

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: P591379

Luminaire Tested: **CTN-CA8-480-730-U-T3-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591379
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-730-U-T3-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48332 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

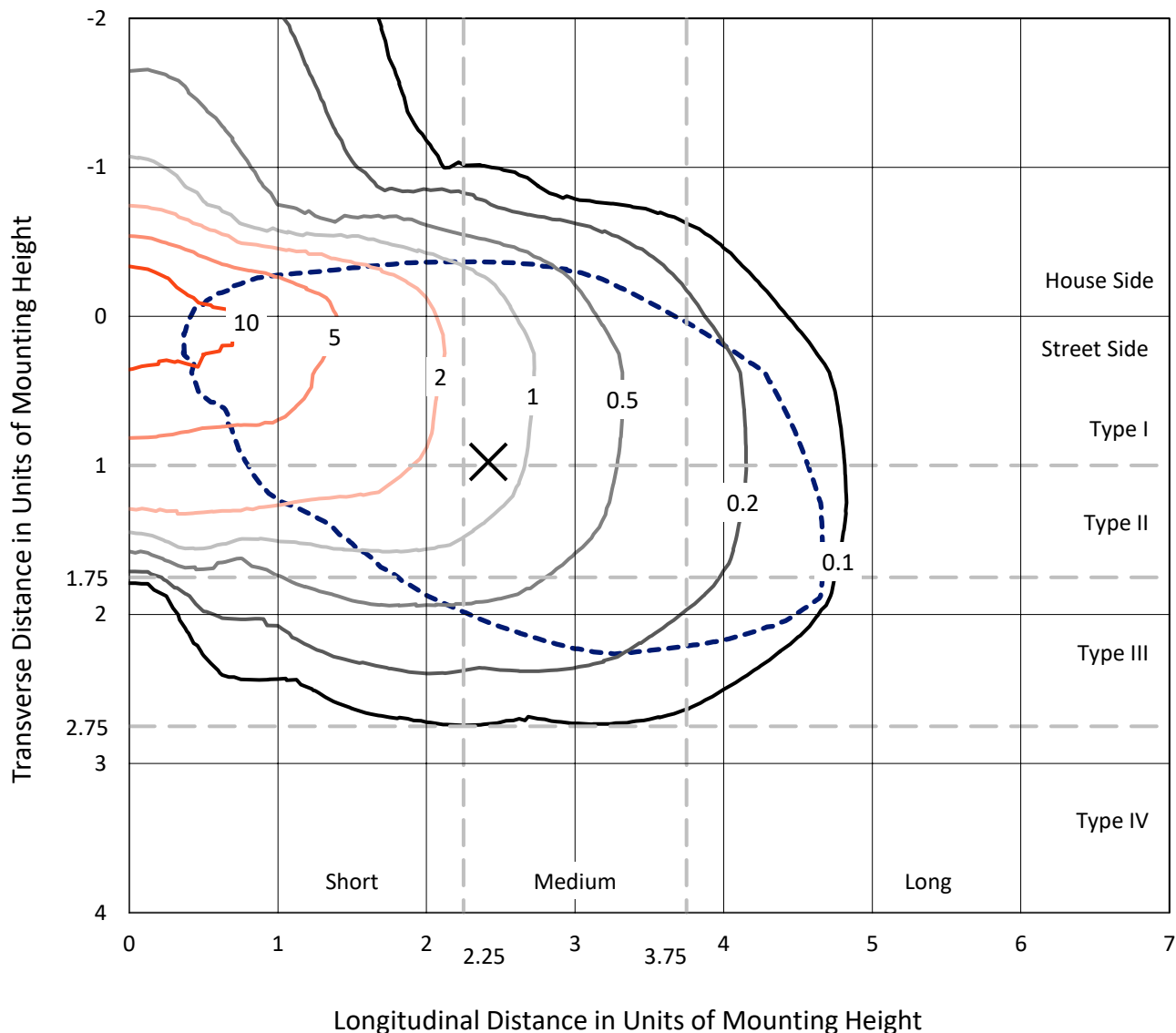
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

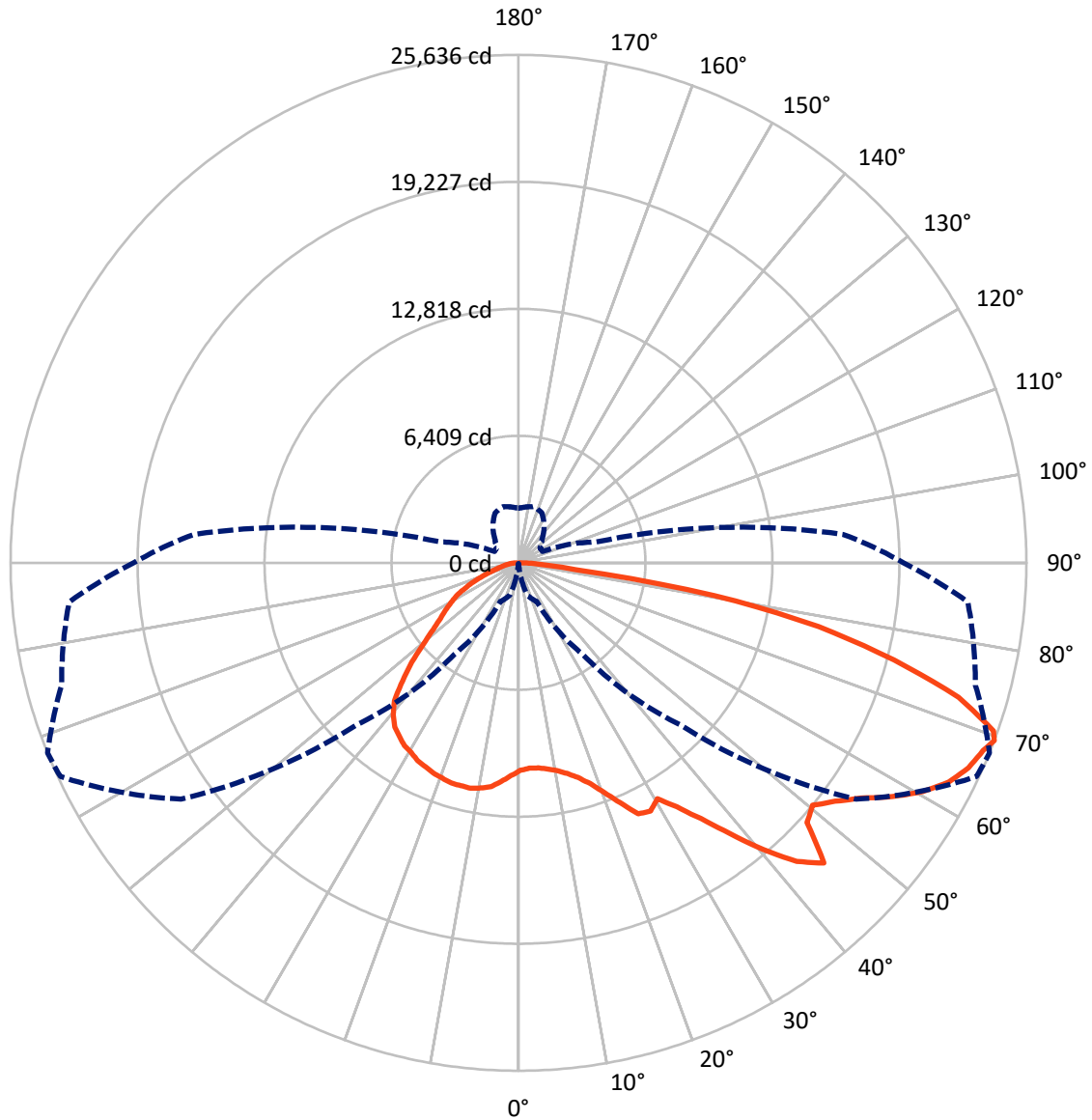
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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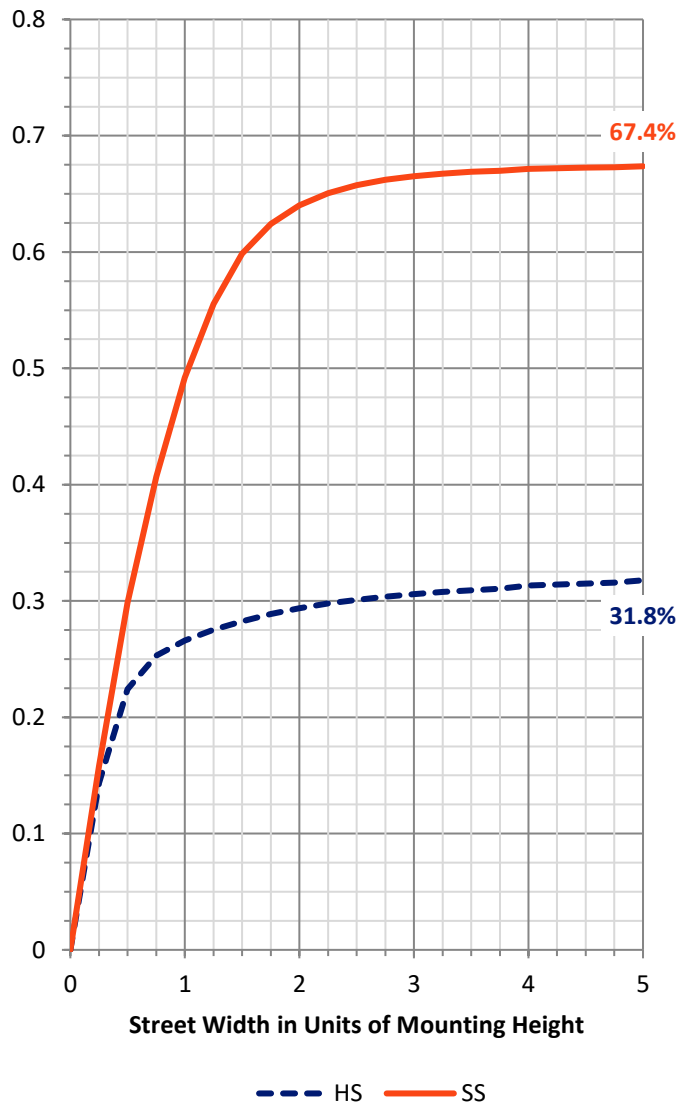
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15765.2	0.0	15765.2
	% Fixture	32.6	0.0	32.6
Street Side	Lumens	32566.8	0.0	32566.8
	% Fixture	67.4	0.0	67.4
Total	Lumens	48332.0	0.0	48332.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1046.4	2.2
10°-20°	3237.7	6.7
20°-30°	4977.8	10.3
30°-40°	6465.3	13.4
40°-50°	7980.4	16.5
50°-60°	8962.8	18.5
60°-70°	8759.3	18.1
70°-80°	5882.1	12.2
80°-90°	1020.2	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°	48332.0	100.0
0°-180°	48332.0	100.0

Coefficient of Utilization

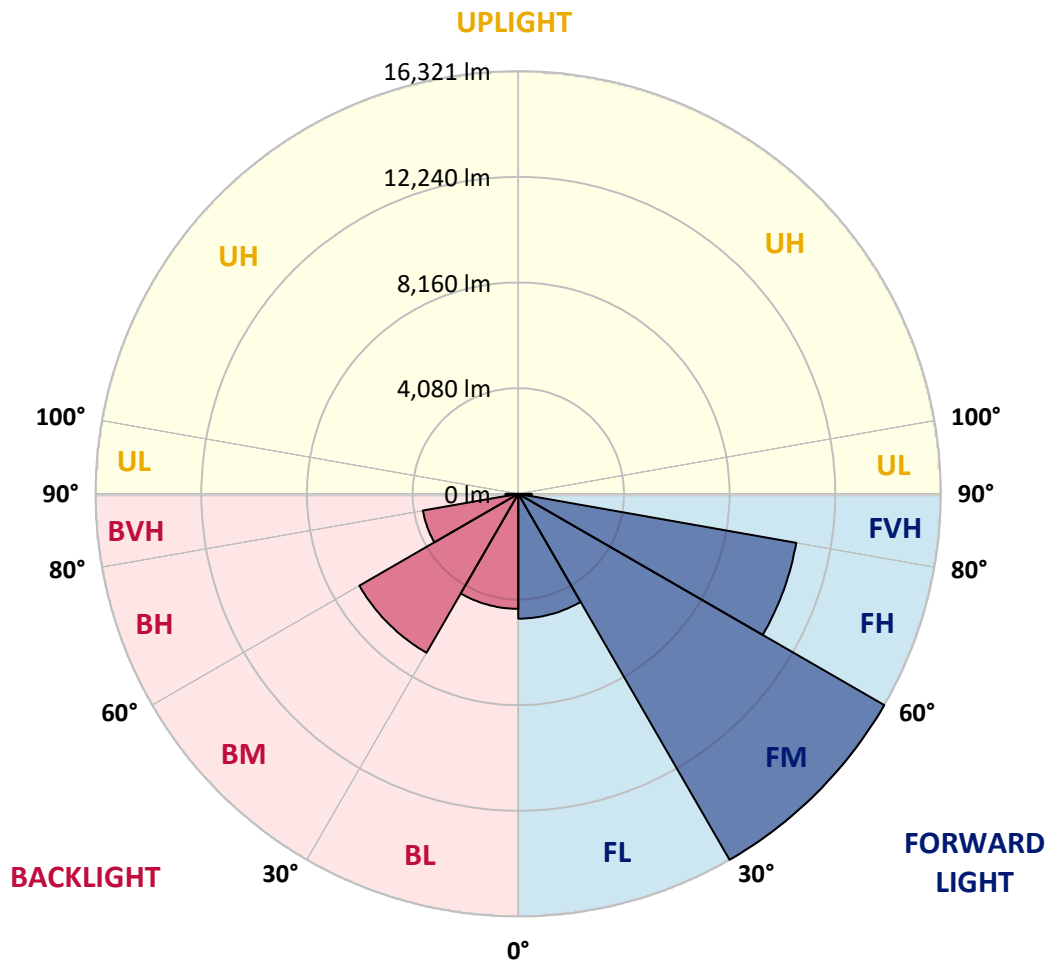


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4819.2	10.0			
FM	(30°-60°)	16320.5	33.8			
FH	(60°-80°)	10901.3	22.6			G4/12000
FVH	(80°-90°)	525.9	1.1			G4/750
BL	(0°-30°)	4442.7	9.2	B4/5000		
BM	(30°-60°)	7088.0	14.7	B4/8500		
BH	(60°-80°)	3740.1	7.7	B4/5000		G4/5000
BVH	(80°-90°)	494.4	1.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9
2.5°	10265.6	10203.0	10226.8	10313.0	10138.3	10252.6	10198.7	10315.2	10375.6	10349.7	10513.6
5°	10362.6	10293.6	10297.9	10358.3	10170.7	10267.7	10207.4	10332.4	10399.3	10362.6	10582.6
7.5°	10658.1	10582.6	10561.0	10556.7	10379.9	10453.2	10332.4	10433.8	10502.8	10483.4	10731.4
10°	11111.0	11020.4	10979.4	10955.7	10744.4	10722.8	10571.8	10617.1	10668.9	10690.4	10957.9
12.5°	11609.2	11486.2	11460.4	11389.2	11117.5	11070.0	10886.7	10908.3	10908.3	10957.9	11223.1
15°	12031.9	11930.5	11930.5	11857.2	11591.9	11525.1	11272.7	11246.9	11242.5	11281.4	11518.6
17.5°	11760.1	11704.1	11654.5	11617.8	11208.0	11100.2	11783.9	11738.6	11717.0	11755.8	11893.8
20°	10847.9	10998.8	10679.7	10228.9	10293.6	11591.9	12441.6	12359.7	12372.6	12411.4	12372.6
22.5°	9547.4	9174.3	9760.9	9922.7	10192.3	11152.0	13041.2	13127.4	13153.3	13155.5	12952.8
25°	8182.3	8389.3	9185.1	10418.7	10384.2	11184.3	12676.7	13903.8	14033.2	14020.3	13668.8
27.5°	8574.8	8536.0	9150.6	9961.5	10985.9	11870.1	12901.0	13446.6	14188.5	15010.2	14533.6
30°	8917.7	8885.3	8950.0	10084.4	11382.7	12555.9	13739.9	13651.5	13808.9	15297.0	15553.7
32.5°	9223.9	9200.2	9275.7	9400.8	10722.8	13295.7	14639.2	14622.0	14675.9	14792.4	16757.1
35°	9512.9	9515.1	9607.8	9812.7	10806.9	13448.8	15527.8	15711.1	15853.4	16110.1	16550.0
37.5°	9711.3	9715.6	9789.0	10037.0	10453.2	12691.8	16427.1	17080.6	17335.0	17796.6	17173.3
40°	9709.2	9741.5	9918.4	10241.9	10798.3	12191.5	16705.3	18633.3	19043.1	19379.5	18331.4
42.5°	9506.4	9523.7	9853.7	10438.1	11104.5	12571.0	15840.5	20147.3	20602.3	20509.6	19288.9
45°	9321.0	9316.7	9691.9	10412.2	11378.4	13092.9	15956.9	20104.2	21616.0	21503.8	20168.9
47.5°	9073.0	9079.4	9476.3	10300.1	11628.6	13651.5	16819.6	18281.8	19590.9	22357.8	20884.9
50°	8762.4	8801.2	9204.5	10129.7	11753.7	14173.4	17565.8	19081.9	19237.2	20080.4	21585.8
52.5°	8247.0	8178.0	8913.4	9933.5	11842.1	14553.0	18277.5	19849.7	19996.3	19690.1	22299.6
55°	4682.1	5810.0	8548.9	9704.9	11868.0	14781.6	18829.6	20723.1	20951.7	20662.7	22879.7
57.5°	2941.7	3032.2	7405.9	9098.8	11650.1	14923.9	19506.8	21922.2	22260.8	21572.8	23319.7
60°	1041.7	1123.6	3601.6	4177.4	9549.6	14531.4	20537.6	23334.8	23446.9	22429.0	23643.2
62.5°	110.0	144.5	2441.3	3066.7	7414.5	13410.0	21249.3	24471.3	24370.0	23063.1	23817.9
65°	38.8	53.9	2145.9	2743.2	6901.2	13060.6	21484.4	24956.6	24954.4	23468.5	23692.8
67.5°	30.2	41.0	1865.5	2383.1	6159.4	12312.2	21094.0	25321.1	25286.5	23869.6	23362.8
69°	30.2	43.1	1680.0	2148.0	5622.3	11596.2	20792.1	25513.0	25635.9	23876.1	22765.4
70°	30.2	43.1	1561.4	1984.1	5184.6	10940.6	20358.6	25366.3	25428.9	23669.1	22146.5
72.5°	30.2	43.1	1209.9	1535.5	3942.3	8421.7	17835.4	23114.8	23233.4	21851.0	19903.6
75°	30.2	43.1	851.9	1117.1	2588.0	5650.4	14201.4	19252.3	19573.6	18467.3	16308.5
77.5°	30.2	43.1	509.0	763.4	1623.9	3101.2	9771.7	14755.7	15482.5	14451.6	11656.6
80°	30.2	41.0	239.4	416.2	925.2	1643.4	4477.2	9083.7	10030.5	9040.6	6096.8
82.5°	30.2	41.0	196.3	299.8	468.0	817.4	1749.0	2976.2	2922.2	2624.6	1964.7
85°	28.0	36.7	161.7	220.0	336.4	517.6	974.8	1212.0	1156.0	1022.2	1028.7
87.5°	19.4	21.6	56.1	99.2	135.9	256.6	472.3	513.3	524.1	437.8	459.4
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9	10476.9
2.5°	10591.2	10604.2	10666.7	10778.9	10776.7	10897.5	10865.1	11145.5	11156.3	11152.0	11173.5
5°	10688.3	10761.6	10899.6	11139.0	11277.0	11458.2	11423.7	11706.2	11723.5	11699.7	11760.1
7.5°	10856.5	10947.1	11173.5	11469.0	11505.6	11734.3	11686.8	11915.4	11904.6	11861.5	11965.0
10°	11093.7	11201.6	11406.4	11574.7	11680.3	11814.0	11762.3	11956.4	11919.7	11872.3	11971.5
12.5°	11335.3	11387.0	11501.3	11691.1	11699.7	11729.9	11669.6	11827.0	11786.0	11714.8	11818.4
15°	11566.0	11572.5	11553.1	11639.4	11548.8	11568.2	11436.6	11535.8	11464.7	11432.3	11499.2
17.5°	11865.8	11788.2	11650.1	11613.5	11400.0	11309.4	11115.3	11111.0	10985.9	10940.6	10985.9
20°	12226.0	12057.7	11738.6	11434.5	11065.7	10880.2	10550.3	10461.8	10360.5	10263.4	10317.3
22.5°	12724.1	12398.5	11848.6	11281.4	10671.0	10306.6	9901.1	9650.9	9461.2	9273.5	9329.6
25°	13291.3	12836.3	12003.8	11020.4	10198.7	9553.9	9027.7	8600.7	8328.9	8055.0	8178.0
27.5°	14059.1	13431.5	12098.7	10826.3	9584.1	8719.3	7880.3	7323.9	7041.4	6845.2	6782.6
30°	14954.1	14201.4	12269.1	10444.6	8861.6	7692.7	6627.3	6006.2	5706.5	5613.7	5652.5
32.5°	16045.4	15137.4	12616.3	10125.4	8128.4	6603.6	5361.4	4876.2	4660.5	4645.4	4641.1
35°	17505.4	16332.2	12913.9	9629.4	7157.9	5333.4	4265.8	3864.7	3856.1	3849.6	3864.7
37.5°	18626.9	17548.5	13231.0	9144.1	6006.2	4164.5	3411.8	3168.1	3142.2	3217.7	3237.1
40°	19511.1	18419.8	13705.4	8324.6	4656.2	3109.9	2620.3	2529.7	2713.0	2879.1	2913.6
42.5°	20309.0	19153.1	13808.9	7451.2	3392.4	2387.4	2171.7	2322.7	2605.2	2795.0	2831.7
45°	21057.4	19923.0	13414.3	6152.9	2426.2	2022.9	2066.1	2292.5	2609.5	2812.3	2833.8
47.5°	21874.8	20438.4	12987.3	4947.3	1994.9	1938.8	2044.5	2303.3	2635.4	2840.3	2851.1
50°	22413.9	20807.2	11919.7	3869.0	1869.8	1887.1	2035.9	2327.0	2639.7	2786.4	2795.0
52.5°	22633.9	21102.7	10953.6	3096.9	1807.3	1848.2	2046.6	2368.0	2628.9	2710.9	2706.6
55°	22771.9	21238.5	10123.2	2577.2	1751.2	1818.0	2066.1	2398.2	2652.7	2736.8	2736.8
57.5°	22683.5	20934.5	9506.4	2195.5	1695.1	1796.5	2089.8	2443.5	2877.0	3025.8	3010.7
60°	22618.8	20365.1	8630.9	1938.8	1628.3	1772.8	2120.0	2600.9	3355.7	3506.7	3457.1
62.5°	22284.5	19884.2	7681.9	1774.9	1552.8	1759.8	2145.9	2812.3	3422.6	3414.0	3316.9
65°	21432.6	18905.1	6185.2	1608.8	1475.1	1742.6	2154.5	2905.0	3148.7	3012.8	2984.8
67.5°	20224.9	17492.5	4880.5	1442.8	1388.9	1705.9	2225.6	2795.0	2995.6	2879.1	2836.0
69°	19435.6	16446.5	4054.5	1339.3	1332.8	1675.7	2253.7	2784.2	2939.5	2807.9	2751.9
70°	18799.4	15540.7	3500.2	1272.4	1289.7	1652.0	2225.6	2782.1	2915.8	2751.9	2689.3
72.5°	16069.1	12590.4	2260.2	1112.8	1162.4	1589.4	2120.0	2710.9	2866.2	2758.3	2672.1
75°	12452.4	9165.7	1462.2	961.9	1028.7	1483.8	2014.3	2665.6	2911.5	2715.2	2529.7
77.5°	7990.3	4904.2	1132.2	808.7	884.2	1335.0	1824.5	2482.3	2827.3	2650.5	2411.1
80°	3480.8	1820.2	873.4	655.6	716.0	1084.8	1565.7	2206.2	2680.7	2661.3	2499.5
82.5°	1477.3	1173.2	672.9	502.5	569.4	802.3	1227.1	1891.4	2368.0	2460.7	2637.6
85°	836.8	703.1	448.6	345.1	422.7	590.9	873.4	1451.4	1928.0	2137.2	2286.0
87.5°	360.2	293.3	207.0	185.5	239.4	306.2	375.3	681.5	1028.7	1255.2	1350.1
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)