

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: P591332

Luminaire Tested: **CTN-CA10-760-730-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591332  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-11)  
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-T4-SSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE, 120D 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: 56763 lumens  
Efficiency: N/A  
Efficacy: 74.5 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type III - Short  
BUG Rating: B5 - U0 - G5

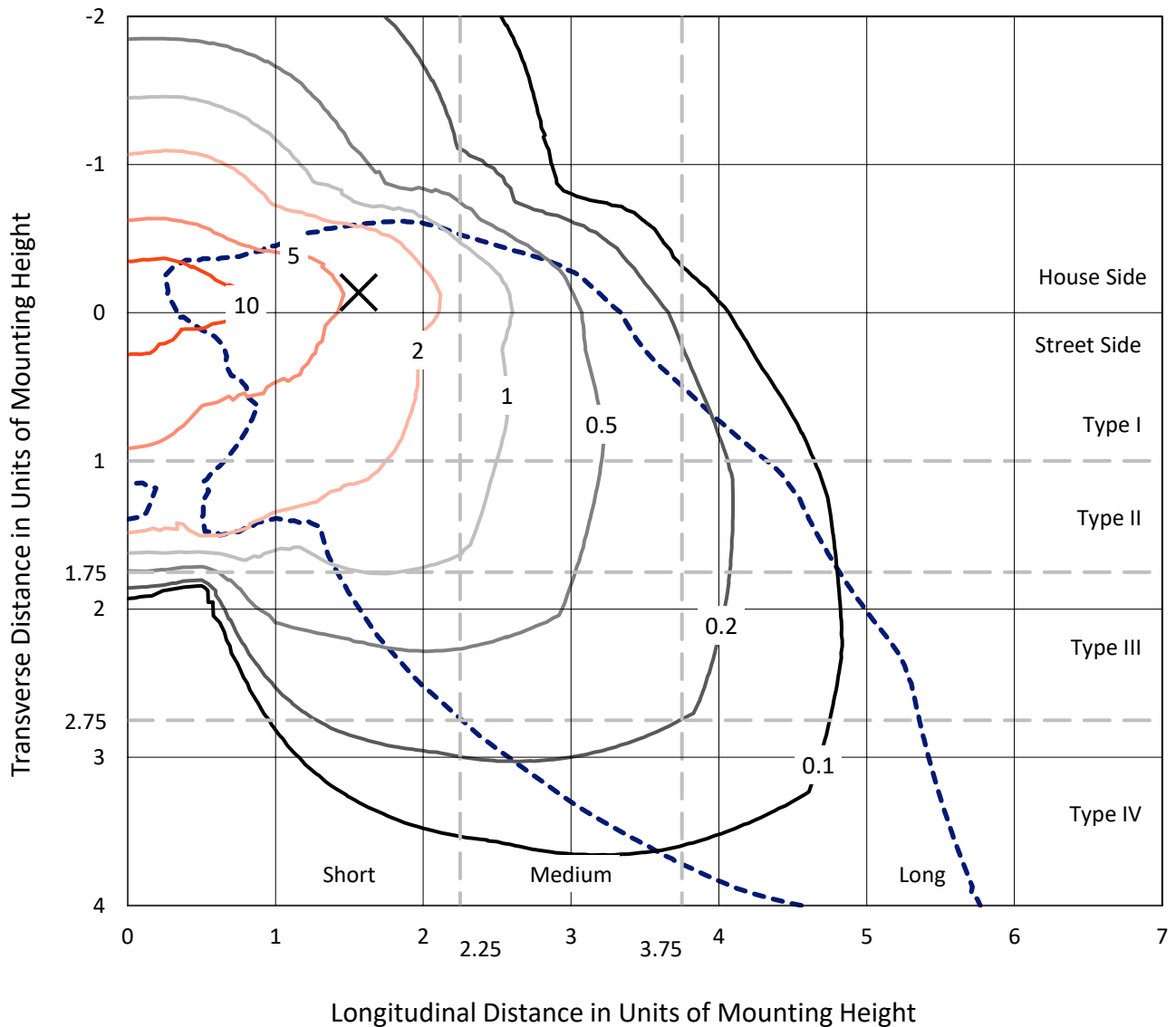
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

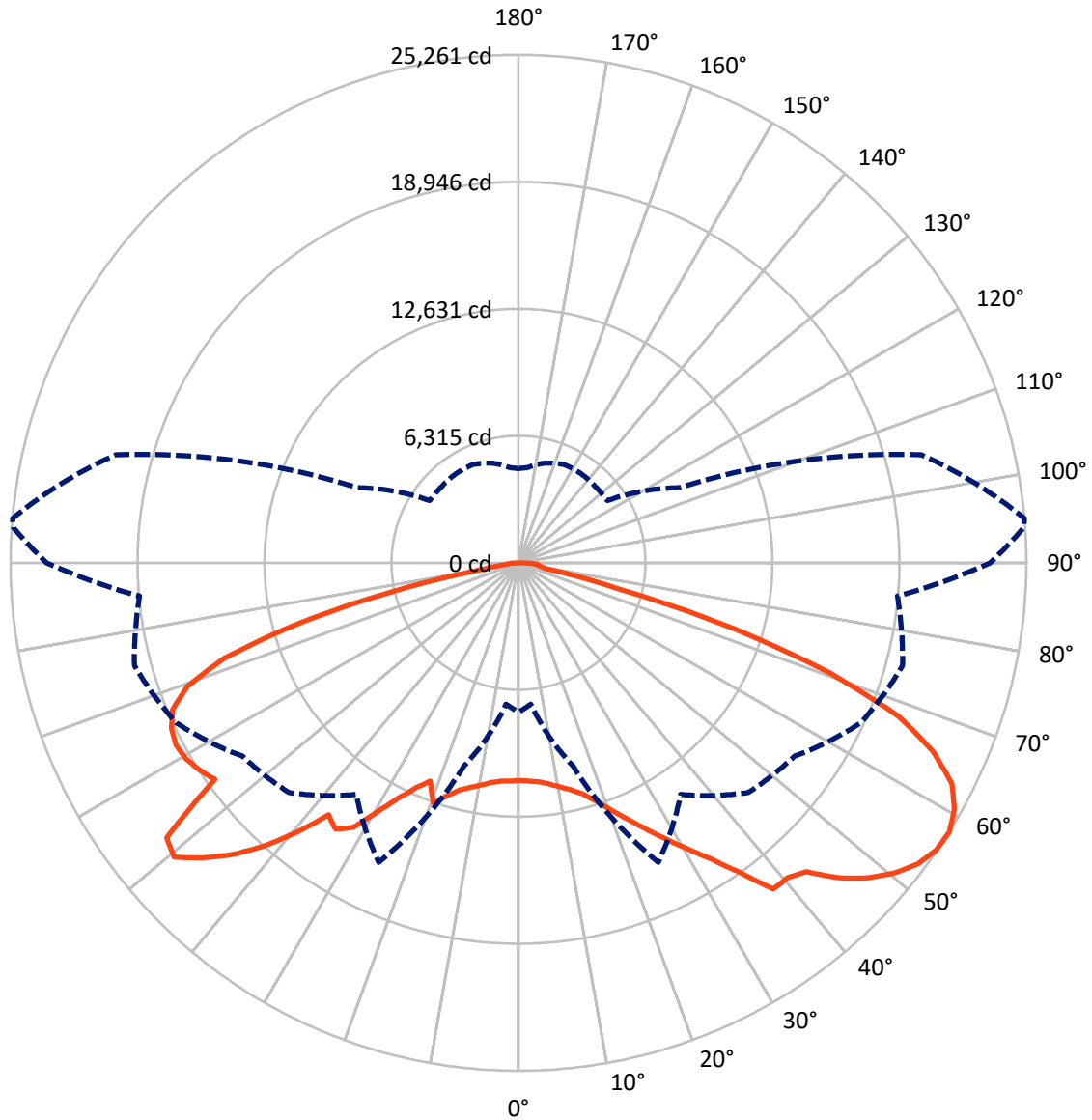
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 95-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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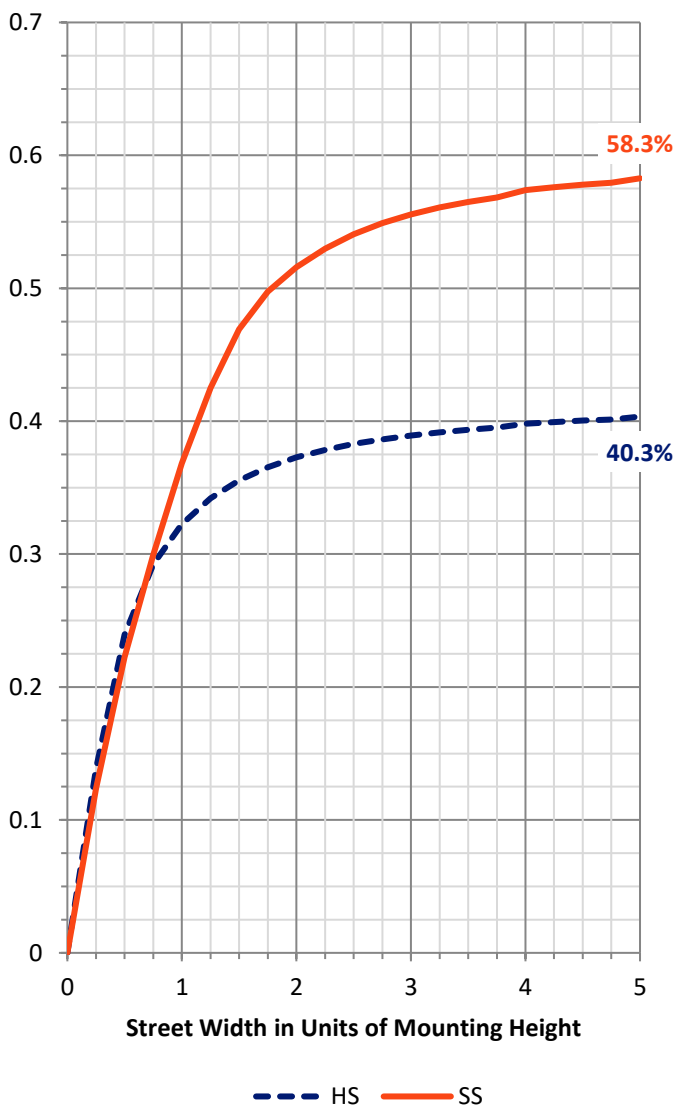
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	23378.9	0.0	23378.9
	% Fixture	41.2	0.0	41.2
<b>Street Side</b>	Lumens	33384.1	0.0	33384.1
	% Fixture	58.8	0.0	58.8
<b>Total</b>	Lumens	56763.0	0.0	56763.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1057.6	1.9
10°-20°	3234.1	5.7
20°-30°	5110.5	9.0
30°-40°	7061.7	12.4
40°-50°	9521.6	16.8
50°-60°	11216.2	19.8
60°-70°	10020.2	17.7
70°-80°	7481.8	13.2
80°-90°	2059.4	3.6
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°	56763.0	100.0
0°-180°	56763.0	100.0

**Coefficient of Utilization**



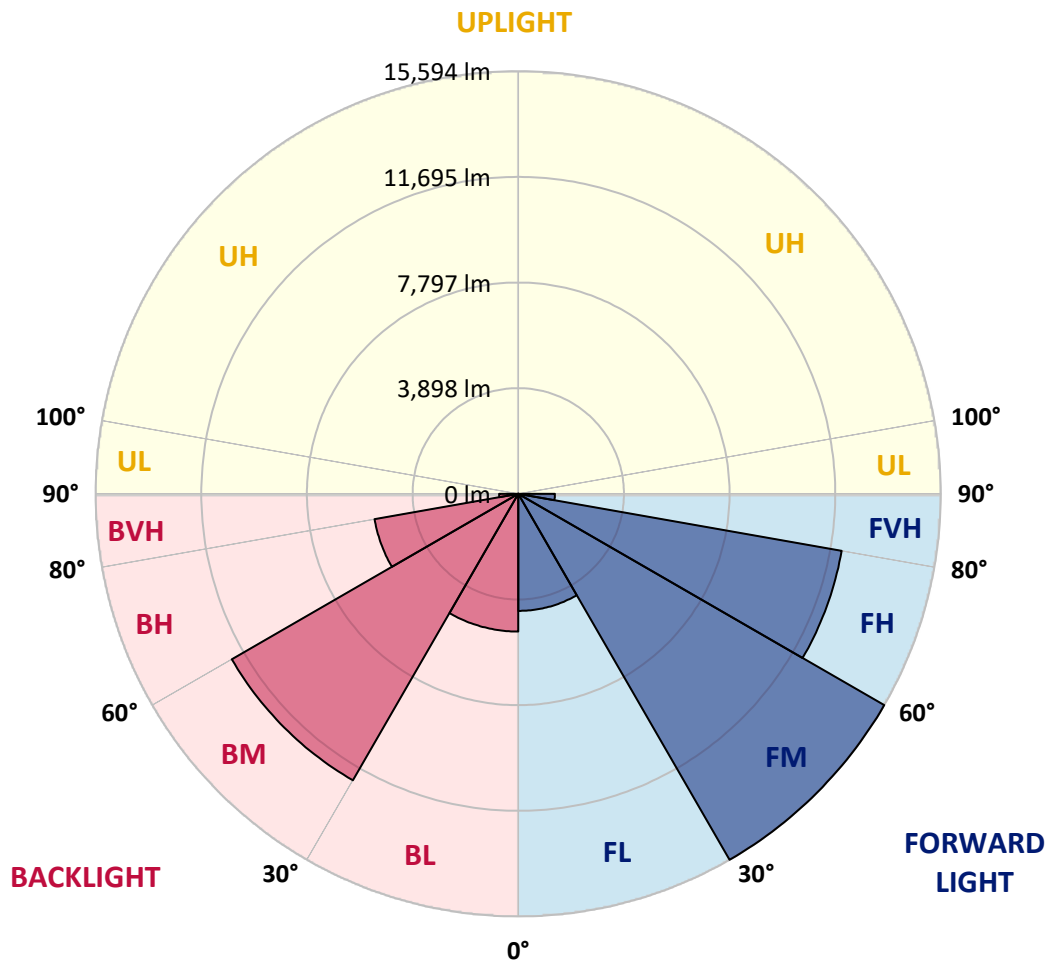
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 CATALOG NUMBER: CTN-CA10-760-730-U-T4-SSS-HM-EX120

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4320.4	7.6			
FM	(30°-60°)	15593.9	27.5			
FH	(60°-80°)	12117.1	21.3			G5
FVH	(80°-90°)	1352.7	2.4			G5
BL	(0°-30°)	5081.6	9.0	B5		
BM	(30°-60°)	12205.6	21.5	B5		
BH	(60°-80°)	5384.9	9.5	B5		G5
BVH	(80°-90°)	706.7	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9
2.5°	10687.7	10619.8	10623.0	10716.8	10577.8	10678.0	10665.1	10820.2	10797.6	10859.0	10878.4
5°	10600.4	10542.2	10545.5	10665.1	10571.3	10661.8	10600.4	10742.7	10794.4	10888.1	10907.5
7.5°	10623.0	10571.3	10590.7	10703.9	10587.5	10678.0	10684.5	10817.0	10842.9	11004.5	11030.4
10°	10681.2	10626.3	10639.2	10729.7	10655.4	10817.0	10797.6	10972.2	10978.7	11204.9	11237.3
12.5°	10603.6	10564.9	10564.9	10678.0	10716.8	10878.4	10926.9	11108.0	11146.8	11408.6	11450.6
15°	10464.6	10400.0	10493.7	10661.8	10739.4	10985.1	11075.6	11347.2	11392.5	11664.0	11754.5
17.5°	10225.4	10189.8	10535.8	10587.5	10293.3	10480.8	10865.5	11625.2	11780.4	12100.4	12268.5
20°	9511.0	9110.1	8185.5	8353.6	9258.8	9934.5	10054.1	10419.4	11085.3	12679.1	12941.0
22.5°	6992.6	7338.5	8560.5	8660.7	8631.6	9190.9	10448.5	10800.8	11117.7	11702.8	13442.1
25°	7241.5	7222.1	7820.2	9090.7	9045.4	9152.1	9679.1	11392.5	11709.3	12291.2	14101.6
27.5°	7464.6	7480.7	7435.5	8631.6	9478.6	9588.5	9750.2	10920.5	12452.8	13118.8	14822.5
30°	7907.5	7839.6	7716.7	7713.5	9856.9	10018.5	10293.3	10684.5	13138.2	14195.3	15724.4
32.5°	8654.3	8576.7	8415.0	8159.6	8518.5	10464.6	10842.9	11340.7	12123.1	15517.5	16781.6
35°	9207.1	9152.1	9042.2	8864.4	8576.7	10687.7	11379.5	12039.0	13073.5	16067.1	18168.4
37.5°	9889.2	9811.6	9685.5	9465.7	9249.1	9161.8	11896.8	12831.1	14399.0	15695.3	18469.1
40°	10661.8	10616.6	10387.0	10102.6	9863.3	9620.9	12252.4	13865.6	16102.7	17363.5	18194.3
42.5°	11243.7	11208.2	11072.4	10842.9	10610.1	10454.9	10859.0	15136.1	17958.3	18976.6	19587.6
45°	11751.3	11712.5	11712.5	11651.1	11586.4	11599.4	11773.9	16047.7	19720.2	20353.8	20906.6
47.5°	12142.5	12074.6	11803.0	11858.0	11951.7	12233.0	12763.2	13952.8	21139.4	21524.1	22015.5
50°	13096.1	12992.7	12113.4	12317.0	12620.9	13073.5	13755.6	15252.4	19739.6	22523.0	22907.8
52.5°	13975.5	13497.0	10005.6	12992.7	13335.4	14004.6	14812.8	16658.7	18168.4	22199.8	23589.9
55°	12469.0	11980.8	10057.3	14234.1	14175.9	15019.7	15808.5	17812.8	19021.9	18543.4	23418.5
57.5°	7422.6	7054.0	10464.6	16438.9	14053.1	16154.4	16762.2	18798.8	19771.9	18915.2	23463.8
60°	3843.8	4041.0	3885.8	9727.6	12100.4	16652.2	17748.2	19749.3	20279.5	19193.2	23492.9
62.5°	517.3	371.8	155.2	7115.4	8599.3	13875.3	18986.3	20654.5	20651.2	19287.0	23289.2
65°	32.3	35.6	71.1	7079.9	9485.1	16461.5	21035.9	21385.1	20835.5	19122.1	22610.3
67.5°	12.9	16.2	64.7	7031.4	10235.1	17305.3	23447.6	21617.9	20854.9	18679.2	21120.0
70°	12.9	16.2	64.7	6549.7	10745.9	17454.0	23855.0	21530.6	20615.7	17589.8	18349.5
72.5°	16.2	19.4	58.2	5689.8	10435.5	17049.9	23189.0	21352.8	19759.0	15397.9	14247.0
75°	16.2	19.4	58.2	4597.1	9232.9	16167.3	22662.1	19865.7	17321.4	11505.6	9239.4
77.5°	12.9	16.2	58.2	3588.4	7697.3	14327.9	20557.5	17272.9	13697.5	6695.2	3649.9
80°	12.9	16.2	58.2	2499.0	5864.3	11744.8	16746.0	13451.8	7703.8	1913.8	1028.0
82.5°	12.9	16.2	55.0	1558.2	4147.7	8638.1	11444.2	6200.5	1652.0	746.8	801.7
85°	12.9	12.9	42.0	762.9	2650.9	5738.3	5702.7	1037.7	656.3	484.9	607.8
87.5°	6.5	9.7	22.6	349.1	1480.6	3025.9	2272.7	397.6	281.3	197.2	339.4
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):**

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9	10829.9
2.5°	10884.9	10868.7	10914.0	11030.4	11023.9	11111.2	11043.3	11175.9	11198.5	11169.4	11214.6
5°	10943.1	10949.6	11072.4	11195.3	11150.0	11292.2	11321.3	11518.5	11525.0	11499.1	11557.3
7.5°	11088.6	11111.2	11234.0	11379.5	11444.2	11563.8	11547.6	11803.0	11780.4	11767.5	11835.3
10°	11292.2	11334.3	11466.8	11696.3	11667.2	11851.5	11767.5	11938.8	11932.3	11906.5	11980.8
12.5°	11541.2	11583.2	11751.3	11971.1	11974.4	11987.3	11919.4	12006.7	11977.6	11916.2	11974.4
15°	11877.4	11925.9	12155.4	12317.0	12178.0	12142.5	12013.2	11964.7	11854.7	11693.1	11741.6
17.5°	12407.6	12446.4	12705.0	12795.5	12556.3	12414.0	12045.5	11770.7	11460.3	11234.0	11276.1
20°	13076.8	13112.3	13322.4	13299.8	12979.8	12630.6	12058.4	11592.9	11014.2	10571.3	10558.4
22.5°	13813.8	13836.5	14036.9	13836.5	13267.5	12759.9	12032.6	11318.1	10345.0	9772.8	9711.4
25°	14625.3	14644.7	14641.4	14195.3	13432.4	12685.6	11793.3	10859.0	9611.2	9000.2	8935.5
27.5°	15533.7	15536.9	15181.3	14473.3	13361.2	12410.8	11331.0	10034.7	8938.7	8408.6	8360.1
30°	16500.3	16493.8	15675.9	14499.2	13086.4	11890.3	10616.6	9255.6	8334.2	7862.2	7794.3
32.5°	17602.7	17547.7	16115.6	14408.7	12585.4	11143.5	9695.2	8602.5	7859.0	7319.1	7218.9
35°	19015.4	18879.7	16490.6	14095.1	11841.8	10134.9	8841.8	8033.6	7399.9	6850.3	6750.1
37.5°	20764.4	20589.8	17079.0	13652.2	10985.1	9300.8	8214.6	7648.8	7070.2	6443.0	6313.7
40°	20260.1	20596.3	17780.5	13173.7	10157.5	8634.9	7846.1	7464.6	6869.7	6174.7	6051.8
42.5°	21039.2	20997.2	18740.6	12608.0	9362.2	8114.4	7697.3	7409.6	6763.1	6058.3	5916.1
45°	22364.6	22354.9	19775.2	12058.4	8586.4	7697.3	7584.2	7260.9	6611.1	5912.8	5757.6
47.5°	23441.2	23408.8	20764.4	11453.9	7868.7	7370.8	7354.7	6960.3	6339.6	5689.8	5547.5
50°	24191.2	24239.7	21314.0	10872.0	7189.8	7034.6	6973.2	6536.8	5958.1	5421.4	5311.5
52.5°	24782.8	24873.3	21553.2	10817.0	6594.9	6601.4	6494.7	6097.1	5644.5	5211.3	5094.9
55°	25073.7	25212.8	21307.5	10461.4	6013.0	6051.8	5948.4	5696.2	5427.9	5030.3	4946.2
57.5°	25193.4	25261.2	20738.5	8848.2	5389.1	5382.6	5415.0	5389.1	5136.9	4745.8	4684.4
60°	24989.7	24899.2	19500.4	6724.3	4755.5	4784.6	4991.5	4965.6	4742.5	4445.1	4361.1
62.5°	24362.5	24184.7	17234.2	4972.1	4247.9	4483.9	4703.8	4629.4	4357.8	4086.3	4021.6
65°	23166.4	22665.3	13733.0	3882.6	4005.5	4328.7	4532.4	4422.5	4112.1	3792.1	3753.3
67.5°	21019.8	20392.6	9013.1	3481.7	3902.0	4196.2	4409.6	4225.3	3924.6	3578.7	3523.8
70°	17153.3	16464.7	4267.3	3245.7	3669.2	3960.2	4115.4	3927.9	3620.8	3274.8	3236.1
72.5°	11961.4	11179.1	2298.5	2990.4	3400.9	3653.1	3756.5	3527.0	3258.7	3106.7	3097.0
75°	5961.3	5094.9	2085.2	2728.5	3055.0	3274.8	3449.4	3291.0	3055.0	2777.0	2705.9
77.5°	1587.3	1364.2	1962.3	2437.5	2780.2	3029.2	3129.4	2964.5	2692.9	2456.9	2414.9
80°	1102.4	1125.0	1833.0	2020.5	2424.6	2647.7	2741.4	2531.3	2395.5	2162.8	2098.1
82.5°	934.3	982.8	1480.6	1522.7	1926.8	2166.0	2330.9	2295.3	2101.3	1913.8	1888.0
85°	876.1	931.1	947.2	1053.9	1380.4	1661.7	1946.2	1962.3	1833.0	1593.8	1516.2
87.5°	504.3	497.9	455.8	536.6	756.5	921.4	1115.3	1063.6	866.4	750.0	733.8
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)