

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: P510426

Luminaire Tested: **CTN-CA10-210-740-U-T2-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510426  
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: MCGRAW-EDISON  
Catalog Number: CTN-CA10-210-740-U-T2-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31765 lumens  
Efficiency: N/A  
Efficacy: 149.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

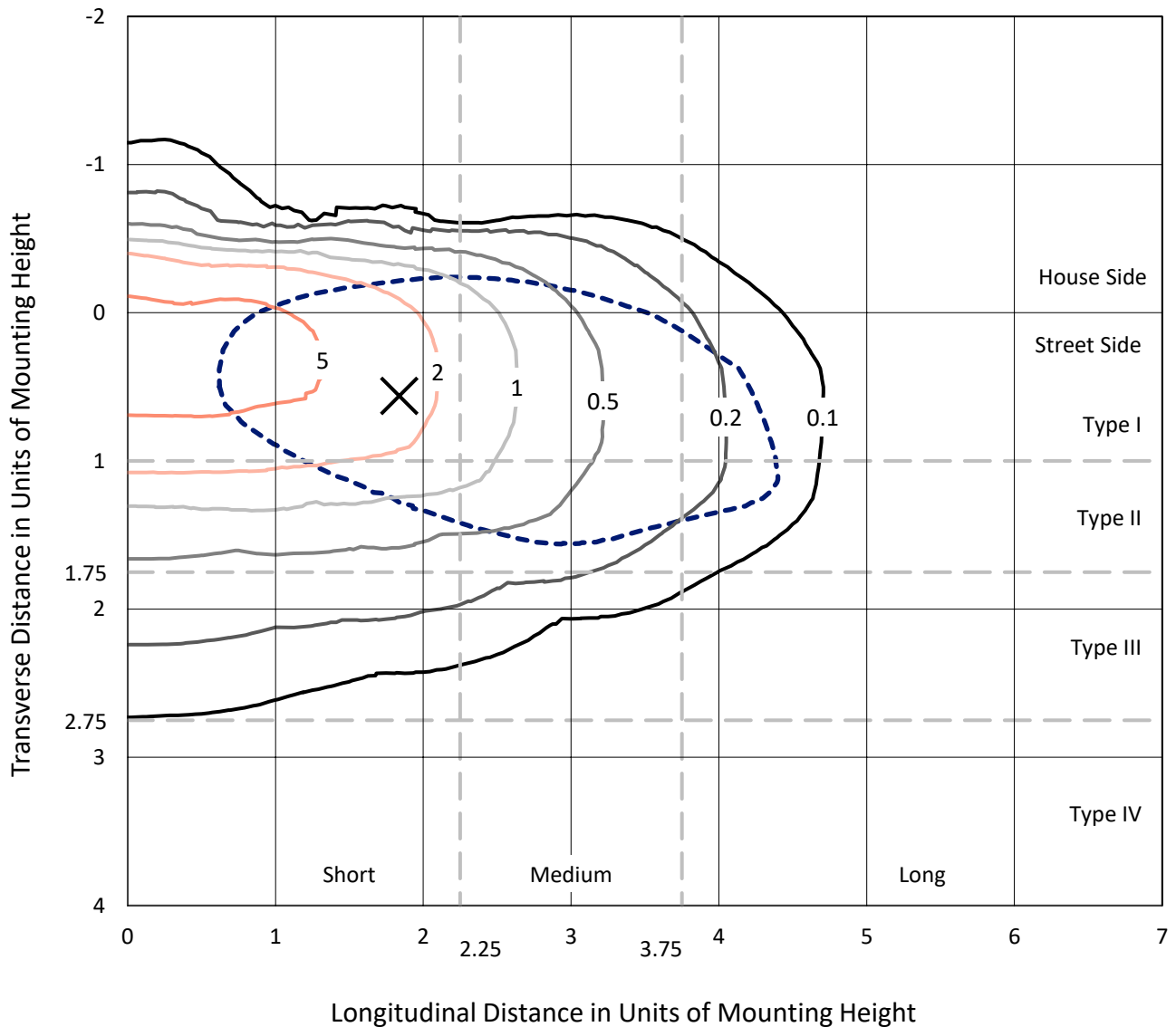
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

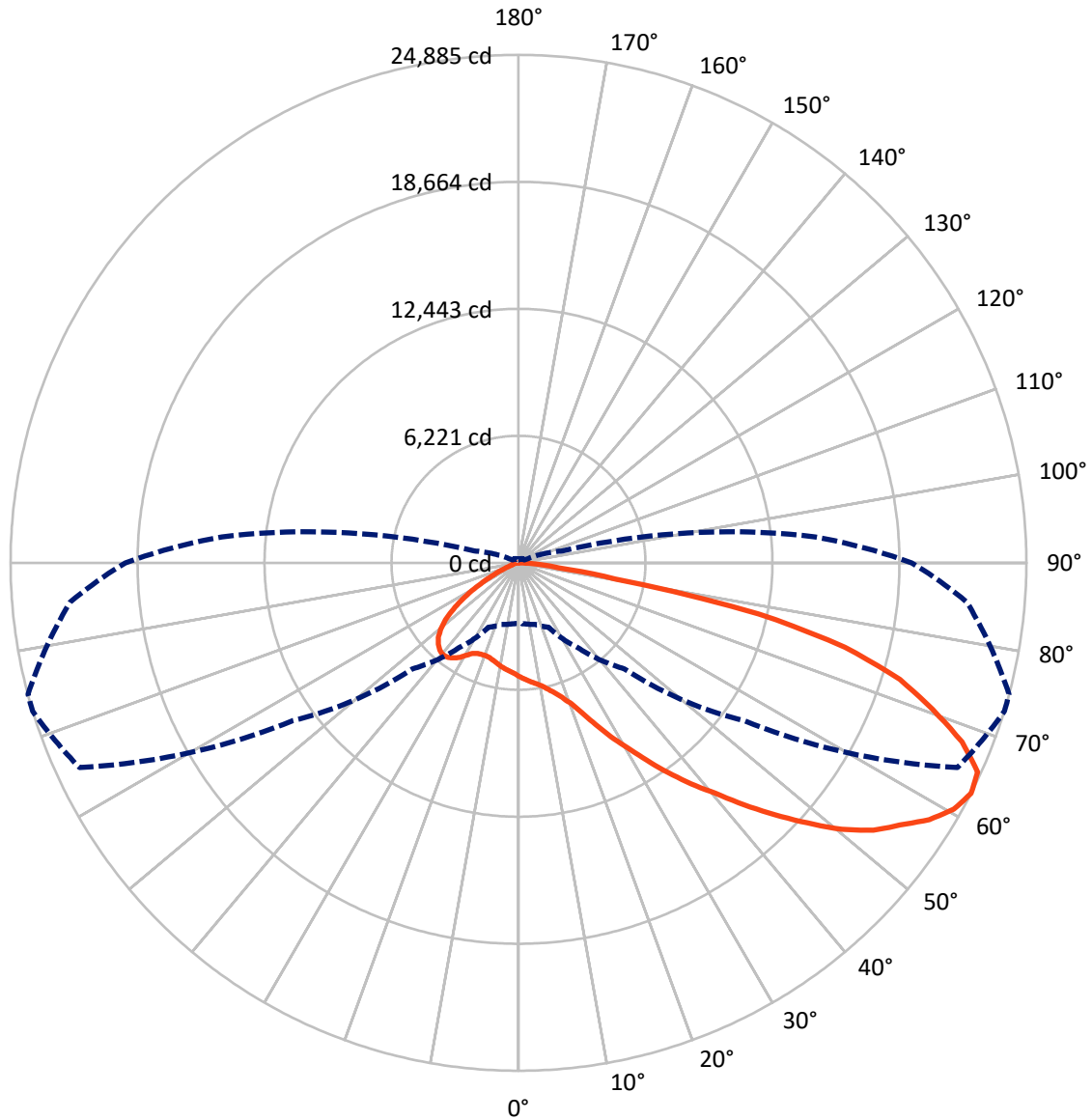
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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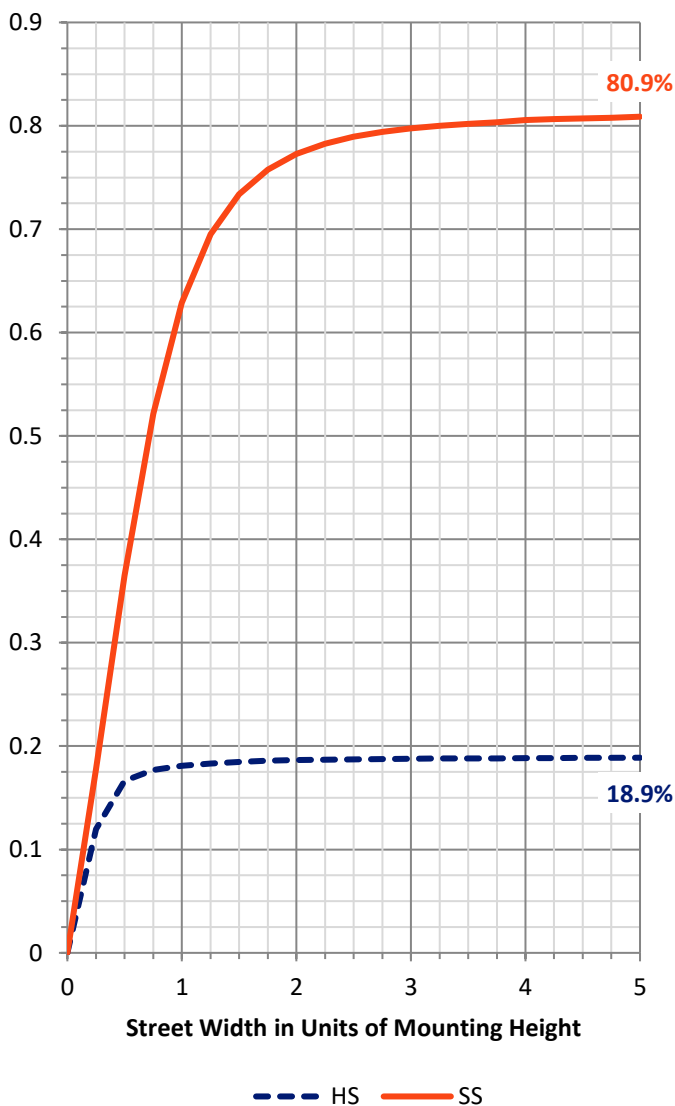
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6076.5	0.0	6076.5
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	25688.5	0.0	25688.5
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	31765.0	0.0	31765.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	532.1	1.7
10°-20°	1600.4	5.0
20°-30°	2765.2	8.7
30°-40°	4158.1	13.1
40°-50°	5544.5	17.5
50°-60°	6529.7	20.6
60°-70°	6491.7	20.4
70°-80°	3727.0	11.7
80°-90°	416.4	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°	31765.0	100.0
0°-180°	31765.0	100.0

**Coefficient of Utilization**



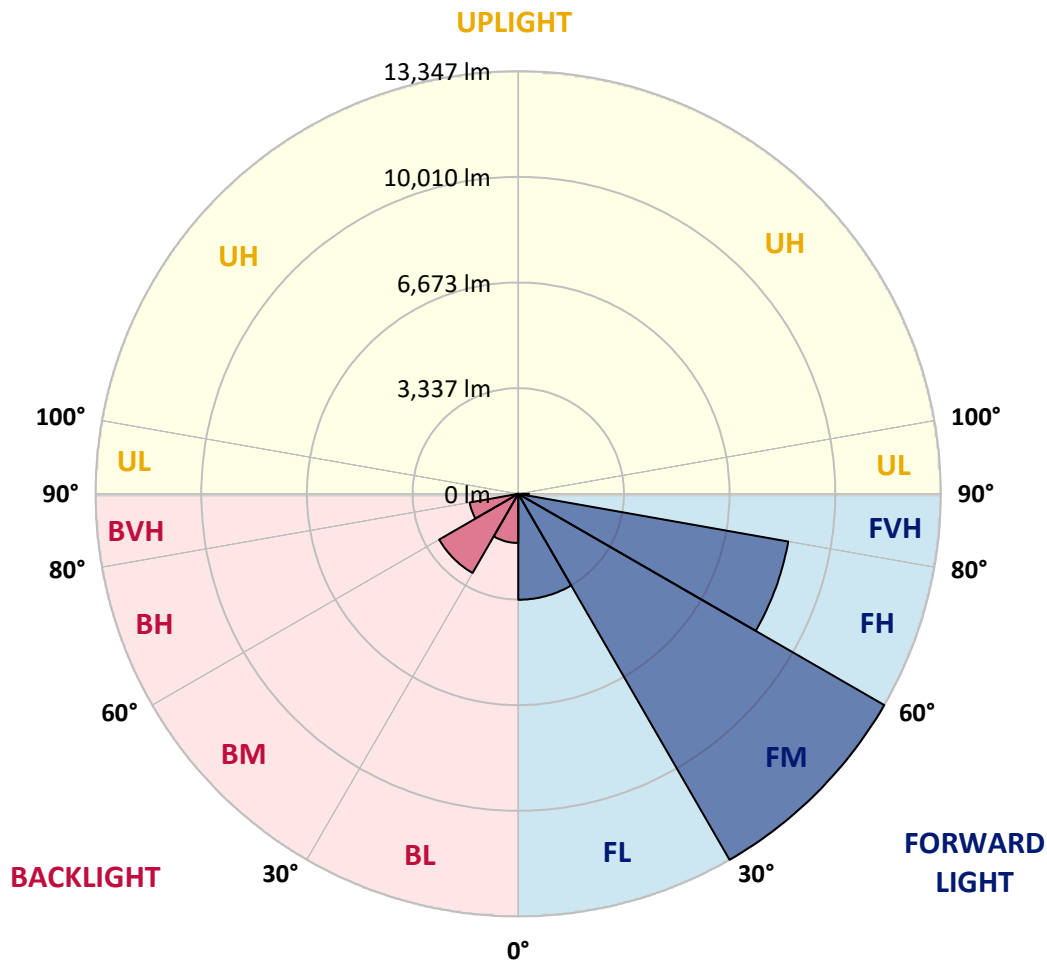
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3344.8	10.5			
FM (30°-60°)	13346.9	42.0			
FH (60°-80°)	8658.6	27.3			G4/12000
FVH (80°-90°)	338.2	1.1			G3/500
BL (0°-30°)	1552.8	4.9	B3/2500		
BM (30°-60°)	2885.4	9.1	B3/5000		
BH (60°-80°)	1560.1	4.9	B3/2500		G3/2500
BVH (80°-90°)	78.2	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9
2.5°	5960.2	5975.1	5957.3	5949.5	5940.9	5885.3	5820.4	5754.1	5700.6	5692.1	5622.2
5°	6378.7	6386.6	6357.3	6323.8	6266.1	6174.1	6057.9	5943.1	5836.1	5807.6	5680.0
7.5°	6700.3	6685.3	6678.2	6649.7	6599.0	6497.8	6321.7	6133.4	5968.0	5928.1	5734.1
10°	7001.9	6995.5	6941.3	6905.6	6825.1	6731.7	6586.9	6348.1	6114.9	6050.7	5781.2
12.5°	7328.5	7314.2	7292.1	7215.1	7149.5	6991.9	6817.2	6599.8	6340.2	6254.6	5861.8
15°	7622.2	7583.7	7571.6	7491.0	7424.7	7304.2	7128.8	6876.4	6599.0	6525.6	6015.1
17.5°	7901.7	7883.9	7856.8	7801.9	7727.8	7635.1	7494.6	7224.4	6937.7	6830.8	6275.3
20°	8139.2	8117.1	8093.5	8108.5	8092.1	8032.9	7944.5	7714.2	7364.1	7260.7	6591.9
22.5°	8304.6	8303.9	8398.0	8452.9	8484.3	8482.1	8460.7	8330.3	7978.0	7873.2	7065.4
25°	8442.2	8452.9	8572.0	8780.9	8967.7	8984.8	9136.0	9073.9	8774.5	8665.4	7777.7
27.5°	8482.8	8504.2	8720.3	9049.0	9332.8	9605.1	9826.9	9940.3	9662.9	9532.4	8543.5
30°	8512.1	8520.6	8732.4	9126.0	9724.2	10155.6	10552.0	10743.8	10505.0	10409.4	9396.9
32.5°	8306.0	8308.9	8633.3	9229.4	10011.6	10759.5	11228.7	11590.2	11527.5	11401.3	10330.3
35°	8022.2	8075.0	8447.2	9129.6	10248.3	11314.3	11953.1	12492.2	12617.7	12527.1	11262.9
37.5°	7671.4	7712.8	8111.4	8981.3	10300.3	11695.7	12516.4	13409.1	13737.1	13722.1	12388.8
40°	7240.0	7290.7	7767.7	8661.8	10274.7	11973.1	13177.4	14424.5	14840.9	14793.8	13505.4
42.5°	6730.2	6804.4	7267.1	8251.1	10087.2	12142.8	13718.6	15458.4	16207.8	16177.1	14493.6
45°	6226.1	6266.1	6688.2	7679.3	9742.0	12197.7	14227.7	16883.0	17609.6	17575.3	15684.4
47.5°	5706.3	5741.3	6181.9	7076.8	9143.1	12087.2	14630.5	18106.5	19037.7	19003.5	16867.3
50°	4497.0	4629.0	5532.4	6547.0	8460.7	11774.2	15010.6	19631.0	20532.2	20386.8	17903.3
52.5°	3847.5	3895.3	4363.7	6012.9	7779.8	11240.1	15264.4	21043.5	21761.5	21551.9	18962.9
55°	3596.5	3628.6	3858.2	5028.2	7140.2	10432.3	15563.2	22459.5	22683.4	22630.0	19827.1
57.5°	3406.1	3441.8	3605.8	4199.7	6466.4	9300.0	15469.8	23455.6	23735.9	23564.7	20744.7
60°	3136.6	3180.1	3397.6	3770.5	5700.6	8150.6	14647.7	23863.5	24500.9	24308.4	21442.8
62.5°	2966.9	2995.4	3120.2	3481.7	5066.0	7342.0	13477.6	23732.3	24885.3	24878.1	22048.1
65°	2736.6	2778.7	2912.0	3205.0	4501.3	6715.3	12373.8	23084.2	24719.8	24726.3	22172.9
67.5°	2495.6	2512.7	2652.4	2887.7	3836.1	6141.3	10945.6	21975.4	23431.4	23578.3	21309.4
70°	2194.7	2186.1	2337.3	2509.1	3135.2	5214.3	8810.1	20003.2	21527.6	21588.2	19563.2
72.5°	1726.9	1734.8	1776.9	1895.9	2380.1	4103.5	6393.0	16900.1	19537.6	19645.2	17331.5
75°	1160.8	1173.6	1369.7	1485.9	1712.0	2949.1	4020.0	11407.7	16516.5	16820.2	14184.9
77.5°	885.6	893.4	950.5	1077.4	1238.5	2102.0	2179.0	6216.1	12024.4	12745.3	11096.8
80°	627.5	630.3	574.0	510.5	659.5	1426.0	1287.0	2647.5	4791.5	5662.1	6517.8
82.5°	280.9	276.7	325.9	270.9	380.0	551.9	607.5	1284.9	1990.1	2139.1	2328.7
85°	130.5	146.2	167.6	140.5	226.0	213.2	236.7	547.6	932.6	1029.6	1023.9
87.5°	32.1	34.9	44.2	56.3	82.0	72.7	71.3	161.1	208.2	207.5	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9	5570.9
2.5°	5574.4	5537.3	5449.6	5364.8	5284.2	5230.7	5170.9	5108.1	5070.3	5052.5	5091.0
5°	5602.2	5531.6	5364.1	5195.8	5053.2	4931.3	4845.7	4773.0	4733.8	4737.3	4739.5
7.5°	5625.8	5526.7	5292.1	5054.6	4832.2	4681.0	4569.1	4490.6	4445.7	4411.5	4437.1
10°	5646.4	5506.0	5207.9	4891.3	4649.6	4425.7	4273.9	4179.0	4096.3	4050.0	4086.3
12.5°	5668.5	5498.1	5113.8	4745.2	4432.2	4181.9	3973.7	3879.6	3798.3	3763.3	3785.4
15°	5764.8	5528.1	5026.1	4573.3	4217.5	3893.8	3669.2	3553.7	3489.5	3447.5	3456.7
17.5°	5930.2	5607.2	4969.8	4393.7	3978.0	3635.7	3344.8	3210.0	3103.8	3073.8	3066.0
20°	6165.5	5757.7	4969.8	4241.8	3706.3	3349.1	3014.0	2786.5	2621.1	2559.0	2606.8
22.5°	6560.5	6013.6	5019.0	4104.2	3472.4	3051.7	2652.4	2305.2	2082.0	1991.5	2044.2
25°	7113.1	6409.4	5098.8	3983.7	3259.2	2709.5	2194.0	1794.7	1548.7	1441.0	1439.6
27.5°	7834.7	7014.7	5260.0	3885.3	3004.0	2266.7	1715.5	1331.2	1100.2	1035.3	1044.6
30°	8634.7	7670.7	5564.4	3742.7	2693.8	1771.2	1249.2	978.3	815.7	730.1	731.6
32.5°	9406.2	8350.2	5925.9	3650.0	2290.9	1335.5	890.6	698.1	596.8	546.2	554.0
35°	10233.3	8936.3	6194.8	3494.5	1818.2	965.4	629.6	523.4	481.3	454.9	456.3
37.5°	11126.7	9580.9	6415.8	3286.3	1374.7	663.1	464.9	448.5	430.7	397.2	394.3
40°	12060.1	10327.4	6547.7	2949.8	955.5	459.2	395.0	413.6	403.6	360.1	356.5
42.5°	12851.5	10903.6	6580.5	2504.1	618.2	372.2	357.9	386.5	388.6	344.4	338.7
45°	13611.6	11416.9	6516.3	1917.3	428.5	350.1	335.1	374.3	377.2	337.3	328.0
47.5°	14462.3	12119.3	6400.1	1279.2	354.4	330.8	327.3	354.4	364.4	331.6	320.1
50°	15495.4	12690.4	6055.7	785.8	334.4	318.7	318.7	335.1	348.7	320.1	314.4
52.5°	16555.0	13188.1	5545.9	539.0	322.3	305.9	315.2	322.3	327.3	301.6	306.6
55°	17314.4	13629.5	4785.8	433.5	315.2	297.3	319.4	305.2	298.0	275.9	270.9
57.5°	18157.2	14154.2	4008.6	384.3	305.9	302.3	305.2	278.1	258.1	235.3	230.3
60°	18745.4	14436.6	3057.4	361.5	295.2	297.3	281.6	245.3	208.9	192.5	189.0
62.5°	19258.8	14597.7	2241.0	332.3	285.2	284.5	255.3	209.6	171.8	154.0	151.2
65°	19181.1	14346.0	1452.4	308.7	277.4	268.1	228.9	179.7	143.3	129.8	128.3
67.5°	18326.1	13232.3	914.8	284.5	263.8	247.4	205.4	160.4	131.9	116.2	114.8
70°	16531.5	11694.3	559.7	253.1	234.6	218.9	181.8	150.4	124.8	106.2	102.7
72.5°	14050.9	10015.9	395.7	223.2	204.6	186.1	154.0	143.3	119.1	95.5	92.7
75°	11543.9	7377.7	331.6	194.7	174.7	149.7	131.2	133.3	111.9	87.0	84.8
77.5°	8129.2	4599.7	308.7	159.0	137.6	119.1	113.4	121.9	102.7	79.9	77.7
80°	4744.5	2583.3	255.3	125.5	103.4	92.0	94.8	103.4	89.8	72.0	69.2
82.5°	1915.2	1022.5	179.7	97.7	75.6	73.4	77.7	84.1	74.2	60.6	59.2
85°	683.8	319.4	102.0	64.2	48.5	50.6	49.9	59.9	53.5	44.2	43.5
87.5°	179.7	63.5	45.6	25.7	20.7	20.7	19.3	27.8	25.7	20.0	22.1
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)