

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: P591325

Luminaire Tested: **CTN-CA10-760-730-U-T1-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591325
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-760-730-U-T1-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 88909 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

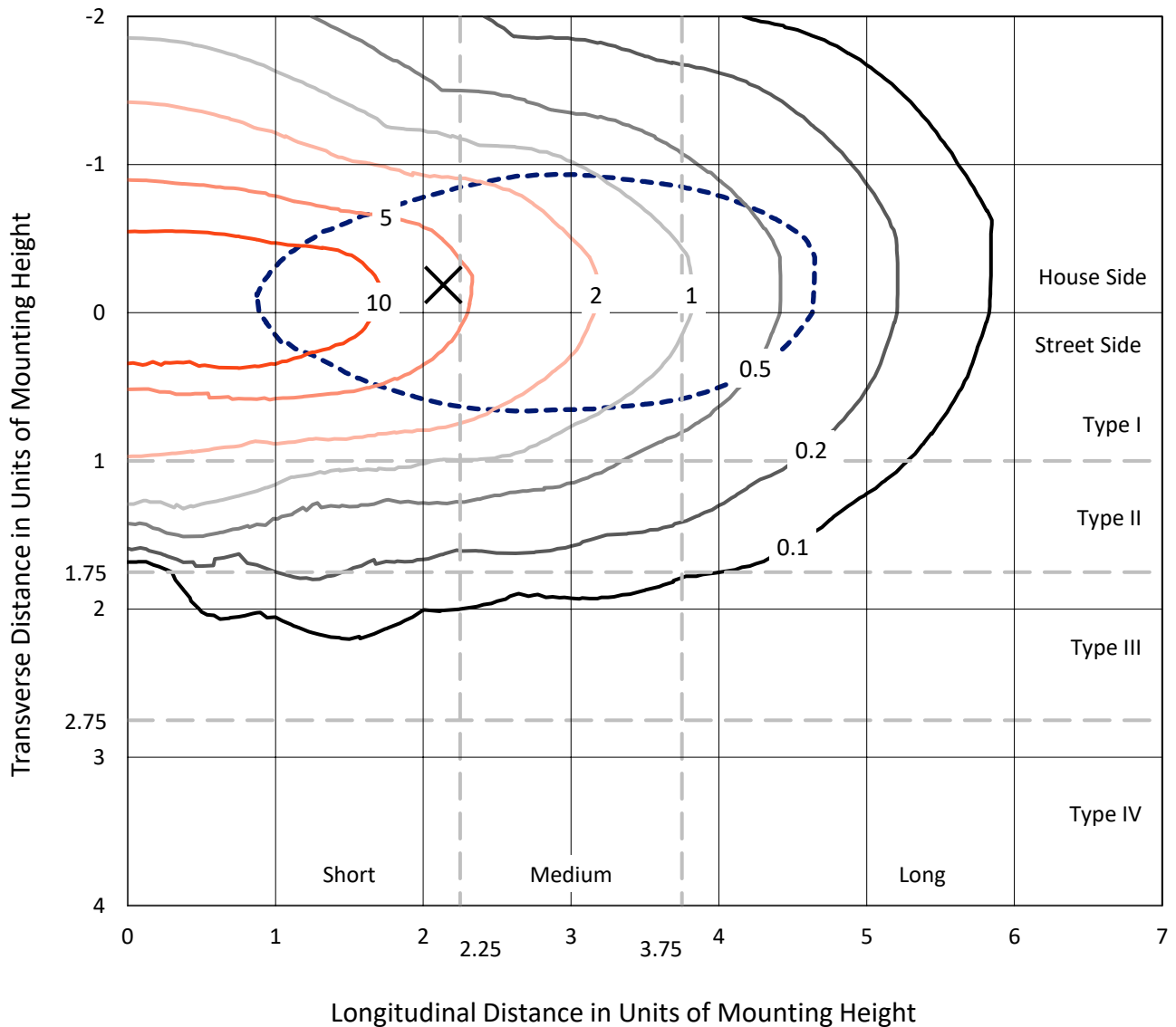
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

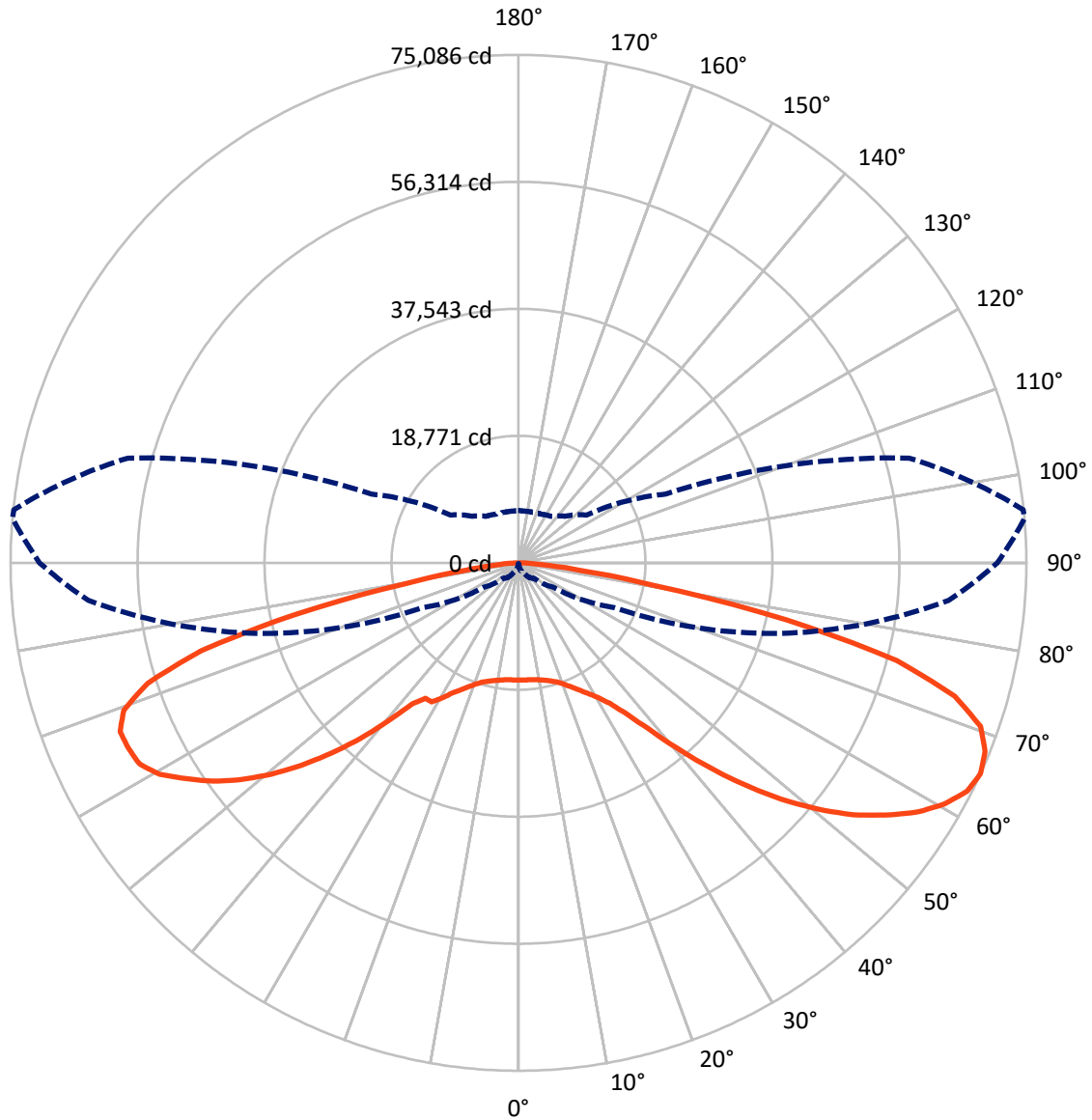
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 19.3 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 95-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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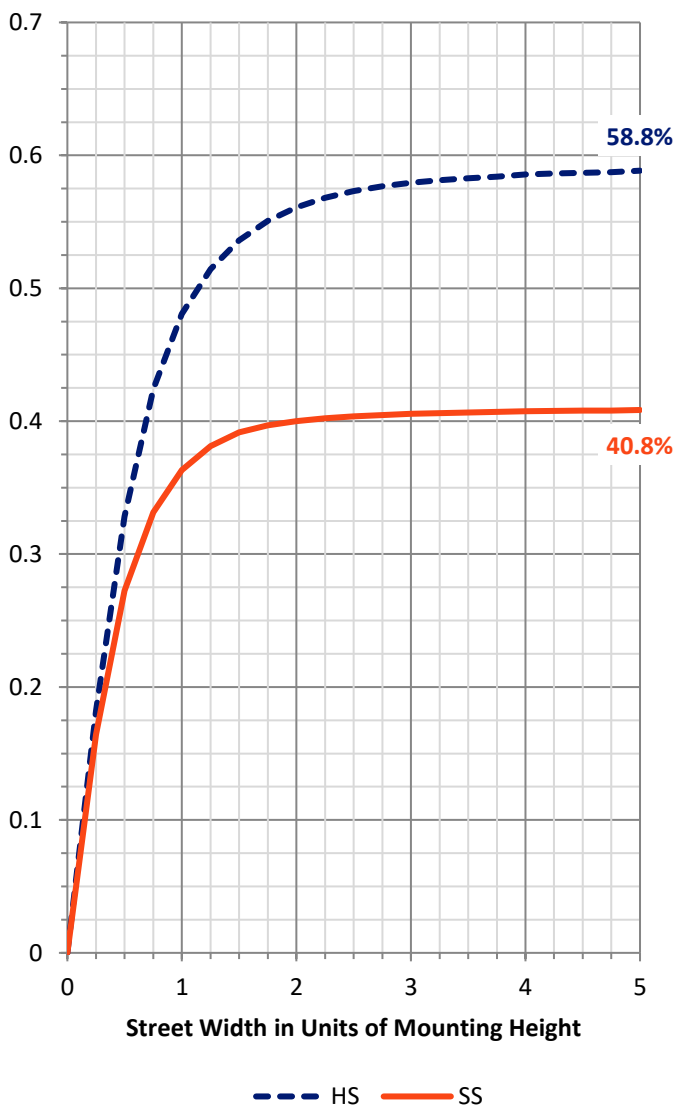
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	52717.8	0.0	52717.8
	% Fixture	59.3	0.0	59.3
Street Side	Lumens	36191.2	0.0	36191.2
	% Fixture	40.7	0.0	40.7
Total	Lumens	88909.0	0.0	88909.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1649.6	1.9
10°-20°	4750.3	5.3
20°-30°	7139.7	8.0
30°-40°	9954.6	11.2
40°-50°	14291.8	16.1
50°-60°	18218.4	20.5
60°-70°	18969.2	21.3
70°-80°	12215.1	13.7
80°-90°	1720.3	1.9
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°	88909.0	100.0
0°-180°	88909.0	100.0

Coefficient of Utilization

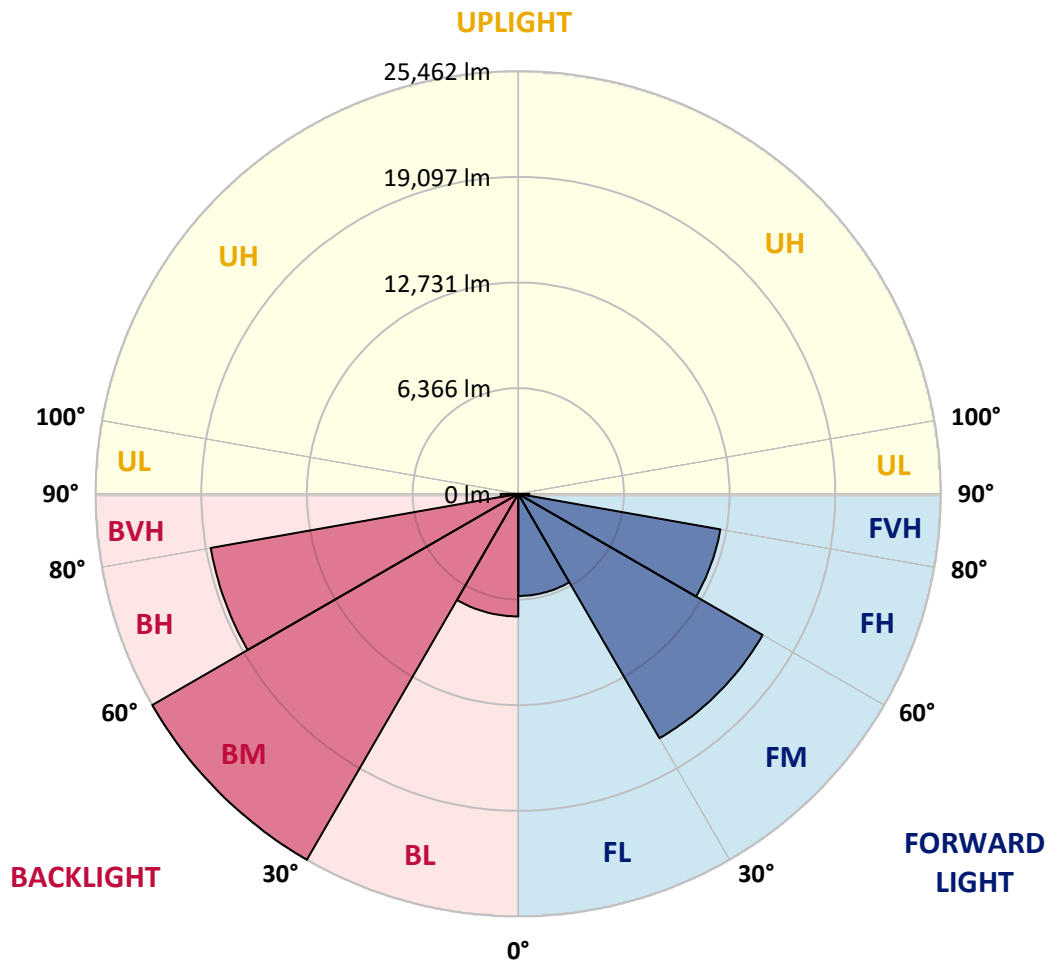


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6152.5	6.9			
FM (30°-60°)	17002.7	19.1			
FH (60°-80°)	12367.0	13.9			G5
FVH (80°-90°)	669.0	0.8			G4/750
BL (0°-30°)	7387.1	8.3	B5		
BM (30°-60°)	25462.1	28.6	B5		
BH (60°-80°)	18817.3	21.2	B5		G5
BVH (80°-90°)	1051.3	1.2			G5
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0
2.5°	17379.7	17237.5	17266.6	17405.6	17150.2	17289.2	17185.8	17353.9	17311.8	17324.8	17405.6
5°	17234.3	17088.8	17143.7	17315.1	17075.8	17244.0	17166.4	17305.4	17292.4	17340.9	17392.7
7.5°	17101.7	16946.5	17017.7	17143.7	17014.4	17159.9	17117.9	17292.4	17286.0	17428.2	17463.8
10°	16953.0	16810.8	16872.2	17027.4	16920.7	17095.2	17130.8	17337.7	17405.6	17599.6	17615.7
12.5°	16691.1	16552.1	16581.2	16778.4	16794.6	17059.7	17182.5	17509.0	17580.2	17803.2	17812.9
15°	15753.6	15721.3	15996.1	16312.9	16442.2	16836.6	17247.2	17693.3	17800.0	18081.3	18110.4
17.5°	13115.6	12792.3	12307.4	12692.1	13539.1	14628.6	17092.0	17968.1	18165.3	18446.6	18533.9
20°	8796.6	9090.7	10186.7	10678.1	11431.3	13267.6	17053.2	18265.5	18692.3	19031.7	19196.6
22.5°	7267.4	7251.3	8563.8	10219.0	10810.6	11654.4	15676.0	18617.9	19325.9	19768.8	19975.7
25°	6750.2	6756.6	6995.9	9087.5	10552.0	11444.2	14399.1	18155.6	20021.0	20654.6	20900.3
27.5°	6339.6	6365.5	6569.1	7277.1	10332.1	11399.0	14434.6	16833.4	20754.8	21601.8	21886.3
30°	6013.1	6000.1	6245.8	6837.5	8599.3	11415.1	14602.7	17098.5	20072.7	22946.7	23105.1
32.5°	5741.5	5706.0	5954.9	6549.7	7509.9	11289.1	14854.9	17842.0	19591.0	24239.8	24857.3
35°	5479.7	5466.7	5686.6	6271.7	7251.3	9375.2	15149.1	18763.4	21155.7	24281.8	27262.5
37.5°	5276.0	5266.3	5440.9	5993.7	7018.5	8541.2	15391.5	19924.0	23192.4	26076.1	29253.9
40°	5111.1	5085.3	5224.3	5748.0	6753.4	8402.1	13406.6	21136.3	25678.4	30262.6	34077.3
42.5°	4972.1	4936.5	5072.3	5505.5	6498.0	8247.0	12449.7	22358.3	28600.9	34924.3	38768.2
45°	4781.4	4778.1	4917.1	5321.3	6226.4	8020.7	12540.2	20318.4	31885.5	39385.7	43695.0
47.5°	4684.4	4661.8	4765.2	5149.9	5971.1	7678.0	12452.9	19445.5	34400.6	43863.1	48495.8
50°	4532.4	4513.0	4613.3	4952.7	5718.9	7244.8	12136.1	19982.2	32328.4	48104.6	53008.8
52.5°	4260.9	3507.6	4464.5	4787.8	5447.3	6776.0	11534.8	20279.6	33133.3	52035.7	57211.5
55°	1674.6	2246.8	4273.8	4580.9	5169.3	6336.4	10623.1	20195.5	35797.2	55556.3	60832.3
57.5°	1458.0	1464.5	2838.4	3824.4	4839.6	5877.3	9511.0	19717.1	38147.5	58569.3	64359.3
60°	206.9	210.1	1438.6	1610.0	3174.6	4176.8	8379.5	18860.4	39540.8	61582.3	67401.4
62.5°	139.0	145.5	1309.3	1461.2	2896.6	3704.8	7328.8	17337.7	40213.3	63412.1	69593.3
65°	100.2	103.5	1186.5	1322.2	2579.8	3287.8	6352.5	15682.5	40274.7	63835.6	70795.9
67.5°	93.8	97.0	1092.7	1218.8	2347.0	2919.3	5508.8	14224.5	38577.4	63961.7	70747.4
70°	97.0	97.0	995.7	1102.4	2081.9	2531.3	4571.2	12772.9	34297.2	62312.9	69156.9
72.5°	97.0	100.2	869.6	969.9	1794.2	2143.4	3746.9	10383.9	27776.5	57644.7	65316.2
75°	97.0	100.2	685.4	801.7	1490.3	1719.9	3074.4	8373.0	21391.7	48647.7	57146.9
77.5°	100.2	100.2	504.3	614.2	1150.9	1293.1	2334.1	6433.3	15763.3	33721.7	39786.5
80°	100.2	106.7	355.6	452.6	850.2	934.3	1694.0	4105.7	8489.4	17101.7	19752.6
82.5°	103.5	106.7	265.1	339.4	588.4	672.4	1034.5	2020.5	3924.7	7914.0	8964.7
85°	97.0	100.2	216.6	236.0	336.2	404.1	643.3	1002.2	1380.4	3113.2	3236.1
87.5°	67.9	64.7	67.9	77.6	109.9	177.8	303.9	339.4	333.0	837.3	973.1
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):

	95°	96°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0	17328.0
2.5°	17357.1	17363.6	17337.7	17437.9	17337.7	17392.7	17247.2	17473.5	17450.9	17389.4	17467.0
5°	17353.9	17370.0	17363.6	17454.1	17328.0	17373.3	17227.8	17467.0	17386.2	17331.2	17425.0
7.5°	17431.5	17454.1	17444.4	17505.8	17360.3	17357.1	17214.9	17392.7	17315.1	17198.7	17315.1
10°	17602.8	17602.8	17573.7	17609.3	17399.1	17376.5	17137.3	17340.9	17208.4	17104.9	17247.2
12.5°	17822.6	17842.0	17767.7	17761.2	17470.3	17402.4	17101.7	17201.9	17011.2	16914.2	17053.2
15°	18145.9	18158.8	18061.9	18000.4	17644.8	17496.1	17011.2	16991.8	16726.7	16632.9	16733.2
17.5°	18520.9	18517.7	18381.9	18356.1	17939.0	17593.1	16936.8	16736.4	16397.0	16290.3	16377.6
20°	19122.2	19086.7	18938.0	18789.3	18181.5	17654.5	16830.2	16409.9	15937.9	15785.9	15857.1
22.5°	19930.4	19917.5	19684.7	19254.8	18440.1	17712.7	16649.1	16012.2	15385.1	15110.3	15155.5
25°	20816.2	20806.5	20473.6	19830.2	18666.4	17754.7	16439.0	15566.1	14719.1	14302.1	14292.4
27.5°	21844.3	21818.4	21369.1	20450.9	18980.0	17767.7	16212.7	15094.1	14059.6	13539.1	13561.8
30°	23095.4	23050.1	22435.9	21139.5	19377.6	17806.5	16018.7	14563.9	13445.4	12892.6	12879.6
32.5°	24753.8	24689.2	23735.5	22044.7	19891.6	17903.5	15785.9	14040.2	12873.2	12317.1	12268.6
35°	27278.7	27146.1	25568.5	23202.1	20463.9	17968.1	15414.2	13542.4	12320.3	11796.6	11757.8
37.5°	31015.8	30792.8	27876.8	24417.6	21032.8	17955.2	14990.7	13005.7	11871.0	11363.4	11353.7
40°	35942.7	35593.5	30647.3	25720.5	21579.2	17884.1	14534.8	12527.2	11496.0	11059.5	11091.9
42.5°	41331.8	40963.3	33931.9	27045.9	21989.8	17664.2	14046.7	12074.6	11150.1	10800.9	10804.1
45°	46763.0	46420.3	37711.0	28293.8	22193.4	17250.4	13539.1	11644.7	10784.7	10480.9	10516.4
47.5°	52171.5	51919.4	41454.7	29347.7	22093.2	16600.6	12928.1	11237.3	10422.7	10173.7	10254.6
50°	57201.8	56933.5	45444.0	30220.6	21588.9	15695.4	12300.9	10836.5	10128.5	9911.9	9979.8
52.5°	61863.6	61504.7	49717.8	30724.9	20680.5	14741.7	11748.1	10484.1	9844.0	9627.4	9698.5
55°	65823.8	65807.6	53629.5	30766.9	19261.2	13765.4	11214.7	10076.8	9566.0	9388.2	9404.3
57.5°	69531.9	69677.3	56994.9	30256.1	17580.2	12860.2	10603.7	9656.5	9245.9	9061.6	9077.8
60°	72363.8	72544.9	59277.3	28769.0	15789.2	11861.3	9947.4	9210.4	8848.3	8673.7	8725.4
62.5°	74397.3	74164.5	60486.4	26635.3	13995.0	10788.0	9236.2	8641.4	8353.7	8247.0	8250.2
65°	75085.9	75011.5	59778.4	24007.0	12300.9	9730.8	8395.7	7933.4	7755.6	7681.2	7736.2
67.5°	74381.1	74426.4	57020.8	21773.2	10691.0	8537.9	7451.7	7154.3	7063.7	7060.5	7118.7
70°	72451.1	72095.5	51301.9	19988.6	9181.3	7212.5	6436.6	6294.3	6265.2	6336.4	6384.9
72.5°	67407.9	66890.6	42544.1	17147.0	7047.6	5305.1	4875.1	5069.1	5062.6	5101.4	5146.7
75°	57748.2	56387.1	33324.1	13652.3	5221.0	3753.3	3252.2	3245.8	3236.1	3565.8	3685.4
77.5°	40475.1	39566.7	24601.9	10396.8	3472.1	2246.8	2230.7	2405.2	2434.3	2217.7	2259.8
80°	20305.5	20703.1	14198.6	6423.6	2308.2	1584.1	1661.7	1635.8	1658.4	1684.3	1700.5
82.5°	9359.1	9559.5	6795.4	3129.4	1487.1	1202.6	1138.0	1238.2	1283.4	1280.2	1270.5
85°	3320.1	3339.5	2149.8	1341.6	911.7	782.3	795.3	924.6	976.3	931.1	908.4
87.5°	963.4	914.9	439.7	397.6	420.3	417.0	430.0	455.8	491.4	484.9	449.4
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)