

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: P510798

Luminaire Tested: **CST-CA8-330-750-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510798  
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-CA8-330-750-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46488 lumens  
Efficiency: N/A  
Efficacy: 140.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

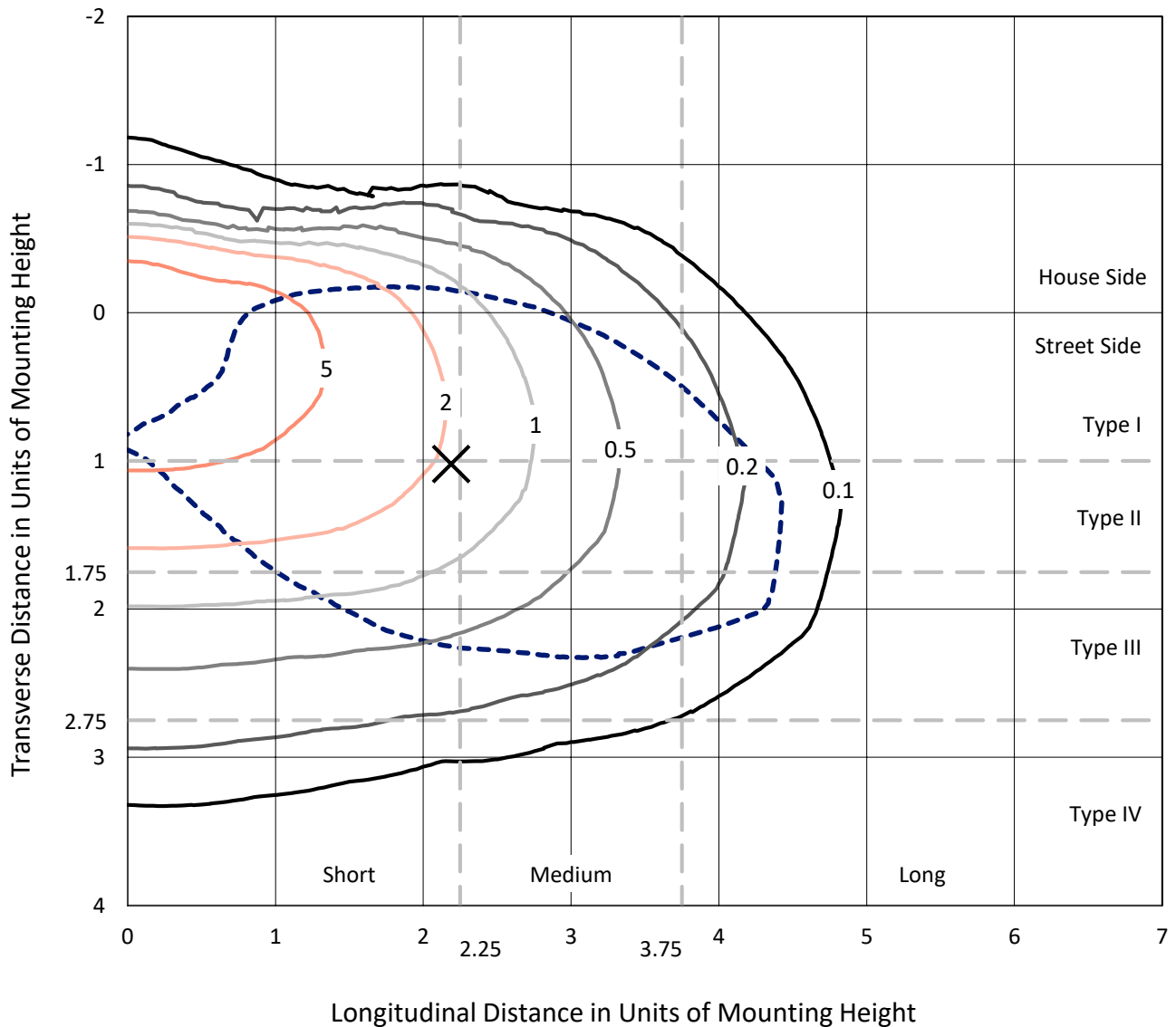
Input Watts (W): 331.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

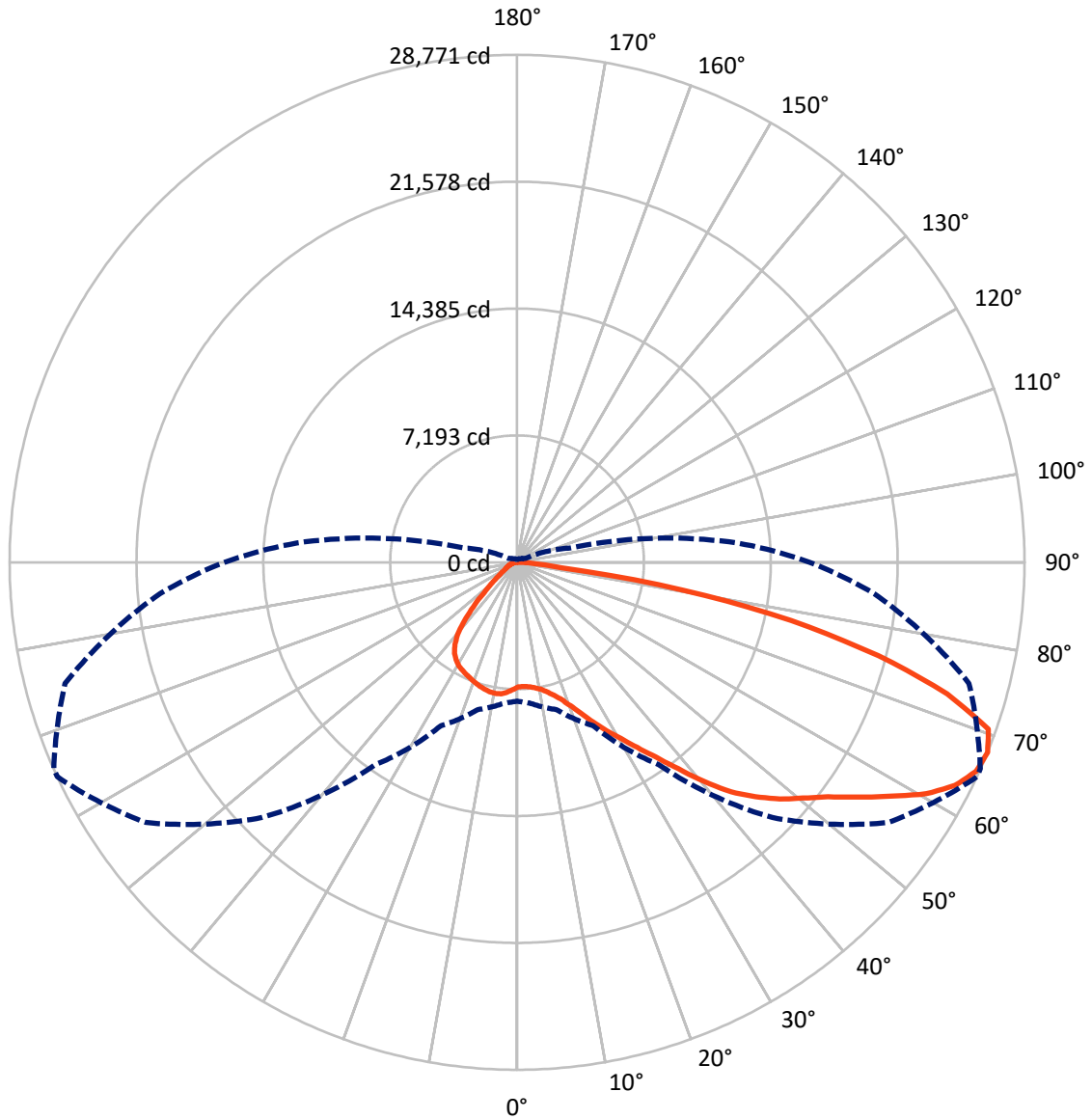
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.2 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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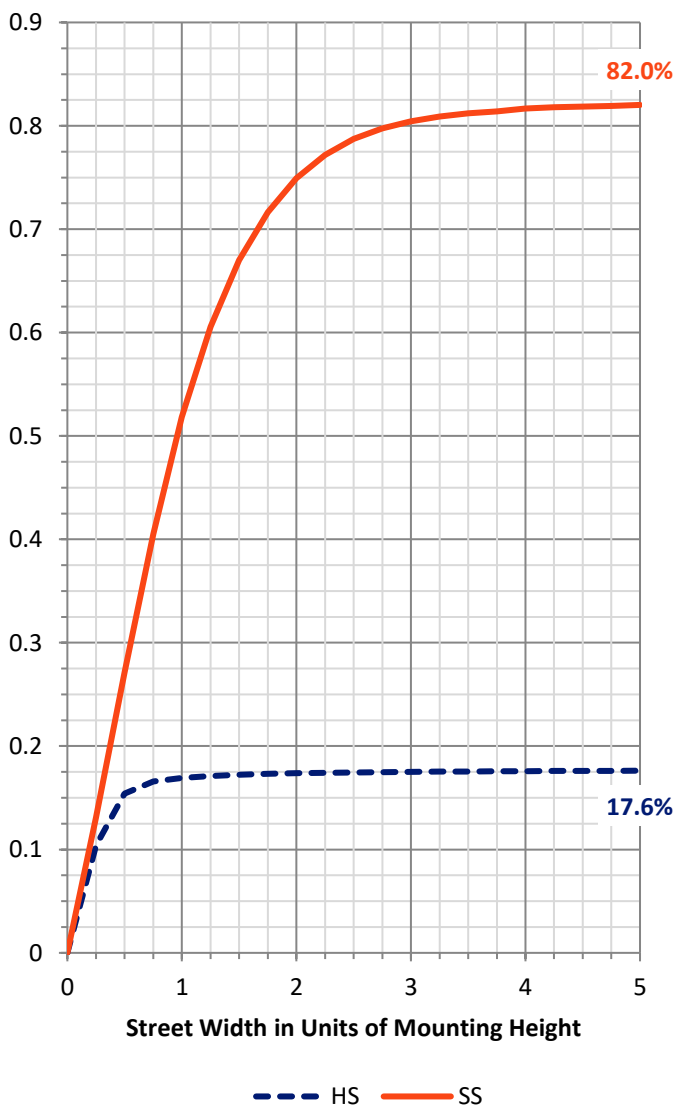
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8308.5	0.0	8308.5
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	38179.5	0.0	38179.5
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	46488.0	0.0	46488.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	698.9	1.5
10°-20°	2157.7	4.6
20°-30°	3743.2	8.1
30°-40°	5646.5	12.1
40°-50°	7829.3	16.8
50°-60°	9664.2	20.8
60°-70°	10297.1	22.1
70°-80°	5892.1	12.7
80°-90°	559.1	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°	46488.0	100.0
0°-180°	46488.0	100.0

**Coefficient of Utilization**

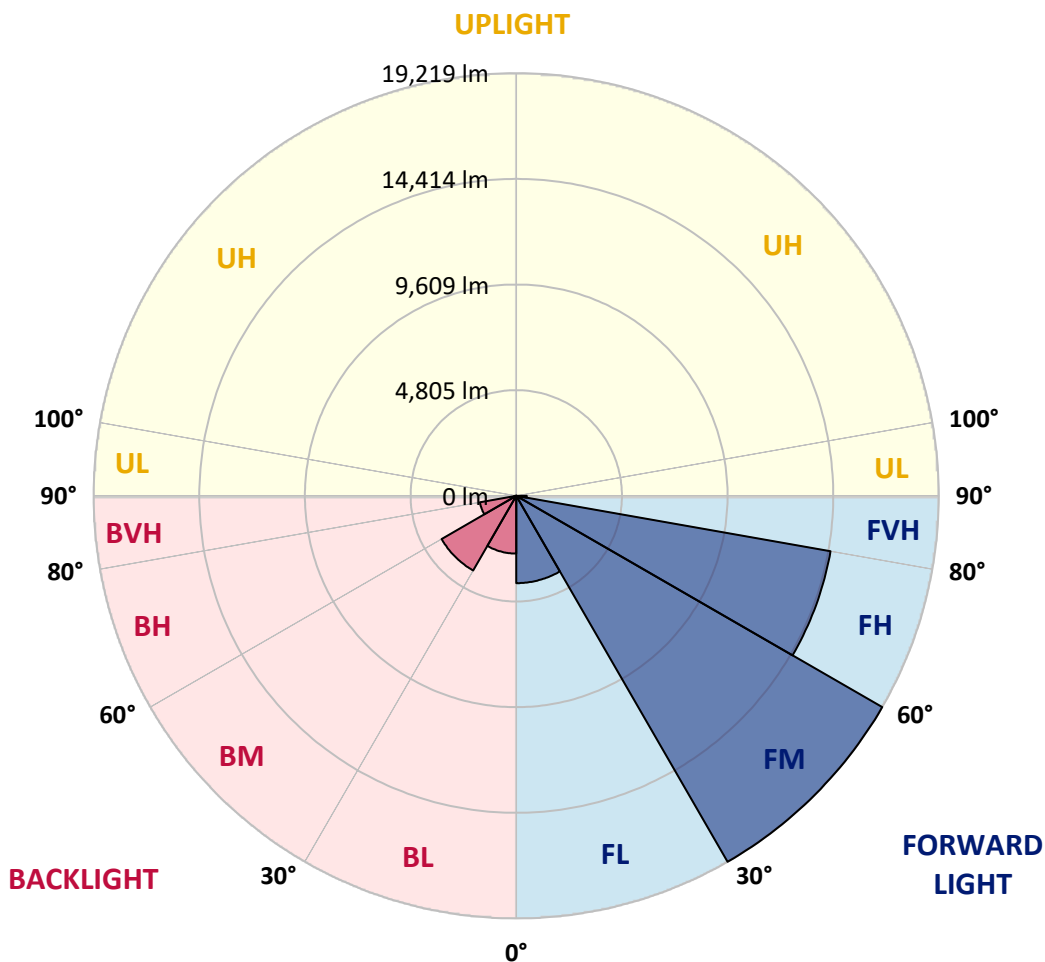


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3970.7	8.5			
FM (30°-60°)	19218.8	41.3			
FH (60°-80°)	14512.3	31.2			G5
FVH (80°-90°)	477.7	1.0			G3/500
BL (0°-30°)	2629.0	5.7	B4/5000		
BM (30°-60°)	3921.2	8.4	B3/5000		
BH (60°-80°)	1676.9	3.6	B3/2500		G3/2500
BVH (80°-90°)	81.4	0.2			G1/100
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°	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2
2.5°	6995.9	6986.8	6978.6	6992.9	7001.0	7014.3	7033.6	7046.8	7050.9	7063.1	7078.4
5°	7107.9	7106.9	7095.7	7089.6	7072.3	7066.2	7070.3	7086.6	7087.6	7102.9	7150.7
7.5°	7327.9	7325.9	7298.4	7286.2	7249.5	7208.8	7178.2	7181.3	7180.2	7195.5	7259.7
10°	7659.9	7643.6	7604.9	7567.2	7495.9	7419.6	7363.5	7312.6	7312.6	7335.0	7406.3
12.5°	8034.6	8057.0	8004.1	7947.0	7827.9	7690.4	7592.7	7535.6	7529.5	7540.7	7591.6
15°	8500.0	8500.0	8464.4	8382.9	8278.0	8086.6	7884.9	7812.6	7802.4	7825.9	7822.8
17.5°	9024.4	9039.7	8972.5	8931.8	8770.9	8559.1	8306.5	8181.3	8181.3	8166.0	8095.7
20°	9693.5	9610.0	9617.1	9549.9	9431.8	9124.2	8867.6	8685.3	8683.3	8652.7	8455.2
22.5°	10420.6	10374.7	10335.0	10276.0	10113.0	9838.1	9481.7	9301.4	9297.4	9222.0	8928.7
25°	11137.5	11172.1	11128.3	11020.4	10901.2	10601.8	10208.8	10031.6	10030.6	9905.3	9489.8
27.5°	11874.7	11912.4	11898.2	11800.4	11641.5	11407.3	11035.6	10804.5	10790.2	10708.8	10186.4
30°	12689.4	12655.8	12699.6	12657.8	12578.4	12196.5	11860.5	11591.6	11626.3	11601.8	10977.6
32.5°	13282.1	13303.5	13447.0	13451.1	13367.6	13084.5	12674.1	12509.2	12564.2	12531.6	11950.1
35°	13817.7	13852.3	14037.7	14220.0	14281.1	13971.5	13554.0	13543.8	13615.1	13813.6	13290.2
37.5°	14278.0	14302.4	14562.1	14799.4	14996.9	14785.1	14481.7	14843.2	14948.1	15354.4	14673.1
40°	14554.0	14585.5	14921.6	15255.6	15607.9	15532.6	15504.1	16359.5	16458.2	16815.7	15682.3
42.5°	14398.2	14460.3	15020.4	15631.4	16149.7	16300.4	16690.4	17790.2	17903.3	17933.8	16674.1
45°	14120.2	14197.6	14823.8	15812.6	16657.8	17141.5	17883.9	18956.2	19018.3	18931.8	17495.9
47.5°	13820.8	13903.3	14602.9	15758.7	17066.2	18120.2	18950.1	20054.0	20097.8	19832.0	18323.8
50°	13480.7	13557.0	14309.6	15632.4	17373.7	19043.8	20045.8	21003.1	21167.0	20641.5	18967.4
52.5°	13067.2	13148.7	13947.0	15434.8	17643.6	19729.1	21012.2	22075.4	22086.6	21653.8	19692.5
55°	12531.6	12673.1	13491.9	15092.7	17785.1	20317.7	21854.4	23493.9	23566.2	23147.7	20299.4
57.5°	11935.8	12059.1	12944.0	14636.5	17657.8	20764.8	23208.8	25015.3	25006.1	24166.0	20829.9
60°	11148.7	11236.3	12230.1	14039.7	17247.5	21305.5	24619.1	26645.6	26629.3	25164.0	21171.1
62.5°	10138.5	10226.1	11160.9	13103.9	16644.6	21668.0	25576.4	27866.6	27819.8	25890.0	21276.0
65°	8967.4	9124.2	9935.8	11889.0	15578.4	21429.7	26038.7	28585.5	28510.2	26444.0	21025.5
67.5°	7869.7	8003.1	8645.6	10216.9	14005.1	20463.3	25712.8	28770.9	28748.5	26524.4	20317.7
70°	6315.7	6364.6	6953.2	8298.4	11652.7	18394.1	24586.6	28343.2	28353.4	25783.1	18896.1
72.5°	4322.8	4442.0	4703.7	5765.8	8479.6	14628.3	21191.4	25508.1	25510.2	23119.1	16463.3
75°	2324.8	2509.2	2814.7	3341.1	4740.3	9387.0	17018.3	21166.0	21205.7	19276.0	13085.5
77.5°	1152.7	1218.9	1396.1	1787.2	2173.1	4428.7	10945.0	15888.0	15982.7	14796.3	8924.6
80°	527.5	538.7	551.9	548.9	832.0	1943.0	4698.6	9541.8	9570.3	8800.4	4074.3
82.5°	412.4	410.4	416.5	378.8	380.9	749.5	1626.3	2499.0	2665.0	2097.8	1292.3
85°	249.5	248.5	267.8	207.7	255.6	405.3	820.8	996.9	1009.2	820.8	669.0
87.5°	94.7	91.6	84.5	74.3	85.5	114.1	284.1	366.6	358.5	254.6	231.2
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°	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2	7064.2
2.5°	7091.6	7124.2	7184.3	7230.1	7245.4	7294.3	7341.1	7349.3	7382.9	7396.1	7439.9
5°	7180.2	7235.2	7328.9	7391.0	7418.5	7500.0	7553.0	7579.4	7570.3	7575.4	7624.2
7.5°	7309.6	7361.5	7436.9	7512.2	7525.5	7539.7	7534.6	7530.6	7494.9	7464.4	7510.2
10°	7427.7	7476.6	7523.4	7534.6	7467.4	7429.7	7362.5	7310.6	7241.3	7209.8	7246.4
12.5°	7593.7	7603.9	7558.0	7496.9	7352.3	7217.9	7109.0	7014.3	6928.7	6869.7	6918.5
15°	7768.8	7729.1	7595.7	7417.5	7193.5	7001.0	6822.8	6665.0	6523.4	6488.8	6502.0
17.5°	8001.0	7893.1	7624.2	7324.8	6976.6	6677.2	6448.1	6248.5	6063.1	5985.7	5978.6
20°	8284.1	8110.0	7682.3	7207.7	6720.0	6321.8	5967.4	5669.0	5413.4	5203.7	5208.8
22.5°	8652.7	8400.2	7769.9	7085.5	6435.8	5905.3	5390.0	4882.9	4462.3	4281.1	4236.3
25°	9139.5	8762.7	7894.1	6974.5	6118.1	5375.8	4647.7	3931.8	3486.8	3310.6	3291.2
27.5°	9745.4	9249.5	8083.5	6851.3	5778.0	4747.5	3700.6	2999.0	2590.6	2405.3	2343.2
30°	10433.8	9849.3	8278.0	6723.0	5366.6	3939.9	2821.8	2134.4	1715.9	1549.9	1528.5
32.5°	11324.8	10609.0	8567.2	6521.4	4765.8	3096.7	1968.4	1332.0	1047.9	976.6	956.2
35°	12590.6	11636.5	8924.6	6266.8	3993.9	2162.9	1220.0	780.0	628.3	592.7	585.5
37.5°	13770.9	12644.6	9285.1	5844.2	3032.6	1350.3	697.6	500.0	466.4	467.4	469.5
40°	14706.7	13334.0	9576.4	5288.2	1994.9	766.8	484.7	415.5	416.5	413.4	411.4
42.5°	15539.7	13883.9	9707.7	4466.4	1155.8	513.2	420.6	382.9	373.7	376.8	374.7
45°	16229.1	14445.0	9453.2	3542.8	681.3	460.3	397.1	355.4	345.2	361.5	363.5
47.5°	16954.2	14977.6	9063.1	2669.0	553.0	437.9	375.8	335.0	329.9	350.3	352.3
50°	17564.2	15363.5	8398.2	2011.2	527.5	413.4	356.4	314.7	313.6	332.0	332.0
52.5°	18074.3	15596.7	7609.0	1553.0	510.2	392.1	337.1	295.3	295.3	301.4	302.4
55°	18433.8	15549.9	7138.5	1222.0	491.9	371.7	316.7	277.0	264.8	260.7	262.7
57.5°	18499.0	15425.7	6592.7	953.2	470.5	352.3	298.4	255.6	233.2	230.1	229.1
60°	18457.2	15152.7	5969.5	796.3	446.0	334.0	280.0	233.2	210.8	203.7	205.7
62.5°	18283.1	14669.0	5249.5	698.6	421.6	319.8	259.7	217.9	197.6	188.4	188.4
65°	17757.6	13976.6	4180.2	612.0	391.0	304.5	243.4	211.8	189.4	179.2	177.2
67.5°	16602.9	12539.7	3141.5	536.7	361.5	288.2	241.3	210.8	185.3	171.1	169.0
70°	15054.0	10771.9	2144.6	471.5	328.9	272.9	240.3	211.8	181.3	162.9	160.9
72.5°	12567.2	8491.9	1235.2	410.4	296.3	258.7	236.3	212.8	174.1	151.7	148.7
75°	9443.0	5956.2	725.1	352.3	264.8	237.3	225.1	206.7	162.9	138.5	135.4
77.5°	5679.2	2781.1	545.8	292.3	227.1	208.8	200.6	189.4	148.7	128.3	125.3
80°	2083.5	1056.0	428.7	234.2	180.2	181.3	173.1	166.0	135.4	118.1	116.1
82.5°	908.4	645.6	316.7	178.2	141.5	161.9	142.6	136.5	116.1	105.9	101.8
85°	550.9	384.9	203.7	121.2	97.8	110.0	99.8	104.9	89.6	83.5	80.4
87.5°	182.3	115.1	90.6	59.1	48.9	45.8	44.8	54.0	50.9	46.8	46.8
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)