

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: P591410

Luminaire Tested: **CTN-CA10-630-740-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591410
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-630-740-U-T2-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56513 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B5 - U0 - G5

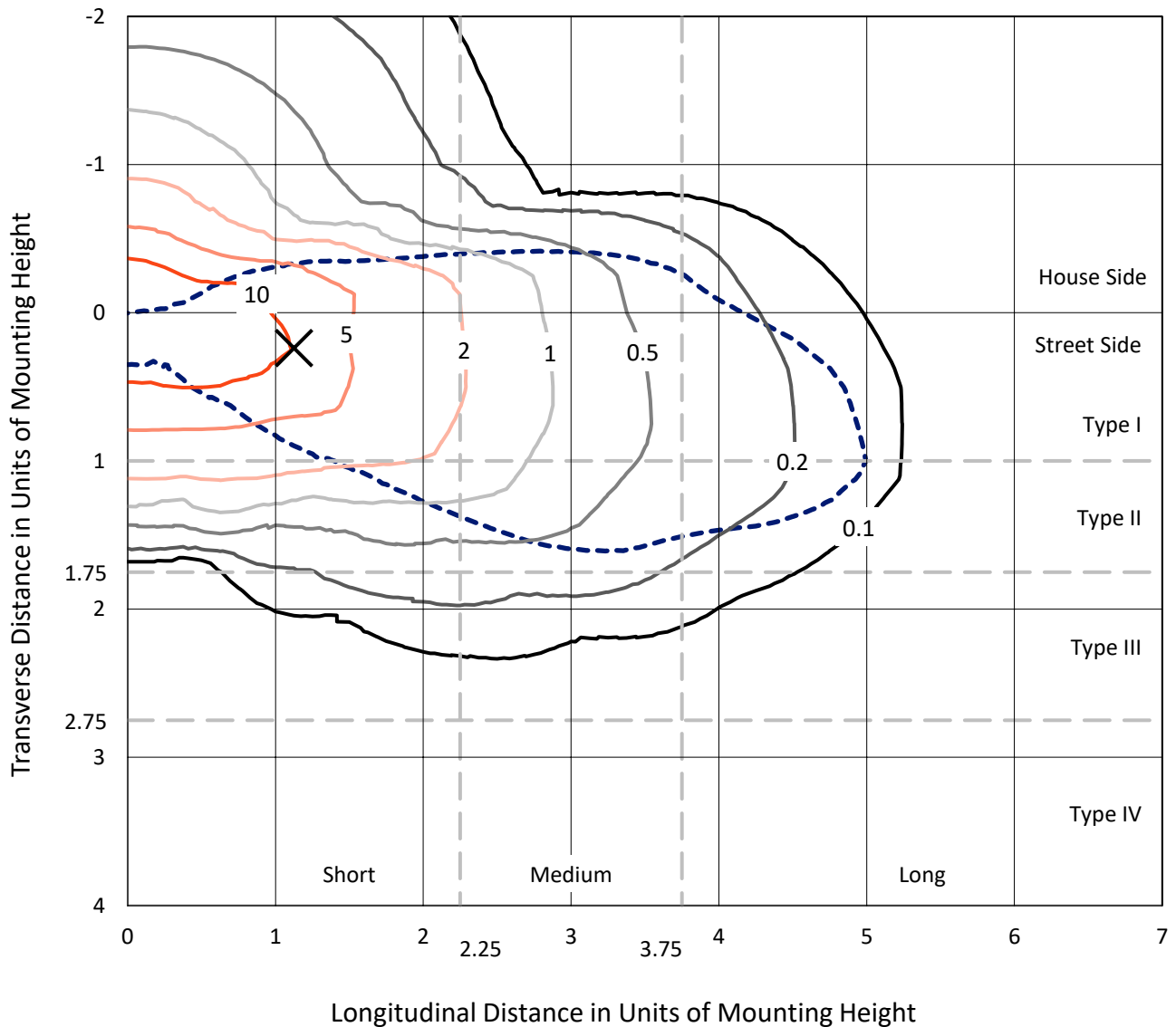
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

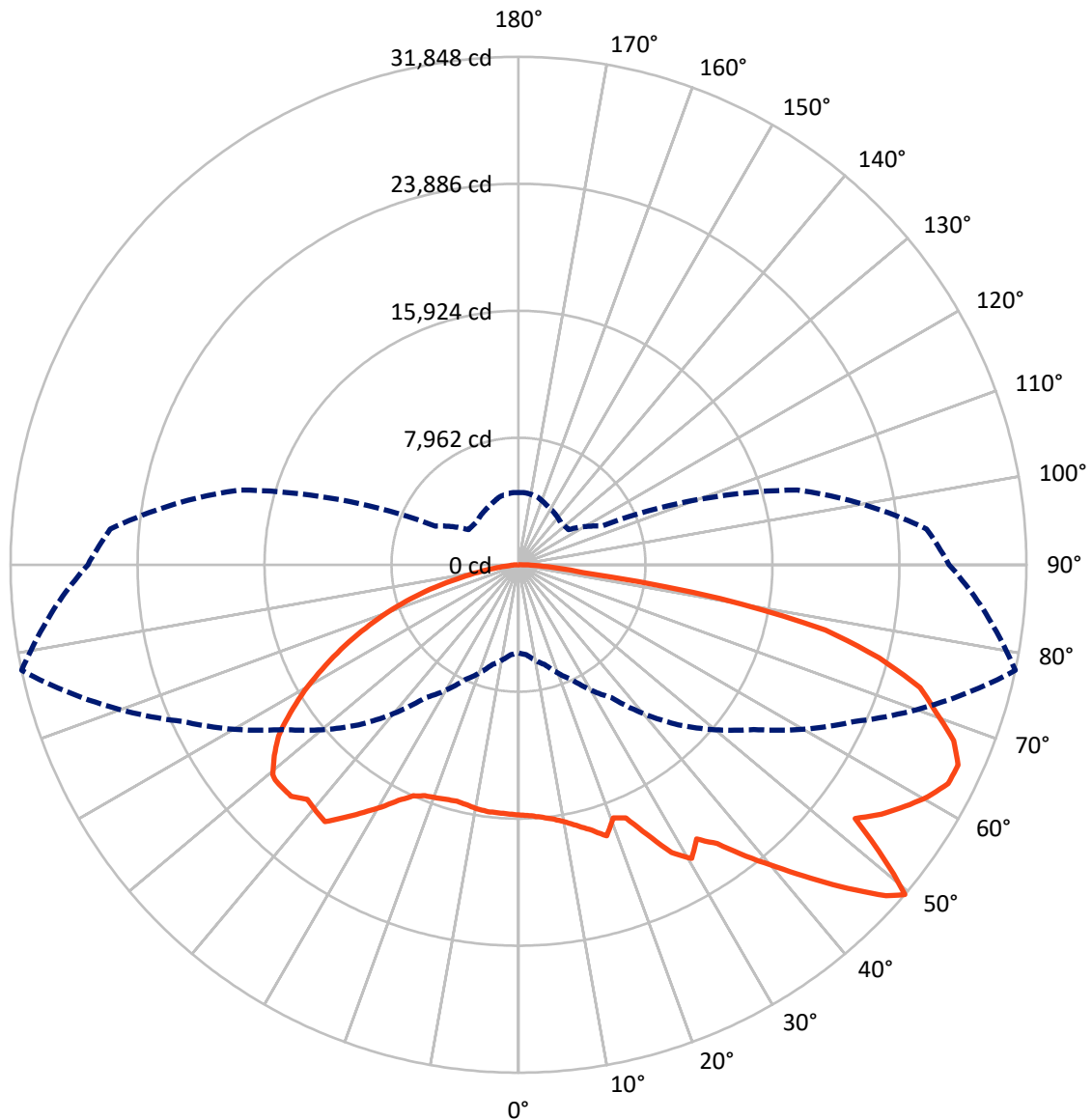
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 19.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 49-Deg Vertical

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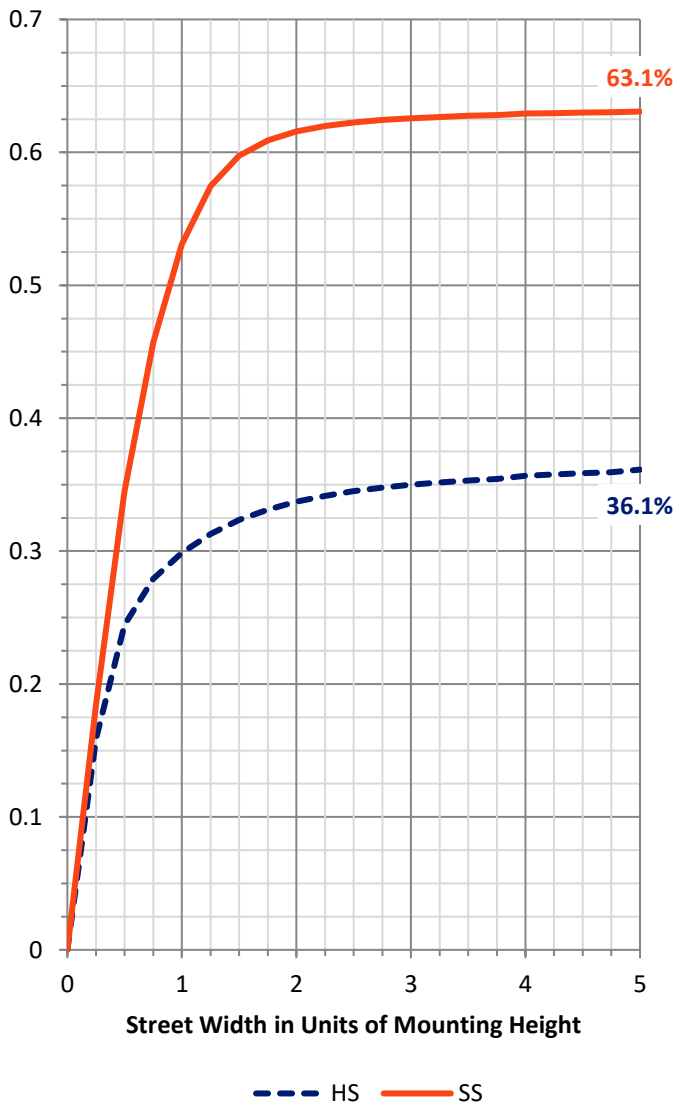
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20924.7	0.0	20924.7
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	35588.3	0.0	35588.3
	% Fixture	63.0	0.0	63.0
Total	Lumens	56513.0	0.0	56513.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1521.2	2.7
10°-20°	4476.6	7.9
20°-30°	6390.4	11.3
30°-40°	8226.5	14.6
40°-50°	9649.7	17.1
50°-60°	9955.0	17.6
60°-70°	9039.0	16.0
70°-80°	6003.0	10.6
80°-90°	1251.7	2.2
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°	56513.0	100.0
0°-180°	56513.0	100.0

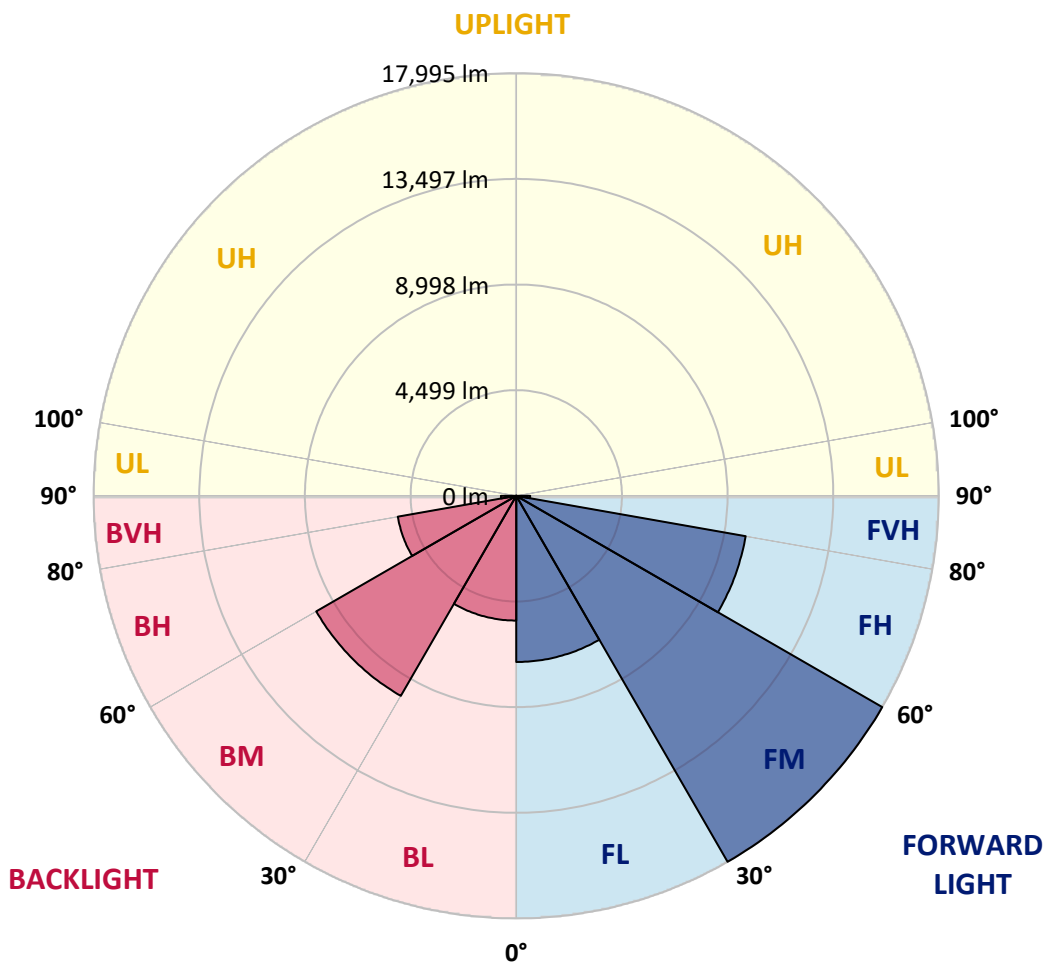


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7076.2	12.5			
FM (30°-60°)	17995.4	31.8			
FH (60°-80°)	9920.2	17.6			G4/12000
FVH (80°-90°)	596.6	1.1			G4/750
BL (0°-30°)	5311.9	9.4	B5		
BM (30°-60°)	9835.8	17.4	B5		
BH (60°-80°)	5121.8	9.1	B5		G5
BVH (80°-90°)	655.1	1.2			G4/750
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1
2.5°	16334.7	16209.2	16249.2	16317.6	16006.8	16075.2	15941.2	15995.4	15830.0	15767.2	15795.7
5°	17489.7	17355.6	17404.1	17426.9	16976.4	16793.9	16374.6	16286.2	16026.7	15912.7	15901.3
7.5°	18060.0	17914.6	17926.0	17940.2	17580.9	17606.6	17227.3	16773.9	16291.9	16118.0	16041.0
10°	18998.2	18795.8	18727.3	18698.8	18214.0	18011.5	17680.7	17432.6	16679.8	16417.4	16220.7
12.5°	19577.1	19428.9	19428.9	19400.3	18887.0	18730.2	18139.9	17877.5	17136.1	16825.2	16485.9
15°	19682.7	19582.8	19711.2	19685.5	19349.0	19166.5	18904.1	18356.6	17598.0	17275.8	16876.6
17.5°	18490.6	18225.4	17717.8	17794.8	17797.7	18168.4	17988.7	18365.2	18142.7	17880.4	17449.8
20°	15185.5	15276.7	16089.5	15892.7	15818.6	16605.6	17409.8	17432.6	16990.6	16947.8	17529.6
22.5°	13229.2	12904.1	13808.1	15122.7	15205.4	16257.7	17195.9	18325.2	17618.0	17238.7	16793.9
25°	11267.2	11387.0	12750.1	14452.6	15656.0	15889.9	16967.8	18770.1	19072.4	18721.6	17792.0
27.5°	10927.8	10922.1	11515.3	13403.1	15872.7	16751.1	17107.5	18519.2	20626.6	20429.8	19254.9
30°	10853.7	10808.1	11118.9	12687.4	14866.1	17526.7	18205.5	18710.2	20504.0	21379.4	20891.8
32.5°	10528.6	10488.7	10819.5	11640.8	14059.0	18094.2	19252.0	20004.9	20087.6	20501.1	22619.9
35°	10018.1	10049.5	10508.6	11401.2	12892.7	16731.1	20324.3	21462.1	21761.6	21476.4	21770.1
37.5°	9496.3	9530.5	9981.1	10993.4	12690.2	16160.8	21017.3	22870.9	23492.6	23187.4	21830.0
40°	8848.9	8903.1	9425.0	10562.8	12456.4	14874.6	19594.3	24470.7	25314.8	24915.6	23404.2
42.5°	8113.2	8136.0	8729.2	9906.9	12159.8	14951.6	18125.6	25947.9	27082.9	26863.3	24955.5
45°	7474.4	7474.4	8013.4	9062.8	11483.9	14806.2	17503.9	24847.1	29253.1	28942.2	26509.7
47.5°	6604.6	6681.6	7314.7	8355.6	10688.3	14469.7	17860.4	22374.7	31275.0	31015.4	28069.6
49°	5532.4	5663.5	6499.1	7967.7	10177.8	14190.2	18003.0	23247.3	29880.5	31848.1	29082.0
50°	5093.2	5161.6	5170.2	7691.1	9798.6	13936.4	18068.6	23917.5	27527.8	30505.0	29792.0
52.5°	4408.8	3978.2	3536.1	6924.0	9037.1	12998.2	18108.5	25736.9	26963.1	26429.9	29238.8
55°	1862.2	2438.2	3099.8	5663.5	8215.8	11837.5	17977.3	27736.0	28203.6	27616.2	25069.6
57.5°	1408.8	1500.0	1665.4	4394.5	5886.0	10514.3	17535.3	29002.1	29250.2	28582.9	26087.6
60°	205.3	211.0	296.6	1782.3	3370.7	7505.8	15944.0	28965.0	30028.7	29515.4	26966.0
62.5°	85.6	88.4	114.1	1460.1	2597.9	5777.6	14555.2	28480.3	30784.5	30234.1	27790.1
65°	14.3	17.1	48.5	1291.8	2147.4	5398.3	13032.4	28577.2	30516.4	30288.3	28109.5
67.5°	11.4	14.3	45.6	1160.7	1770.9	4942.1	11529.6	27034.4	29538.2	29438.4	27256.9
70°	11.4	14.3	48.5	1049.4	1531.4	4354.6	9673.1	24898.5	27744.5	27784.4	25825.3
72.5°	14.3	14.3	48.5	938.2	1331.8	3721.5	7654.1	22046.7	26116.2	26335.7	23789.2
75°	14.3	14.3	45.6	815.6	1143.5	3102.7	5512.4	16212.1	23421.3	23355.7	20863.3
77.5°	14.3	14.3	45.6	647.3	949.6	2552.3	3590.3	9131.2	19394.6	19671.3	17444.0
80°	14.3	14.3	45.6	473.4	744.3	1913.5	2175.9	4674.0	10354.6	12818.5	12000.1
82.5°	14.3	14.3	45.6	319.4	510.5	1103.6	1254.8	2366.9	3718.7	4075.1	4768.1
85°	11.4	11.4	34.2	191.1	262.4	390.7	604.6	1260.5	2033.3	2124.5	2073.2
87.5°	5.7	5.7	17.1	68.4	114.1	142.6	270.9	507.6	747.2	764.3	664.5
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°	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1	15693.1
2.5°	15795.7	15704.5	15621.8	15636.0	15459.2	15407.9	15211.1	15313.8	15214.0	15125.6	15208.3
5°	15821.4	15710.2	15559.1	15413.6	15008.7	14820.5	14583.8	14643.6	14509.6	14404.1	14495.4
7.5°	15895.6	15758.7	15524.8	15111.3	14629.4	14330.0	14061.9	14324.3	14292.9	14213.0	14307.1
10°	15929.8	15812.9	15410.8	14926.0	14253.0	14064.7	13822.3	13819.5	13828.1	13842.3	13936.4
12.5°	16021.0	15844.2	15208.3	14643.6	14019.1	13637.0	13460.2	13602.8	13346.1	13195.0	13260.6
15°	16237.8	15915.5	15071.4	14247.3	13656.9	13340.4	12775.8	12824.2	12770.1	12621.8	12687.4
17.5°	16665.5	16115.1	15065.7	13996.3	13195.0	12678.8	12185.5	11951.6	11877.5	11888.9	11945.9
20°	17190.2	16468.8	15077.1	13674.1	12713.0	12114.2	11352.7	11190.2	10944.9	10950.7	10964.9
22.5°	16856.6	16876.6	15082.8	13306.2	12111.3	11361.3	10554.3	10234.9	10046.7	9998.2	10069.5
25°	17760.6	17669.3	15171.2	13109.4	11478.2	10471.6	9627.4	9219.7	8937.3	8914.5	8994.4
27.5°	18964.0	18798.6	15627.5	12684.5	10808.1	9405.0	8489.6	8181.6	7939.2	7853.7	7910.7
30°	20427.0	20233.0	16257.7	12353.7	9904.1	8258.6	7474.4	7263.4	7023.8	6867.0	6881.2
32.5°	21955.5	21542.0	16905.1	12074.2	8977.3	7254.8	6584.7	6396.4	6114.1	5911.6	5960.1
35°	23495.4	22908.0	17626.6	11580.9	7845.1	6370.8	5828.9	5575.1	5344.1	5161.6	5130.3
37.5°	22277.7	24504.9	18325.2	11121.8	6958.2	5697.8	5084.6	4905.0	4768.1	4625.5	4622.7
40°	22377.5	22888.0	18738.7	10309.0	5968.7	5007.6	4391.7	4454.4	4511.4	4403.1	4403.1
42.5°	23367.1	22639.9	18573.3	9231.1	5232.9	4317.5	4035.2	4289.0	4468.7	4391.7	4388.8
45°	24761.6	23817.7	18855.7	8016.2	4517.1	3892.6	3935.4	4246.2	4480.1	4465.8	4460.1
47.5°	26241.6	25158.0	18313.8	6573.2	4023.8	3761.4	3935.4	4183.5	4463.0	4528.6	4514.3
49°	27003.1	25688.4	18097.1	5732.0	3827.0	3744.3	3941.1	4132.2	4431.6	4531.4	4517.1
50°	27467.9	25973.6	17817.6	5252.9	3721.5	3747.2	3952.5	4100.8	4403.1	4514.3	4505.7
52.5°	28514.5	26407.0	16431.7	4420.2	3550.4	3755.7	4026.6	4069.4	4297.6	4417.3	4480.1
55°	27447.9	27396.6	14663.6	4038.1	3459.2	3735.8	4058.0	4097.9	4209.2	4274.7	4323.2
57.5°	27282.5	27827.2	12436.4	3832.7	3379.3	3707.3	4020.9	4095.1	4160.7	4149.3	4129.3
60°	27807.2	28203.6	10140.8	3630.3	3288.0	3661.6	3898.3	4006.7	4026.6	3998.1	3952.5
62.5°	27889.9	28306.3	7793.8	3424.9	3188.2	3550.4	3718.7	3827.0	3827.0	3755.7	3738.6
65°	27505.0	27664.7	5743.4	3188.2	3068.5	3422.1	3507.6	3587.5	3624.6	3530.4	3536.1
67.5°	26401.3	25477.4	4360.3	2905.9	2923.0	3245.3	3305.2	3359.3	3367.9	3313.7	3308.0
70°	24182.7	23030.6	3116.9	2478.2	2657.8	2965.8	3057.1	3139.8	3111.2	3017.1	3002.9
72.5°	20837.6	19813.8	2118.8	1984.8	2338.4	2697.7	2754.8	2757.6	2700.6	2769.0	2817.5
75°	17926.0	15476.4	1579.9	1582.7	1873.6	2327.0	2503.8	2518.1	2543.7	2920.2	2997.2
77.5°	14244.4	10083.7	1346.0	1249.1	1437.3	1936.3	2215.8	2318.5	3077.0	3336.5	3302.3
80°	8749.1	6054.2	1043.7	989.6	1169.2	1488.6	1905.0	2369.8	3139.8	2951.5	2851.7
82.5°	4097.9	2763.3	752.9	758.6	869.8	1086.5	1505.7	2757.6	2712.0	2238.6	2210.1
85°	1585.6	955.3	456.3	516.2	584.6	735.7	1155.0	2720.6	2107.4	1896.4	1756.7
87.5°	407.8	185.4	199.6	211.0	259.5	387.8	630.2	1425.9	1109.3	972.4	955.3
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)