

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: McGRAW-EDISON

Report Number: P591022

Luminaire Tested: **CTN-CA10-310-722-U-T3-HSS-HM-EX120**

Issue Date: 12/14/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P591022  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2112-474-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 12/14/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-310-722-U-T3-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (10) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35946 lumens  
Efficiency: N/A  
Efficacy: 115.1 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

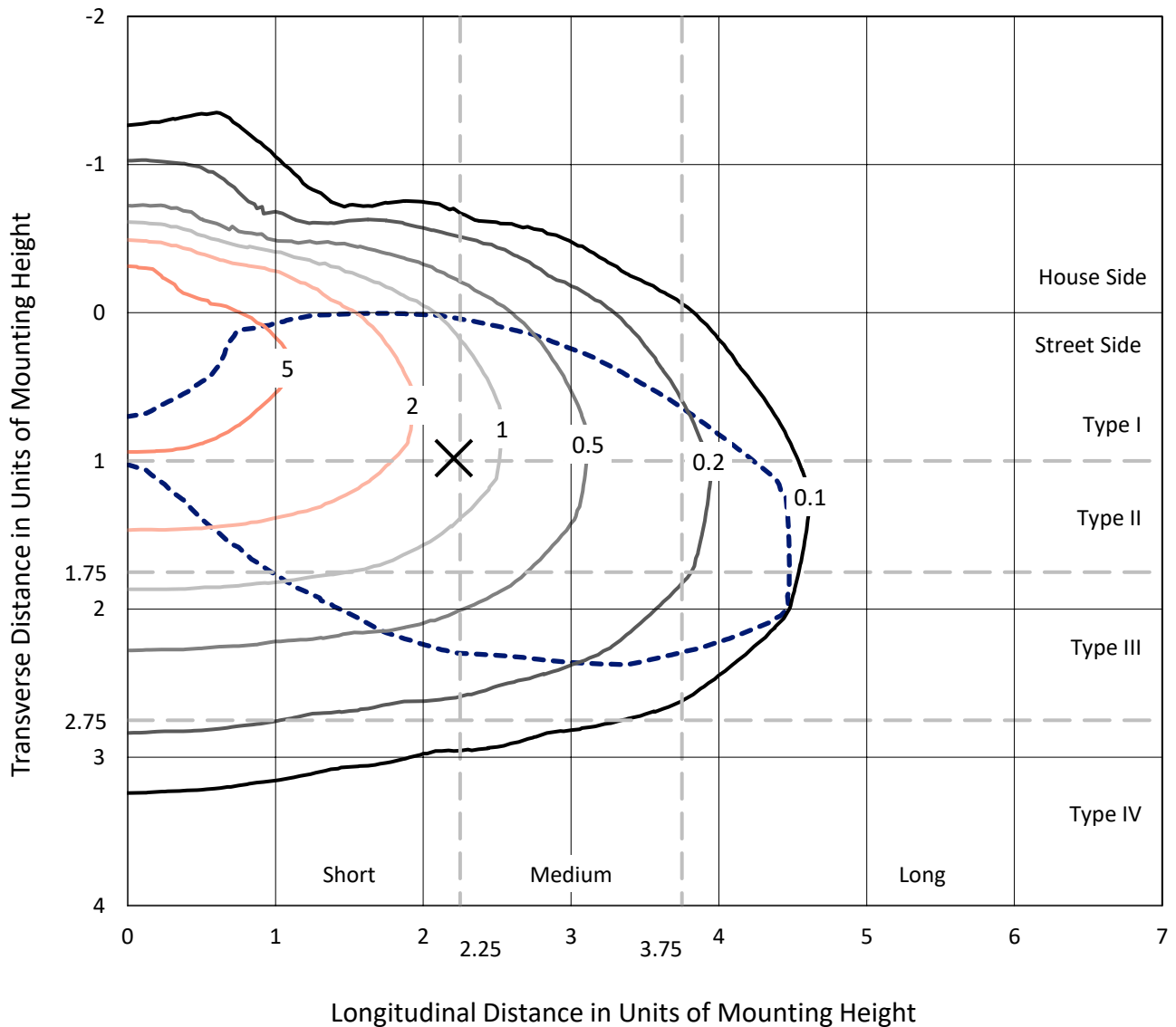
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

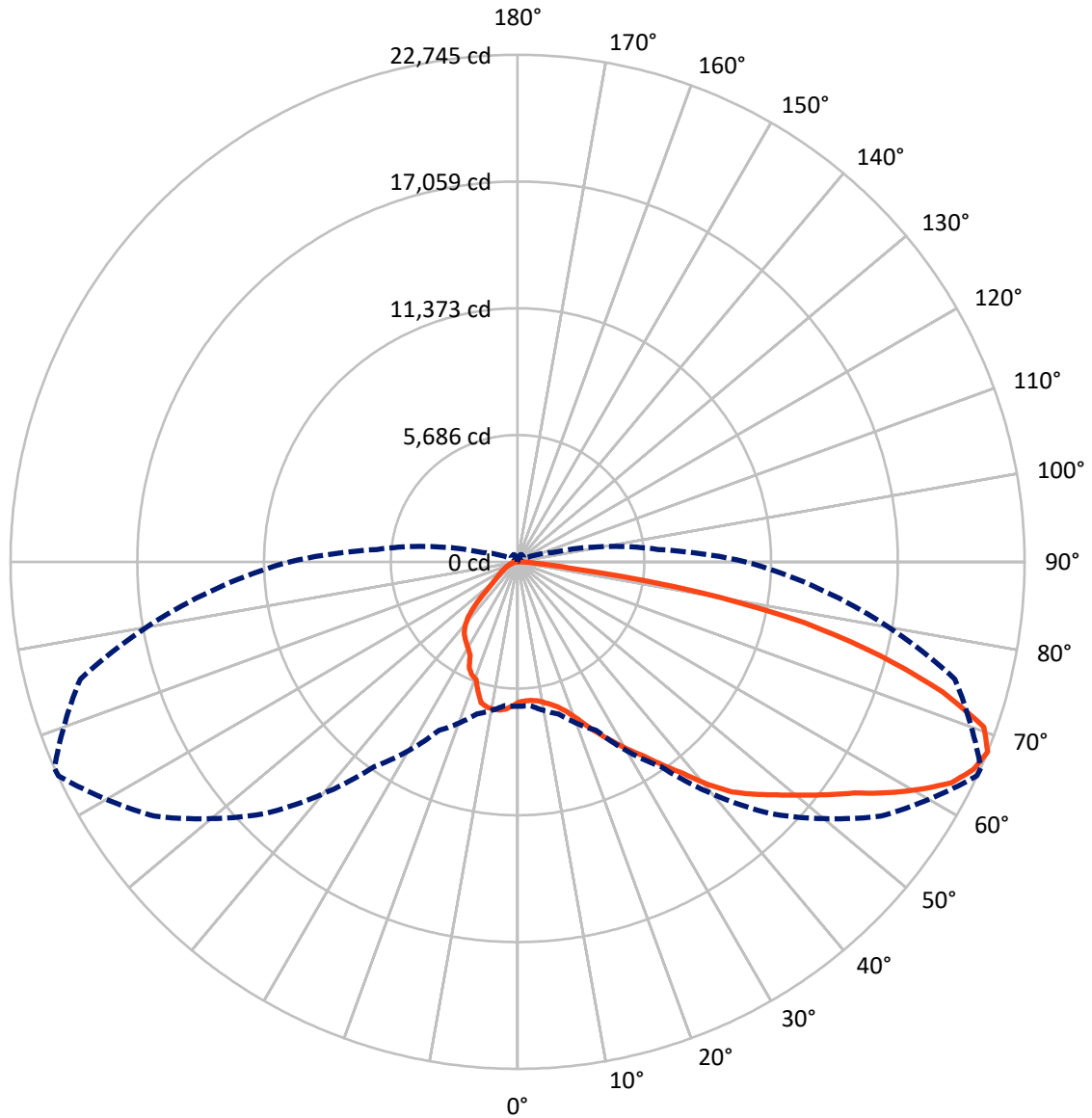
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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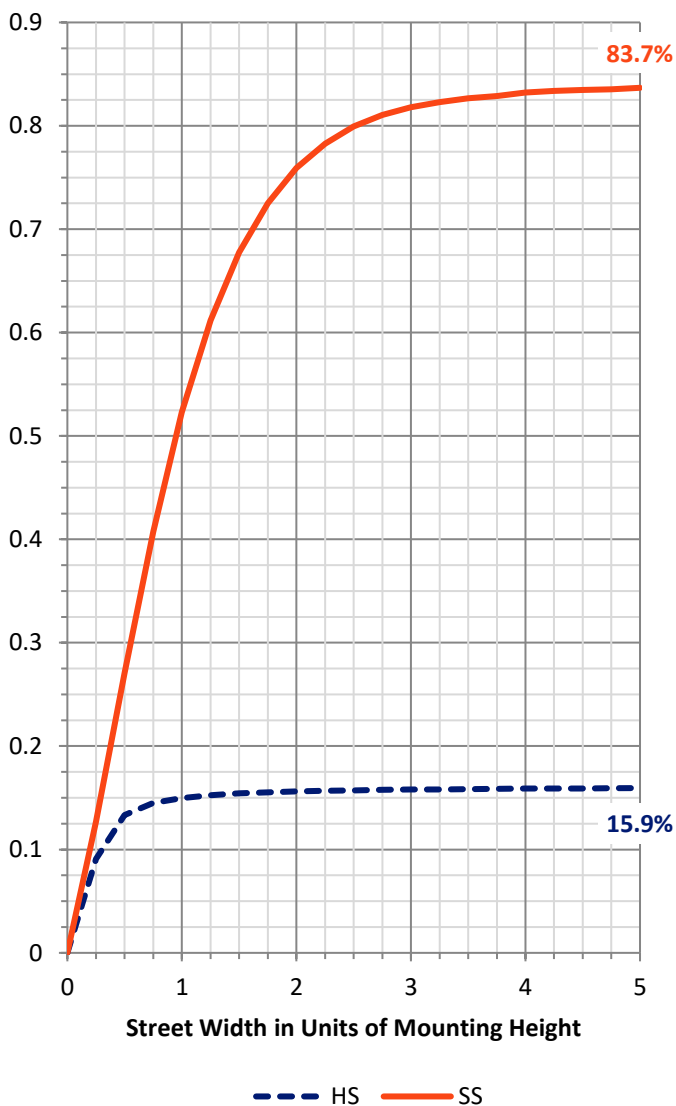
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5802.4	0.0	5802.4
	% Fixture	16.1	0.0	16.1
<b>Street Side</b>	Lumens	30143.6	0.0	30143.6
	% Fixture	83.9	0.0	83.9
<b>Total</b>	Lumens	35946.0	0.0	35946.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	623.7	1.7
10°-20°	1880.5	5.2
20°-30°	3056.9	8.5
30°-40°	4465.3	12.4
40°-50°	5947.3	16.5
50°-60°	7194.3	20.0
60°-70°	7702.3	21.4
70°-80°	4571.0	12.7
80°-90°	504.7	1.4
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°	35946.0	100.0
0°-180°	35946.0	100.0

**Coefficient of Utilization**



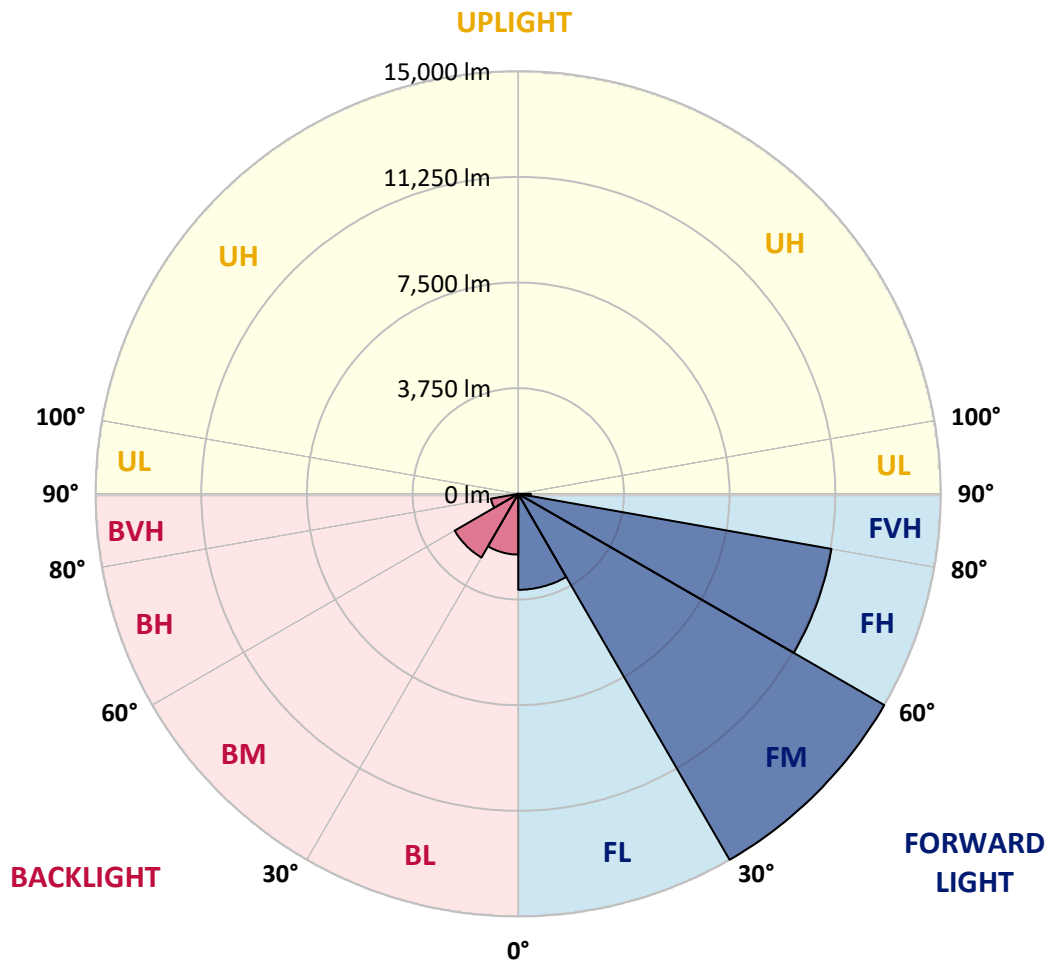
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3406.1	9.5			
FM (30°-60°)	14999.6	41.7			
FH (60°-80°)	11290.4	31.4			G4/12000
FVH (80°-90°)	447.4	1.2			G3/500
BL (0°-30°)	2155.0	6.0	B3/2500		
BM (30°-60°)	2607.3	7.3	B3/5000		
BH (60°-80°)	982.9	2.7	B2/1000		G2/1000
BVH (80°-90°)	57.3	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4
2.5°	6213.5	6178.4	6194.2	6235.6	6156.3	6206.7	6171.0	6233.3	6250.3	6257.1	6282.0
5°	6335.2	6288.8	6289.9	6315.9	6225.9	6248.0	6187.4	6231.0	6244.6	6262.7	6323.3
7.5°	6548.6	6497.1	6492.5	6499.3	6387.3	6362.4	6276.9	6285.9	6296.1	6306.9	6385.6
10°	6841.8	6789.2	6780.1	6762.5	6614.8	6549.7	6422.9	6403.1	6412.7	6395.2	6488.6
12.5°	7193.9	7130.5	7097.1	7046.7	6875.8	6773.9	6606.3	6552.0	6560.5	6523.7	6588.8
15°	7564.1	7496.7	7478.6	7401.0	7190.5	7051.2	6834.4	6751.8	6754.1	6711.6	6708.8
17.5°	7959.2	7899.2	7884.5	7835.2	7602.0	7436.1	7168.4	7056.3	7047.8	7005.9	6881.4
20°	8407.5	8369.6	8361.6	8333.3	8122.2	7928.0	7623.5	7472.9	7464.4	7398.2	7132.2
22.5°	8958.8	8914.1	8890.3	8866.0	8708.0	8506.0	8178.8	7966.5	7999.9	7888.4	7457.7
25°	9507.3	9471.6	9451.3	9435.4	9305.2	9113.9	8782.8	8533.7	8567.1	8447.7	7853.3
27.5°	10051.8	9973.2	10006.0	10043.3	9913.2	9760.9	9400.9	9129.8	9139.9	9010.9	8327.1
30°	10557.9	10516.6	10573.2	10608.3	10513.2	10394.3	10016.2	9754.1	9769.4	9616.0	8870.5
32.5°	11007.3	10947.9	11074.1	11142.6	11086.0	10988.1	10623.0	10374.5	10379.0	10286.2	9519.2
35°	11337.3	11341.3	11515.6	11699.6	11699.0	11560.9	11250.7	11135.3	11187.9	11146.6	10315.1
37.5°	11673.6	11643.6	11845.1	12118.5	12207.9	12085.1	11901.1	11969.6	12040.4	12167.2	11066.8
40°	11832.6	11833.8	12077.7	12393.6	12600.2	12577.0	12512.4	12970.4	13117.0	13154.9	10765.6
42.5°	11640.7	11654.3	12089.6	12648.3	12969.2	13092.1	13233.6	14013.6	14112.7	13898.1	11120.5
45°	11389.4	11408.1	11919.2	12736.0	13296.4	13642.3	14032.3	14793.0	14870.0	14584.7	11636.8
47.5°	11153.4	11187.9	11720.0	12683.4	13555.7	14262.1	14746.6	15527.2	15621.2	15244.7	12117.9
50°	10843.2	10920.2	11463.0	12543.6	13750.9	14801.5	15406.6	16410.8	16447.0	15888.9	12551.5
52.5°	10543.2	10565.8	11172.0	12364.7	13898.1	15290.6	16194.0	17318.7	17360.6	16594.2	12951.7
55°	10132.2	10166.2	10843.7	12140.5	13988.7	15700.4	16991.0	18265.2	18302.5	17441.6	13381.9
57.5°	9679.9	9704.9	10418.1	11796.4	13920.8	16064.4	17840.6	19457.3	19549.0	18313.3	13768.5
60°	9112.2	9145.0	9869.0	11319.2	13686.4	16488.9	18890.1	20731.4	20731.4	19113.7	14074.7
62.5°	8312.4	8358.2	9091.3	10632.0	13199.6	16734.6	19727.8	21840.9	21833.5	19744.2	14178.3
65°	7382.9	7390.3	8054.8	9665.2	12391.3	16603.8	20047.1	22489.0	22472.6	20200.5	14035.7
67.5°	6481.2	6473.3	7063.1	8342.9	11225.8	15960.2	19894.8	22725.6	22745.4	20310.3	13504.2
70°	5202.0	5191.8	5734.0	6780.1	9463.2	14574.0	19029.3	22125.0	22185.0	19683.1	12621.7
72.5°	3722.3	3707.0	3966.8	4658.6	6949.3	11988.8	16871.6	19816.7	19926.5	17674.2	11010.2
75°	2179.8	2196.3	2467.4	2865.3	4127.0	7886.7	13684.2	16642.3	16799.1	15035.3	8659.9
77.5°	1212.5	1209.1	1408.3	1707.8	2029.8	3949.9	9553.2	13106.2	13159.4	11781.7	5823.5
80°	585.3	582.5	636.2	802.7	1157.6	1774.6	4692.0	8143.1	8304.5	7160.5	2847.2
82.5°	421.1	423.4	453.4	440.4	431.9	782.8	1565.7	2564.8	2341.7	1807.4	880.2
85°	316.4	316.4	343.6	317.0	309.6	398.5	761.3	916.4	879.6	804.4	523.0
87.5°	148.9	141.5	150.6	142.6	132.5	176.6	334.0	387.2	358.3	312.5	228.7
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°	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4	6294.4
2.5°	6324.4	6336.9	6402.0	6486.9	6494.8	6567.8	6590.5	6681.0	6677.6	6652.7	6678.8
5°	6366.9	6404.8	6516.3	6635.8	6666.3	6758.0	6777.8	6866.7	6872.4	6841.8	6867.3
7.5°	6434.8	6490.3	6595.6	6713.9	6727.5	6809.0	6805.6	6889.9	6875.2	6848.6	6882.6
10°	6518.0	6561.0	6631.2	6709.3	6703.1	6768.2	6747.8	6808.4	6777.8	6756.3	6795.4
12.5°	6601.8	6603.5	6609.2	6658.4	6619.9	6634.6	6594.4	6639.2	6592.2	6555.9	6579.7
15°	6685.6	6638.0	6558.2	6527.6	6420.7	6365.8	6308.0	6361.8	6252.0	6194.2	6209.0
17.5°	6803.9	6689.5	6421.2	6032.9	5703.5	5521.8	5385.4	5280.1	5282.3	5334.4	5365.5
20°	6898.4	6463.7	5808.2	5568.2	5322.0	4989.7	4474.0	4332.5	4239.1	4237.4	4252.7
22.5°	6865.0	6224.8	5808.8	5433.5	4898.0	4234.0	4011.0	3881.4	3663.4	3197.6	3159.7
25°	7172.4	6436.5	5842.2	5155.0	4222.7	3885.9	3579.7	3327.8	2777.6	2691.0	2687.6
27.5°	7540.9	6722.4	5887.4	4553.8	3952.7	3498.2	3108.7	2500.2	2236.4	2199.1	2186.1
30°	7967.1	7059.2	5611.2	4361.4	3665.1	3047.0	2530.8	1920.0	1705.5	1692.5	1695.9
32.5°	8501.4	7443.5	5323.1	4202.9	3317.0	2524.6	1725.9	1464.4	1341.5	1207.4	1250.4
35°	9070.9	7222.2	5495.2	4007.0	2881.2	1898.5	1311.0	1163.2	1063.6	889.8	819.1
37.5°	8846.7	7374.4	5695.0	3791.9	2336.6	1287.2	1014.4	886.4	793.0	648.1	645.3
40°	9123.0	7810.3	5837.6	3445.5	1689.6	913.0	739.3	686.0	643.0	562.6	551.3
42.5°	9610.9	8190.7	5934.4	3001.2	1009.8	679.3	631.1	639.1	601.7	540.0	532.6
45°	10091.5	8523.5	5843.3	2323.6	718.3	612.5	615.3	611.9	566.6	544.0	536.0
47.5°	10529.0	8804.8	5586.9	1532.9	623.2	597.2	603.4	588.1	537.2	524.2	523.0
50°	10904.9	9102.0	4423.6	1174.5	599.4	576.8	590.4	565.5	477.7	463.6	448.9
52.5°	11136.4	8607.9	3930.1	902.3	574.5	545.1	549.1	569.4	450.0	358.3	335.7
55°	11101.3	7754.3	3653.8	751.1	534.9	501.0	508.9	541.7	407.0	280.2	253.6
57.5°	11268.3	7684.1	3367.4	639.1	461.3	454.0	438.1	493.6	370.2	185.7	176.0
60°	11241.1	7675.6	3005.1	502.6	407.6	381.5	361.7	401.9	265.5	69.1	62.8
62.5°	11197.0	7457.7	2593.6	450.6	375.3	365.1	348.1	393.4	225.9	48.1	35.7
65°	10975.6	7103.9	2127.2	394.5	350.4	329.4	328.3	372.5	186.2	26.6	11.9
67.5°	10220.0	6333.5	1582.7	363.4	335.7	324.9	344.7	358.9	178.9	27.2	10.8
70°	9280.3	5317.4	1021.1	327.7	314.7	320.4	336.8	362.8	173.8	24.9	9.6
72.5°	7759.9	4113.5	619.3	292.6	284.7	301.7	332.3	362.8	160.8	20.9	7.9
75°	5903.3	2743.6	460.8	258.7	249.6	271.1	302.8	348.7	157.9	18.1	5.1
77.5°	3665.1	1295.7	363.4	217.4	207.7	229.8	254.2	287.6	160.2	17.5	2.8
80°	1482.5	541.1	285.3	174.9	163.0	174.9	206.0	245.1	127.4	24.9	0.0
82.5°	623.8	380.9	233.2	139.2	130.2	114.9	140.4	181.7	100.2	19.8	0.0
85°	412.6	264.3	167.0	94.5	83.2	56.0	68.5	82.1	57.2	0.0	0.0
87.5°	186.8	117.2	73.0	32.3	27.2	15.3	9.1	7.9	0.0	0.0	0.0
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)