

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: P510421

Luminaire Tested: **CTN-CA10-210-730-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510421  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-210-730-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33814 lumens  
Efficiency: N/A  
Efficacy: 158.8 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

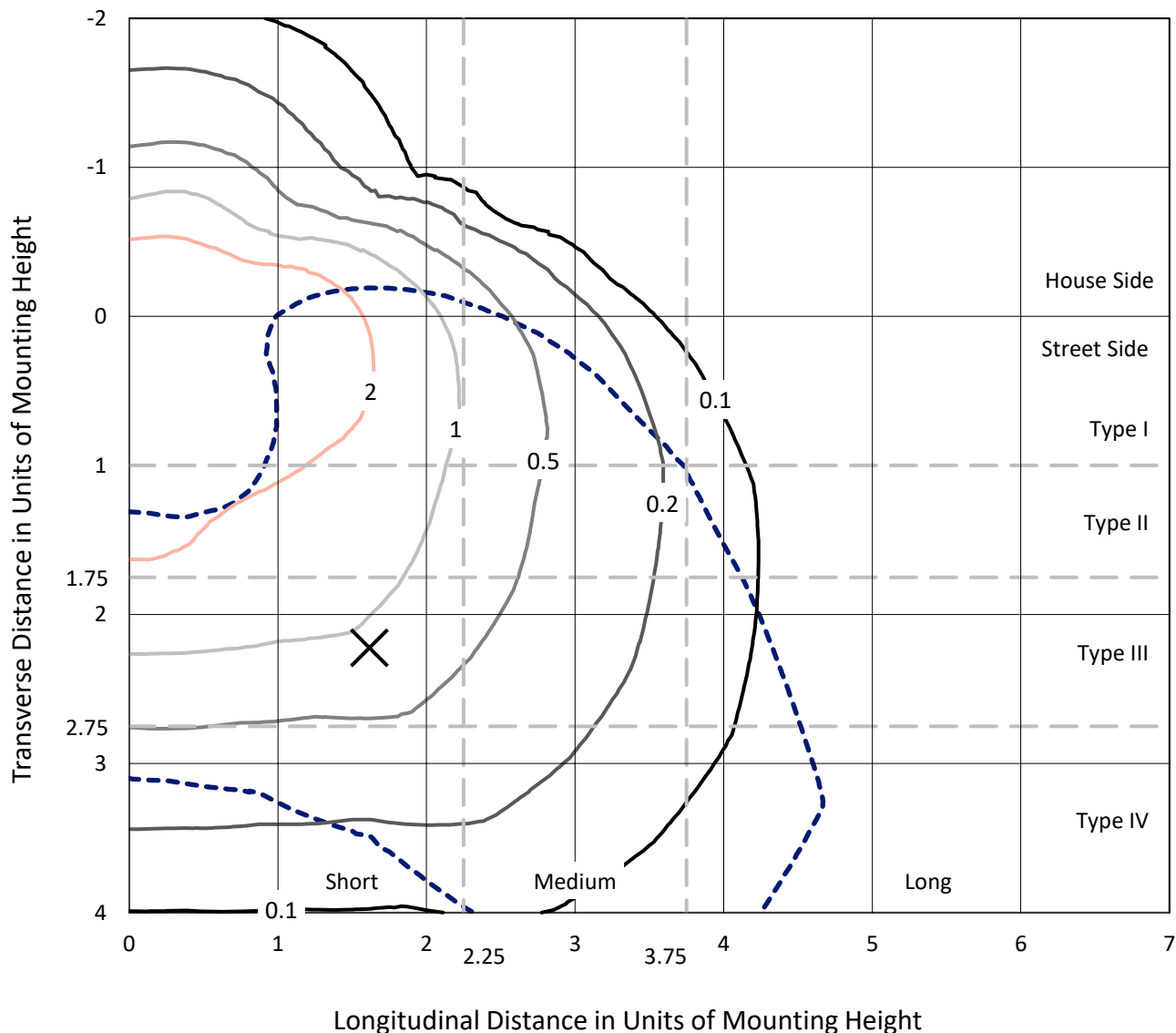
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

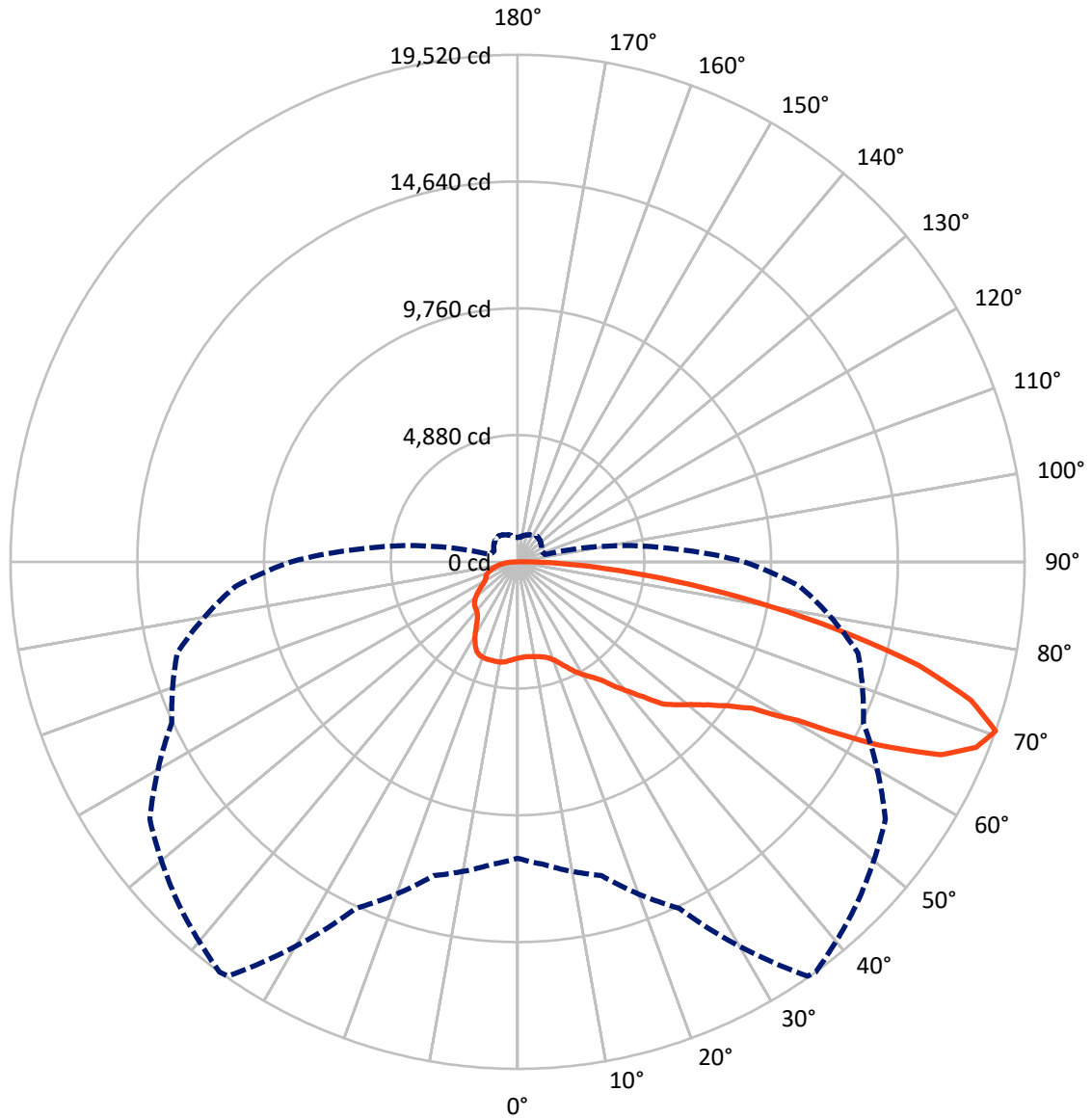
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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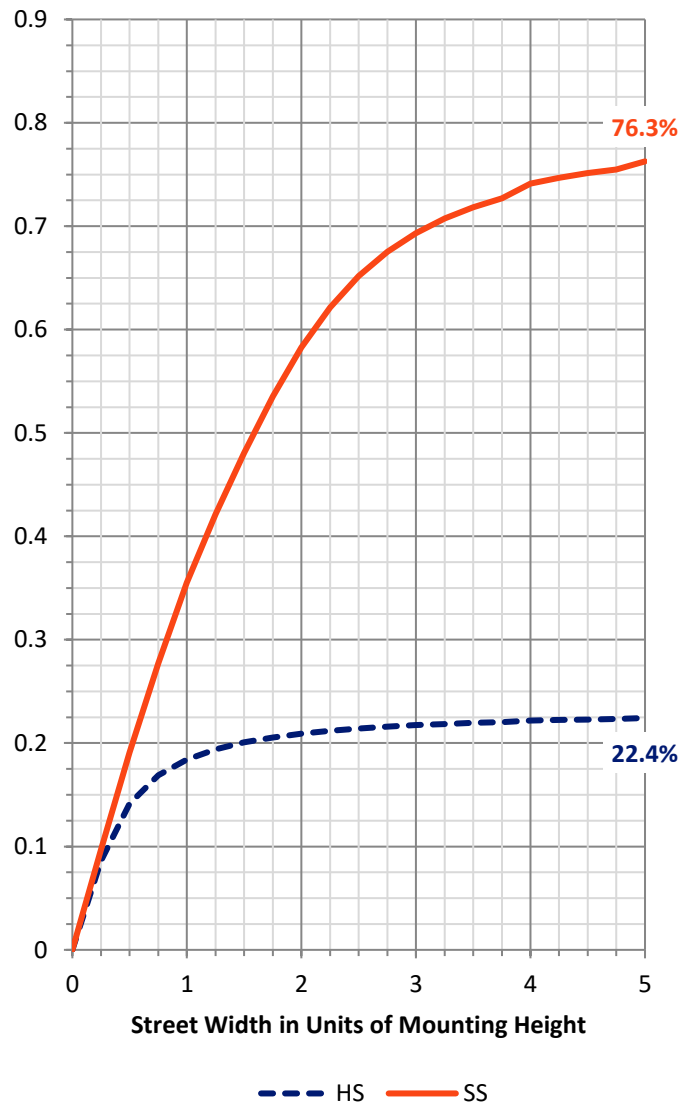
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7704.3	0.0	7704.3
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	26109.7	0.0	26109.7
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	33814.0	0.0	33814.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	358.8	1.1
10°-20°	1109.3	3.3
20°-30°	2000.9	5.9
30°-40°	3099.0	9.2
40°-50°	4707.4	13.9
50°-60°	6524.8	19.3
60°-70°	8484.5	25.1
70°-80°	6265.7	18.5
80°-90°	1263.6	3.7
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°	33814.0	100.0
0°-180°	33814.0	100.0

**Coefficient of Utilization**



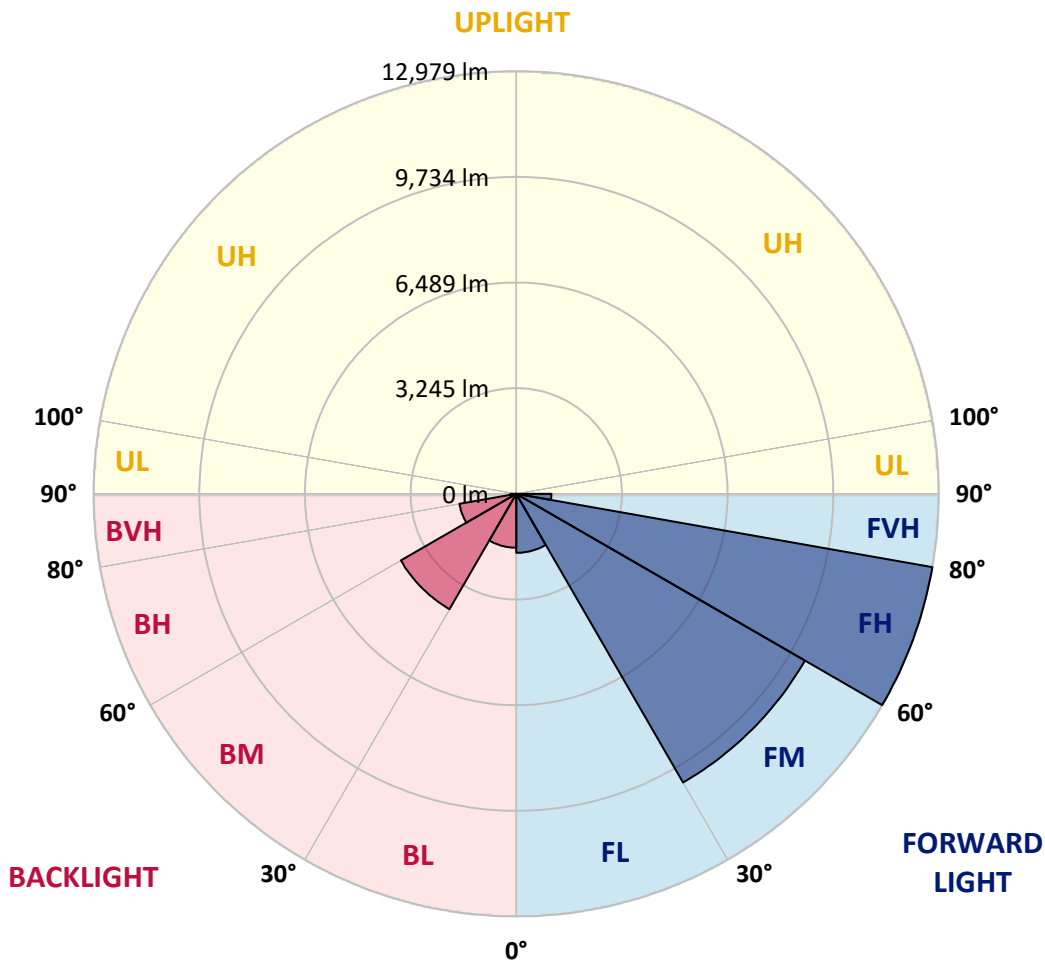
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1812.8	5.4			
FM (30°-60°)	10238.8	30.3			
FH (60°-80°)	12978.6	38.4			G5
FVH (80°-90°)	1079.6	3.2			G5
BL (0°-30°)	1656.2	4.9	B3/2500		
BM (30°-60°)	4092.4	12.1	B3/5000		
BH (60°-80°)	1771.6	5.2	B3/2500		G3/2500
BVH (80°-90°)	184.1	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6
2.5°	3681.2	3676.3	3673.5	3679.1	3681.2	3681.9	3683.3	3681.9	3678.4	3691.0	3706.4
5°	3681.9	3679.1	3673.5	3668.6	3668.6	3668.6	3669.3	3685.4	3692.4	3691.0	3709.9
7.5°	3687.5	3685.4	3674.9	3671.4	3679.8	3682.6	3696.6	3691.7	3699.4	3712.0	3728.1
10°	3688.2	3685.4	3676.3	3684.0	3707.8	3712.0	3718.3	3732.3	3735.1	3750.5	3766.7
12.5°	3695.2	3695.2	3698.7	3715.5	3740.7	3745.6	3769.5	3780.7	3797.5	3805.2	3824.8
15°	3732.3	3731.6	3740.0	3759.0	3799.6	3802.4	3831.8	3865.4	3878.0	3896.9	3928.4
17.5°	3820.6	3824.8	3825.5	3839.5	3887.8	3889.2	3937.5	3969.0	3997.7	4031.3	4103.4
20°	4029.9	4022.2	4013.8	4013.8	4032.7	4042.5	4079.6	4130.0	4188.8	4248.3	4333.1
22.5°	4293.1	4308.5	4277.7	4261.6	4270.7	4259.5	4287.5	4328.1	4396.8	4485.7	4592.8
25°	4607.5	4608.9	4606.8	4541.7	4521.4	4528.4	4551.5	4589.3	4680.3	4751.0	4906.4
27.5°	4914.2	4907.8	4885.4	4816.8	4797.2	4807.0	4806.3	4910.7	5003.8	5094.1	5276.8
30°	5192.8	5209.6	5169.7	5054.2	5056.3	5054.9	5087.1	5221.5	5391.6	5559.7	5747.3
32.5°	5684.3	5633.2	5579.3	5351.0	5309.0	5304.1	5323.0	5523.3	5775.3	6058.8	6284.3
35°	6147.1	6134.5	6081.3	5849.5	5606.6	5602.4	5576.5	5820.1	6174.4	6699.5	6980.9
37.5°	6620.3	6602.1	6549.6	6352.2	6110.7	6087.6	5869.8	6136.6	6615.4	7448.6	7849.8
40°	7184.6	7173.4	7092.2	6839.5	6591.6	6556.6	6330.5	6469.1	7172.0	8446.3	8729.1
42.5°	7679.6	7677.5	7584.4	7349.9	7139.1	7104.1	6911.6	7055.8	7945.7	9423.6	9590.3
45°	8043.0	8098.3	8102.5	7968.8	7823.2	7792.3	7741.2	7940.1	8840.4	10310.7	10286.2
47.5°	8349.6	8397.3	8347.5	8278.9	8229.2	8231.3	8310.4	8705.3	9724.0	11083.6	10893.2
50°	8862.1	8832.7	8574.4	8533.8	8596.8	8633.9	8863.5	9531.4	10735.7	11808.9	11437.9
52.5°	9601.5	9488.7	8981.9	8899.2	9138.0	9152.0	9517.4	10270.1	11746.6	12431.4	11936.4
55°	10613.1	10520.0	9947.3	9565.8	9686.2	9780.7	10295.3	11026.9	12572.1	13016.7	12320.0
57.5°	12108.6	12115.6	11648.6	10937.3	10527.7	10628.5	11030.4	11762.7	13254.0	13506.7	12559.5
60°	13307.2	13529.1	13389.8	13065.0	12476.9	12408.2	12102.3	12529.4	13836.5	13923.3	12788.4
62.5°	14138.2	14239.1	14717.9	14786.6	15458.7	15487.4	14022.0	13427.6	14476.4	14196.4	12836.7
65°	14096.2	14158.6	14915.4	15836.7	17822.3	17911.2	17053.6	14786.6	14914.7	14318.2	12696.0
67.5°	13114.7	13208.5	14170.5	15892.8	19081.8	19048.2	18504.2	16678.3	15058.9	14122.8	12025.3
70°	11409.9	11699.0	12507.0	14711.6	19475.3	19520.1	18517.5	17282.5	14687.1	13570.4	10907.2
72.5°	9404.0	9495.0	10258.2	12725.4	18325.0	18259.2	17758.6	16485.1	14015.0	12571.4	8950.3
75°	7151.7	7151.7	8075.9	10141.3	15736.6	15967.7	16162.3	14930.8	12415.9	10246.3	6094.6
77.5°	4747.5	4917.7	5661.9	7620.8	12456.6	12627.4	13299.5	12726.8	10165.8	7513.7	2783.7
80°	2518.3	2539.3	3337.5	5064.0	8909.7	9231.8	10156.0	9815.7	7312.1	3520.2	703.6
82.5°	880.8	961.3	1467.5	2934.9	5870.5	6071.5	6737.3	5832.7	2582.7	779.2	389.3
85°	437.6	453.0	646.2	1397.4	3305.3	3402.6	3936.1	2271.9	415.9	340.3	264.6
87.5°	210.7	215.6	247.8	499.9	1436.6	1503.2	1591.4	739.3	154.0	129.5	114.8
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°	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6	3703.6
2.5°	3709.9	3716.2	3728.1	3731.6	3723.2	3738.6	3753.3	3766.7	3766.0	3770.9	3788.4
5°	3718.3	3731.6	3744.2	3766.7	3788.4	3801.0	3812.9	3824.1	3827.6	3838.1	3848.6
7.5°	3744.2	3757.6	3786.3	3825.5	3826.9	3858.4	3878.7	3882.2	3885.0	3885.0	3909.5
10°	3784.2	3808.7	3854.9	3882.2	3906.7	3896.2	3917.2	3903.9	3894.1	3898.3	3915.1
12.5°	3852.8	3874.5	3941.0	3971.1	3948.7	3944.5	3923.5	3893.4	3859.1	3855.6	3871.0
15°	3960.6	4001.2	4060.7	4089.4	4033.4	3983.7	3913.0	3851.4	3784.9	3760.4	3770.2
17.5°	4134.2	4183.2	4248.3	4228.7	4126.5	4028.5	3911.6	3781.4	3652.5	3562.9	3586.0
20°	4388.4	4424.8	4478.0	4398.9	4249.7	4088.0	3896.2	3690.3	3472.6	3309.5	3290.6
22.5°	4655.1	4710.4	4678.2	4531.9	4336.6	4111.1	3864.0	3558.0	3221.3	3016.8	2986.0
25°	4976.5	4994.7	4883.3	4662.8	4361.1	4074.7	3759.7	3364.8	2964.3	2771.8	2762.7
27.5°	5317.4	5276.1	5068.9	4723.0	4333.8	3966.9	3550.3	3059.5	2731.9	2561.7	2535.1
30°	5702.5	5606.6	5222.2	4729.3	4230.8	3756.9	3285.7	2820.8	2542.8	2372.0	2344.7
32.5°	6198.2	5972.0	5364.3	4664.2	4013.8	3448.8	2967.8	2617.1	2372.7	2201.2	2176.7
35°	6831.8	6450.2	5514.9	4546.6	3746.3	3140.7	2704.6	2444.1	2234.8	2028.3	1995.3
37.5°	7562.0	7117.4	5694.8	4398.2	3453.0	2869.8	2526.7	2334.2	2132.6	1898.7	1859.5
40°	8410.6	7785.3	5972.0	4221.0	3189.8	2674.5	2440.6	2296.4	2075.9	1832.2	1787.4
42.5°	9145.7	8491.8	6301.8	4030.6	2941.2	2512.0	2402.1	2271.2	2040.2	1782.5	1731.4
45°	9825.5	9075.0	6623.8	3799.6	2679.4	2400.7	2355.9	2208.2	1977.1	1720.9	1667.7
47.5°	10377.9	9546.2	6903.9	3587.4	2470.0	2298.5	2255.1	2088.5	1871.4	1646.7	1607.5
50°	10802.2	9900.4	7057.2	3418.7	2248.8	2182.3	2124.9	1953.3	1744.7	1550.8	1517.2
52.5°	11236.2	10255.4	7132.8	3427.1	2043.0	2009.3	1950.5	1803.5	1643.9	1494.8	1458.4
55°	11489.0	10401.0	7053.0	3223.4	1853.9	1814.7	1763.6	1687.3	1592.1	1459.8	1425.4
57.5°	11636.7	10491.3	6810.1	2629.0	1626.4	1589.3	1597.7	1591.4	1513.0	1373.6	1342.1
60°	11743.1	10295.3	6312.3	1932.3	1432.4	1404.4	1473.8	1451.4	1383.4	1274.9	1248.3
62.5°	11657.0	9922.1	5416.1	1452.8	1274.2	1333.7	1394.6	1353.3	1260.9	1162.2	1131.4
65°	11131.9	9189.8	4116.7	1167.1	1223.1	1305.0	1354.0	1287.5	1193.7	1076.8	1062.8
67.5°	10176.3	7862.4	2428.0	1069.8	1184.6	1271.4	1312.0	1223.8	1141.2	1029.2	1012.4
70°	8717.9	5885.9	1084.5	996.3	1117.4	1203.5	1230.1	1146.8	1057.2	952.2	935.4
72.5°	6488.7	3548.9	730.9	920.0	1018.0	1094.3	1123.7	1035.5	971.8	924.2	919.3
75°	3603.5	1232.2	674.2	833.1	909.5	978.1	1014.5	952.2	901.8	836.6	810.0
77.5°	1147.5	523.7	640.6	744.9	841.5	898.3	892.7	798.8	782.7	703.6	696.6
80°	457.9	456.5	592.3	609.8	718.3	765.9	753.3	635.0	656.0	609.8	591.6
82.5°	359.2	418.0	474.7	465.6	558.7	614.7	597.2	466.3	527.2	484.5	443.2
85°	273.0	366.2	304.6	303.2	390.0	456.5	467.7	358.5	359.2	327.0	291.3
87.5°	140.7	135.1	116.9	116.2	130.2	185.5	227.5	203.7	161.0	121.1	116.2
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)