35054.1	40410.1	40424.6	36760.1	26941.1
72.5°	6163.2	6333.1	6706.2	8220.5	12089.8	20856.2	30213.6	36368.1	36371.0	32962.0	23472.5
75°	3314.6	3577.4	4013.0	4763.6	6758.5	13383.4	24263.8	30177.3	30233.9	27482.6	18656.6
77.5°	1643.5	1737.9	1990.5	2548.0	3098.3	6314.2	15604.8	22652.2	22787.2	21095.8	12724.3
80°	752.1	768.0	786.9	782.6	1186.2	2770.2	6699.0	13604.1	13644.8	12547.1	5809.0
82.5°	588.0	585.1	593.8	540.1	543.0	1068.6	2318.6	3562.9	3799.6	2990.9	1842.4
85°	355.7	354.3	381.8	296.2	364.4	577.8	1170.2	1421.4	1438.8	1170.2	953.9
87.5°	135.0	130.7	120.5	106.0	122.0	162.6	405.1	522.7	511.1	363.0	329.6
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°	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7	10071.7
2.5°	10110.9	10157.3	10243.0	10308.3	10330.1	10399.8	10466.6	10478.2	10526.1	10545.0	10607.4
5°	10237.2	10315.6	10449.2	10537.7	10576.9	10693.1	10768.6	10806.3	10793.3	10800.5	10870.2
7.5°	10421.6	10495.6	10603.1	10710.5	10729.4	10749.7	10742.4	10736.6	10685.8	10642.3	10707.6
10°	10590.0	10659.7	10726.5	10742.4	10646.6	10592.9	10497.1	10423.0	10324.3	10279.3	10331.6
12.5°	10826.7	10841.2	10775.8	10688.7	10482.6	10290.9	10135.6	10000.5	9878.6	9794.4	9864.1
15°	11076.4	11019.8	10829.6	10575.5	10256.1	9981.7	9727.6	9502.5	9300.7	9251.4	9270.2
17.5°	11407.4	11253.5	10870.2	10443.4	9946.8	9520.0	9193.3	8908.7	8644.5	8534.1	8524.0
20°	11811.0	11562.8	10953.0	10276.4	9580.9	9013.3	8508.0	8082.6	7718.2	7419.1	7426.4
22.5°	12336.6	11976.5	11077.8	10102.2	9175.9	8419.4	7684.8	6961.8	6362.1	6103.7	6039.8
25°	13030.6	12493.4	11255.0	9943.9	8722.9	7664.5	6626.4	5605.7	4971.2	4720.1	4692.5
27.5°	13894.5	13187.4	11525.0	9768.2	8238.0	6768.7	5276.1	4275.8	3693.6	3429.3	3340.8
30°	14875.9	14042.6	11802.3	9585.3	7651.4	5617.3	4023.2	3043.1	2446.4	2209.8	2179.3
32.5°	16146.3	15125.7	12214.7	9297.8	6794.8	4415.2	2806.5	1899.1	1494.0	1392.4	1363.3
35°	17951.0	16590.6	12724.3	8934.9	5694.3	3083.8	1739.3	1112.1	895.8	845.0	834.8
37.5°	19633.7	18028.0	13238.2	8332.3	4323.7	1925.2	994.5	712.9	665.0	666.4	669.3
40°	20968.0	19010.9	13653.5	7539.6	2844.2	1093.3	691.1	592.4	593.8	589.5	586.6
42.5°	22155.7	19794.9	13840.8	6367.9	1647.9	731.7	599.6	545.9	532.8	537.2	534.3
45°	23138.6	20594.9	13477.8	5051.1	971.3	656.2	566.2	506.7	492.2	515.4	518.3
47.5°	24172.3	21354.2	12921.7	3805.4	788.4	624.3	535.7	477.7	470.4	499.4	502.3
50°	25042.0	21904.5	11973.6	2867.5	752.1	589.5	508.2	448.6	447.2	473.3	473.3
52.5°	25769.4	22237.0	10848.4	2214.1	727.4	559.0	480.6	421.0	421.0	429.8	431.2
55°	26281.9	22170.2	10177.7	1742.3	701.3	529.9	451.5	394.9	377.5	371.7	374.6
57.5°	26374.8	21993.0	9399.5	1359.0	670.8	502.3	425.4	364.4	332.5	328.1	326.7
60°	26315.3	21603.9	8510.9	1135.4	635.9	476.2	399.3	332.5	300.5	290.4	293.3
62.5°	26067.0	20914.3	7484.4	996.0	601.1	455.9	370.2	310.7	281.7	268.6	268.6
65°	25317.9	19927.0	5960.0	872.6	557.5	434.1	347.0	302.0	270.0	255.5	252.6
67.5°	23671.4	17878.4	4479.0	765.1	515.4	410.9	344.1	300.5	264.2	243.9	241.0
70°	21463.1	15358.0	3057.7	672.2	469.0	389.1	342.6	302.0	258.4	232.3	229.4
72.5°	17917.6	12107.2	1761.1	585.1	422.5	368.8	336.8	303.4	248.3	216.3	212.0
75°	13463.3	8492.0	1033.7	502.3	377.5	338.3	320.9	294.7	232.3	197.5	193.1
77.5°	8097.1	3965.1	778.2	416.7	323.8	297.6	286.0	270.0	212.0	182.9	178.6
80°	2970.5	1505.6	611.2	333.9	257.0	258.4	246.8	236.7	193.1	168.4	165.5
82.5°	1295.1	920.5	451.5	254.1	201.8	230.8	203.3	194.6	165.5	151.0	145.2
85°	785.5	548.8	290.4	172.8	139.4	156.8	142.3	149.5	127.8	119.1	114.7
87.5°	259.9	164.1	129.2	84.2	69.7	65.3	63.9	76.9	72.6	66.8	66.8
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)