

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: P591327

Luminaire Tested: **CTN-CA10-760-730-U-T2-SSS-HM-EX180**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-6)
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-T2-SSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE, 180D 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: 57407 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B5 - U0 - G4

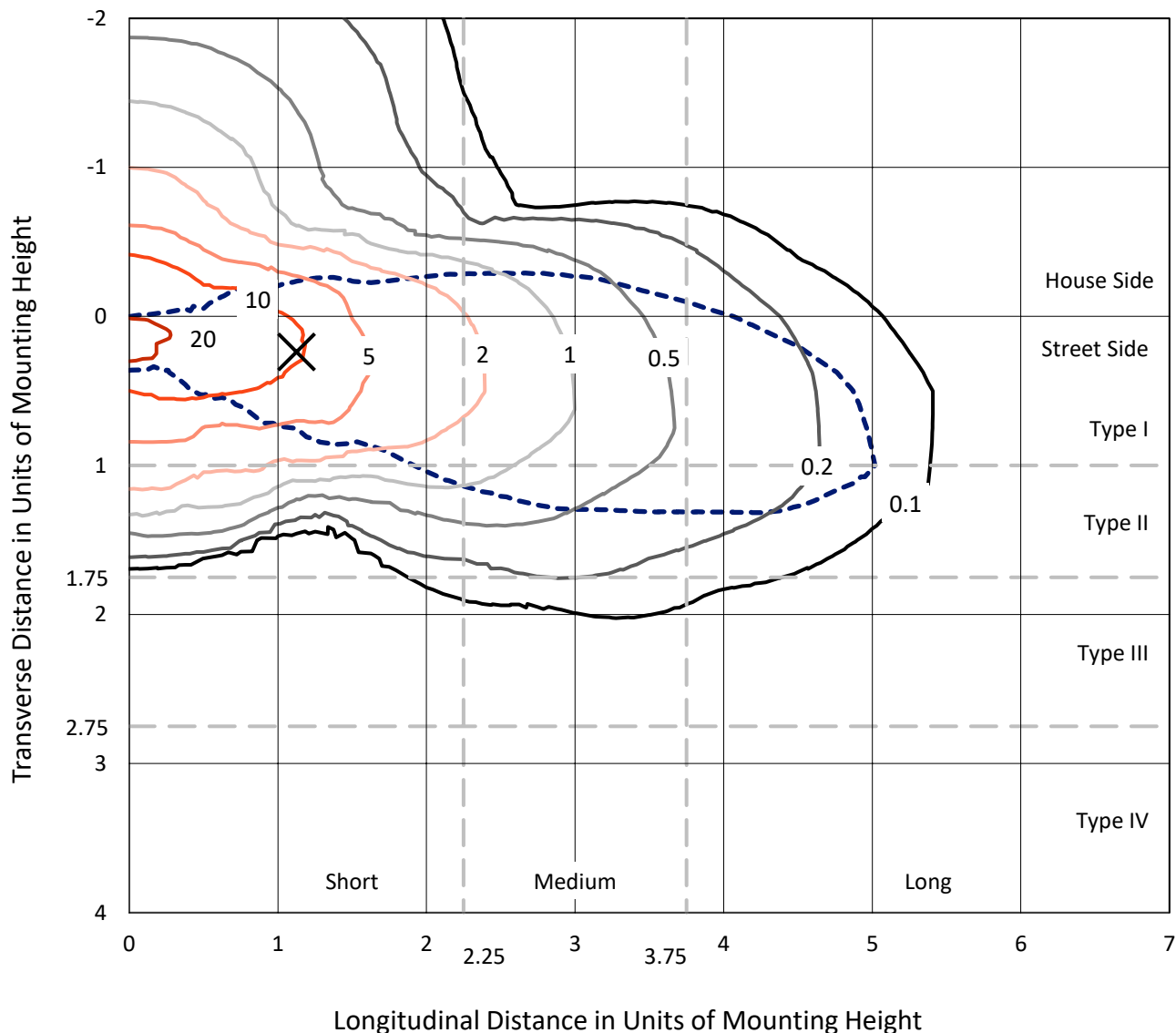
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

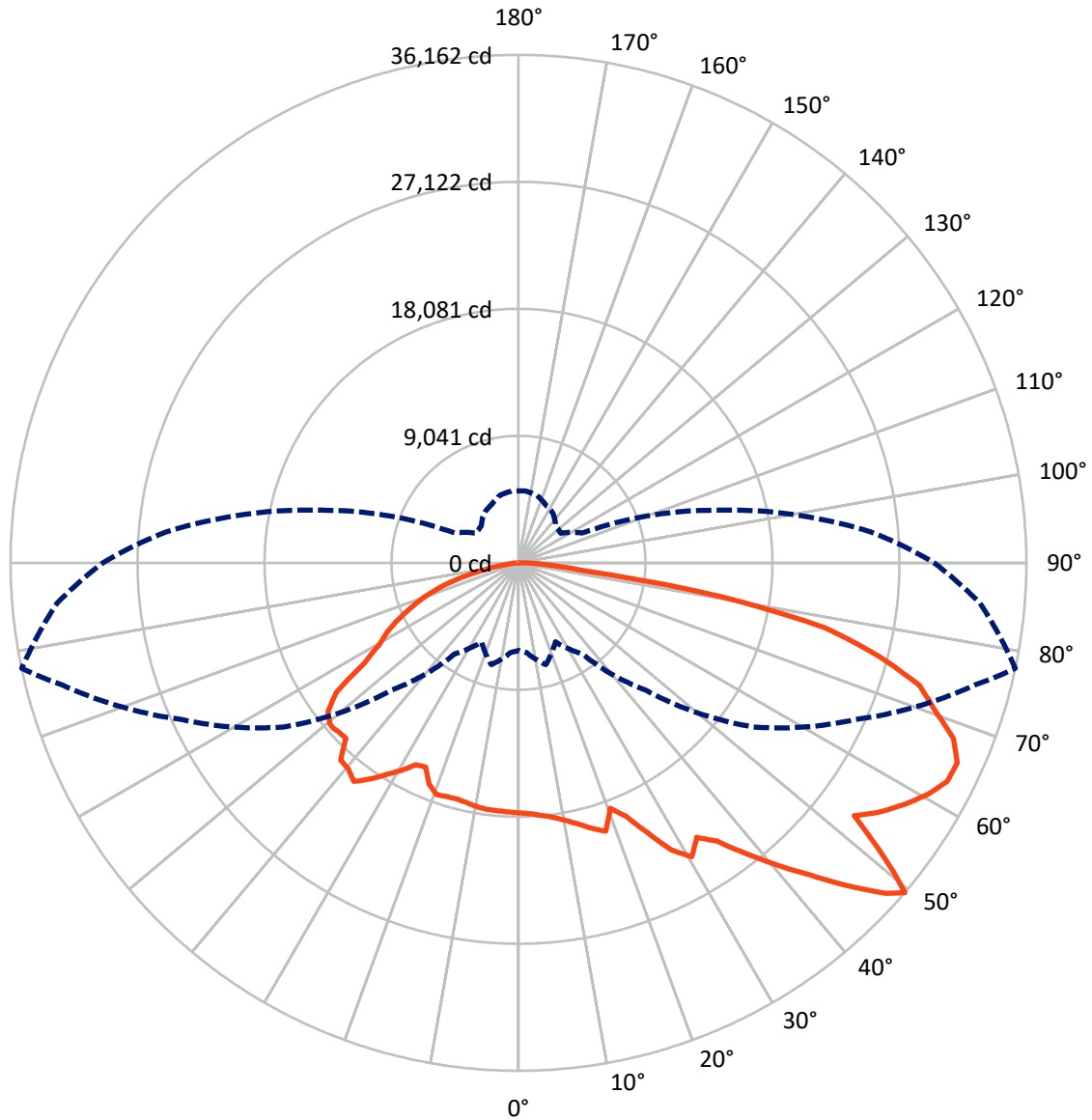
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 22.8 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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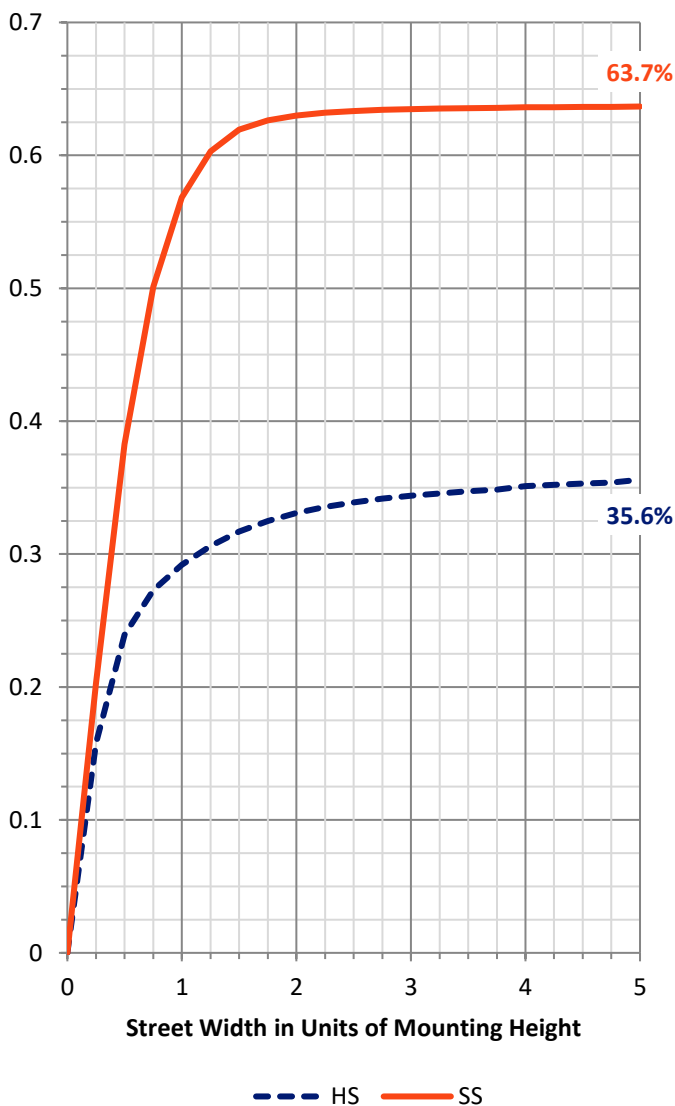
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20971.7	0.0	20971.7
	% Fixture	36.5	0.0	36.5
Street Side	Lumens	36435.3	0.0	36435.3
	% Fixture	63.5	0.0	63.5
Total	Lumens	57407.0	0.0	57407.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1725.4	3.0
10°-20°	5074.2	8.8
20°-30°	7144.3	12.4
30°-40°	8955.6	15.6
40°-50°	10108.4	17.6
50°-60°	9712.9	16.9
60°-70°	7934.8	13.8
70°-80°	5566.5	9.7
80°-90°	1185.0	2.1
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°	57407.0	100.0
0°-180°	57407.0	100.0

Coefficient of Utilization

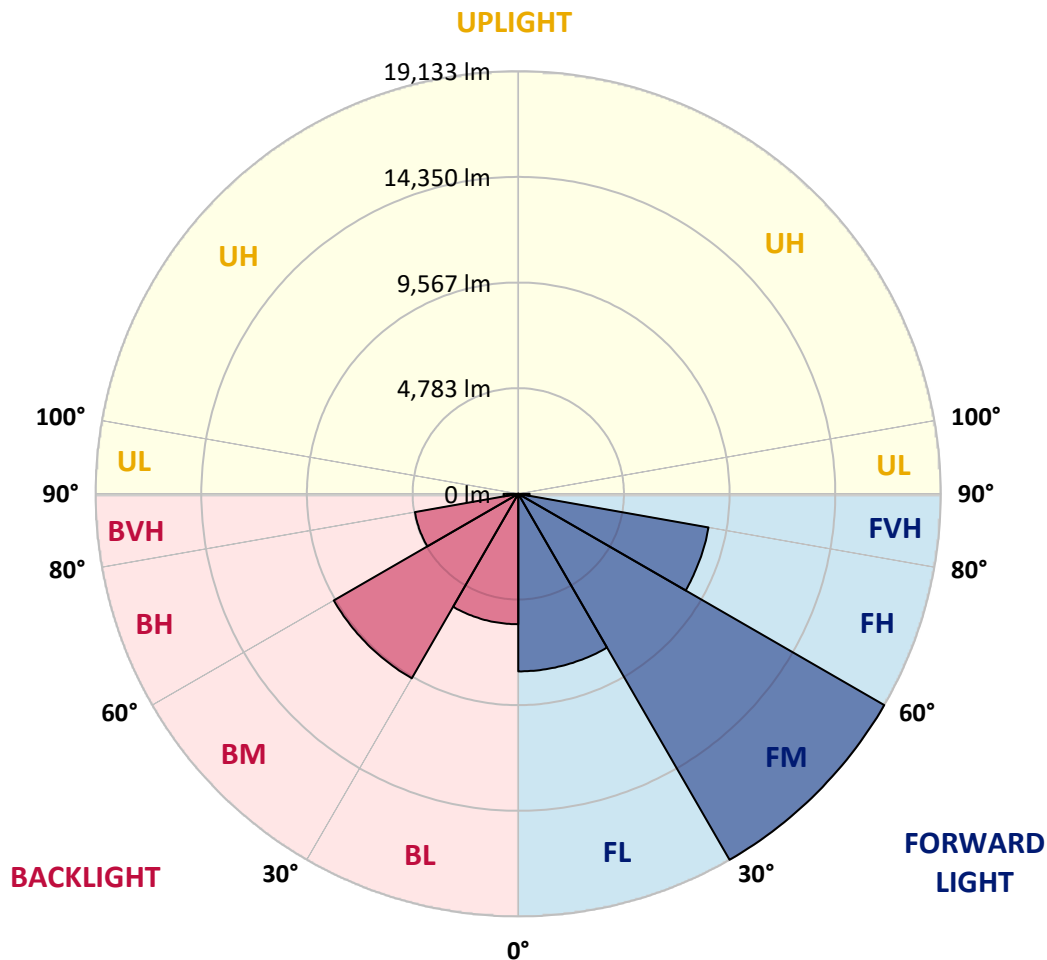


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	8038.6	14.0			
FM (30°-60°)	19133.0	33.3			
FH (60°-80°)	8747.7	15.2			G4/12000
FVH (80°-90°)	516.0	0.9			G4/750
BL (0°-30°)	5905.2	10.3	B5		
BM (30°-60°)	9643.9	16.8	B5		
BH (60°-80°)	4753.5	8.3	B4/5000		G4/5000
BVH (80°-90°)	669.0	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-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3
2.5°	18540.1	18368.8	18407.6	18498.1	18149.0	18246.0	18090.8	18158.7	17974.4	17896.8	17929.1
5°	19862.4	19661.9	19707.2	19752.4	19238.4	19018.6	18585.4	18485.2	18203.9	18074.6	18058.5
7.5°	20492.8	20285.9	20334.4	20334.4	19943.2	19978.7	19539.1	19073.6	18511.0	18307.4	18216.9
10°	21504.6	21271.9	21236.3	21174.9	20664.1	20437.8	20072.5	19800.9	18947.5	18656.5	18407.6
12.5°	22244.9	22063.9	22067.1	21999.2	21423.8	21258.9	20615.6	20295.6	19451.8	19099.4	18698.6
15°	22552.1	22422.7	22506.8	22303.1	21918.4	21672.7	21368.8	20854.8	19982.0	19619.9	19125.3
17.5°	21119.9	20887.2	20269.7	20376.4	20350.5	20424.9	20127.5	20431.3	20292.3	20095.1	19768.6
20°	17883.9	18129.6	18562.8	18178.1	18149.0	19115.6	19807.4	19713.7	18937.8	18650.1	18976.6
22.5°	15197.4	14896.8	15811.7	17179.1	17563.8	18549.8	19726.6	20845.1	19969.0	19600.5	18611.3
25°	12785.7	13089.6	14512.1	16581.1	17790.1	18081.1	19429.2	21533.7	21672.7	21271.9	19988.4
27.5°	12404.3	12401.0	13361.2	15365.5	18116.6	19028.3	19442.1	21191.0	23395.8	23121.0	21646.9
30°	12317.0	12271.7	12637.0	14667.2	17227.6	19878.5	20683.5	21297.7	23382.9	24301.0	23541.3
32.5°	11942.0	11906.4	12281.4	13235.1	16018.6	20690.0	21873.2	22681.4	22801.0	23302.1	25464.8
35°	11340.7	11424.7	11916.1	12970.0	15026.1	19093.0	23079.0	24343.0	24630.8	24336.6	24352.7
37.5°	10765.2	10829.9	11334.2	12498.0	14301.9	15530.4	23906.6	25940.0	26580.1	26243.9	24672.8
40°	10018.5	10109.0	10707.1	11996.9	13826.7	13403.2	22707.2	27815.1	28704.1	28274.1	26492.8
42.5°	9177.9	9220.0	9927.9	11172.6	9915.0	13474.3	21010.0	29534.9	30779.5	30352.8	28203.0
45°	8460.3	8486.1	9064.8	9856.8	8938.7	13361.2	19836.5	28720.2	33204.2	32777.4	30013.4
47.5°	7451.6	7635.9	8263.1	6814.8	8301.8	13083.2	20230.9	25468.0	35476.8	35160.0	31772.0
49°	6242.5	6407.4	7509.8	6207.0	7907.4	12834.2	20366.7	26418.5	33634.1	36162.2	32977.9
50°	5738.2	5857.8	5754.4	5990.4	7619.7	12582.1	20150.1	27184.7	30912.1	34633.1	33753.7
52.5°	4988.2	4642.3	3953.7	5379.4	6957.0	11599.3	16603.7	29244.0	30627.6	29929.3	31626.5
55°	2107.8	3003.3	3497.9	4412.8	6287.8	7041.1	15375.2	31487.5	32001.5	31296.8	28419.6
57.5°	1648.7	1681.1	1923.5	3284.5	3478.5	5453.7	14874.1	32450.9	33039.3	32428.3	29522.0
60°	242.5	239.2	316.8	378.2	863.2	2508.7	9721.0	23098.4	31888.4	33482.2	30530.6
62.5°	87.3	90.5	90.5	106.7	158.4	1099.2	7066.9	21549.9	32657.8	34254.8	31374.4
65°	6.5	9.7	16.2	35.6	84.1	1037.7	6268.4	21931.4	32408.9	34329.2	31785.0
67.5°	0.0	3.2	9.7	25.9	67.9	1021.6	5828.7	21288.0	31364.7	33385.2	30886.2
70°	0.0	0.0	6.5	22.6	61.4	982.8	5062.6	19105.9	29496.1	31448.7	29250.4
72.5°	0.0	0.0	6.5	22.6	55.0	937.5	4160.6	16820.3	27795.7	29838.8	26877.6
75°	0.0	0.0	6.5	19.4	48.5	853.5	3042.1	12190.9	24899.1	26460.5	23509.0
77.5°	0.0	0.0	6.5	19.4	45.3	737.1	2056.1	6986.1	20486.3	22374.3	19752.4
80°	0.0	0.0	6.5	16.2	42.0	559.3	1163.8	3488.2	10707.1	14706.0	14117.7
82.5°	0.0	0.0	6.5	16.2	32.3	297.4	543.1	1522.7	3947.3	4658.5	5437.6
85°	0.0	0.0	6.5	12.9	25.9	74.4	184.3	724.1	2156.3	2395.5	2337.3
87.5°	0.0	0.0	6.5	12.9	19.4	29.1	61.4	206.9	798.5	892.3	762.9
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°	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3	17806.3
2.5°	17922.7	17822.5	17728.7	17741.6	17518.6	17470.1	17260.0	17389.3	17302.0	17192.1	17263.2
5°	17961.5	17832.2	17667.3	17483.0	16994.9	16820.3	16529.3	16613.4	16497.0	16367.7	16435.6
7.5°	18045.5	17893.6	17622.0	17143.6	16574.6	16267.5	15931.3	16219.0	16183.4	16109.1	16183.4
10°	18081.1	17948.5	17486.2	16930.2	16141.4	15931.3	15675.9	15627.4	15637.1	15653.2	15763.2
12.5°	18174.8	17977.6	17266.4	16606.9	15889.2	15472.2	15220.1	15368.8	15061.6	14925.9	14984.1
15°	18404.4	18029.4	17095.1	16157.6	15443.1	15113.4	14492.7	14492.7	14415.1	14282.5	14321.3
17.5°	18866.7	18236.3	17049.8	15860.1	14945.3	14376.3	13807.3	13506.7	13422.6	13464.6	13490.5
20°	19115.6	18617.7	17027.2	15469.0	14386.0	13726.5	12863.3	12650.0	12368.7	12407.5	12452.8
22.5°	17618.8	16969.0	16991.6	14990.5	13694.2	12856.9	11912.9	11541.1	11369.8	11337.5	11424.7
25°	18685.6	17376.3	15355.8	14728.7	12934.5	11867.6	10910.7	10399.9	10138.1	10121.9	10176.9
27.5°	20101.6	18498.1	15129.5	13500.2	12126.3	10668.3	9611.1	9245.8	8987.2	8974.3	8984.0
30°	21750.3	19994.9	15692.0	11987.2	11030.3	9284.6	8444.1	8185.5	7949.5	7846.0	7849.3
32.5°	23583.3	21349.5	16235.2	11696.3	8841.7	8078.8	7425.8	7225.3	6902.0	6753.3	6711.3
35°	25299.9	22788.1	16914.0	11208.1	7671.4	7005.5	6546.4	6278.1	6026.0	5899.9	5857.8
37.5°	23787.0	24113.5	17515.3	10807.3	6779.2	5806.1	5680.0	5502.2	5372.9	5275.9	5259.8
40°	24132.9	21721.2	17871.0	10050.8	5857.8	5072.3	4868.6	4955.9	5088.4	5007.6	5004.4
42.5°	25287.0	22093.0	17547.7	9003.4	5127.2	4374.0	4432.2	4758.7	5036.7	4985.0	4991.5
45°	26939.0	23253.6	15058.4	7752.3	4419.2	3940.8	4319.0	4700.5	5049.6	5065.8	5065.8
47.5°	28649.1	24559.6	14596.1	6084.1	3898.8	3772.7	4299.6	4629.4	5030.2	5133.7	5120.8
49°	29596.3	25193.3	14466.8	5007.6	3666.0	3737.1	4296.4	4561.5	4991.5	5136.9	5120.8
50°	30149.2	25626.5	14224.3	4577.7	3530.2	3730.7	4299.6	4519.5	4952.7	5114.3	5107.8
52.5°	31309.7	26176.0	13377.4	3769.5	3200.5	3708.0	4351.4	4480.7	4833.0	5004.4	5069.0
55°	25872.1	25248.2	11954.9	3384.7	3051.8	3662.8	4351.4	4503.3	4729.6	4829.8	4891.2
57.5°	26192.2	21588.7	9401.0	3194.0	2951.6	3614.3	4283.5	4500.1	4674.6	4690.8	4671.4
60°	27168.5	22089.8	7008.7	3000.0	2835.2	3552.9	4138.0	4396.6	4529.2	4529.2	4471.0
62.5°	27753.6	22325.8	5605.7	2786.7	2712.3	3426.8	3921.4	4196.2	4296.4	4241.4	4231.7
65°	27899.1	22516.5	4066.9	2557.1	2573.3	3291.0	3698.3	3937.6	4076.6	3982.8	4002.2
67.5°	27398.0	21155.5	2970.9	2321.2	2414.9	3106.7	3478.5	3691.9	3792.1	3743.6	3753.3
70°	25545.6	19674.9	2091.6	1917.1	2159.5	2822.2	3200.5	3446.2	3497.9	3413.8	3426.8
72.5°	22568.2	17389.3	1319.0	1500.0	1900.9	2560.4	2874.0	3029.1	3038.8	3142.3	3197.2
75°	19655.5	13952.8	953.7	1183.2	1509.7	2188.6	2625.0	2770.5	2877.2	3394.4	3478.5
77.5°	15753.5	8828.8	811.4	934.3	1186.4	1816.8	2340.6	2563.6	3523.8	3779.2	3714.5
80°	9546.5	5482.8	611.0	737.1	989.2	1396.6	2004.3	2641.2	3565.8	3326.6	3190.8
82.5°	4406.3	2382.6	413.8	601.3	785.6	1041.0	1580.8	3084.1	3055.0	2547.5	2521.6
85°	1584.1	704.8	226.3	430.0	549.6	717.7	1215.5	3055.0	2395.5	2140.1	2004.3
87.5°	404.1	126.1	93.8	210.1	278.0	381.5	662.7	1616.4	1244.6	1095.9	1057.1
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)