

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: P591275

Luminaire Tested: **CTN-CA8-480-727-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591275
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-727-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35012 lumens
Efficiency: N/A
Efficacy: 72.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

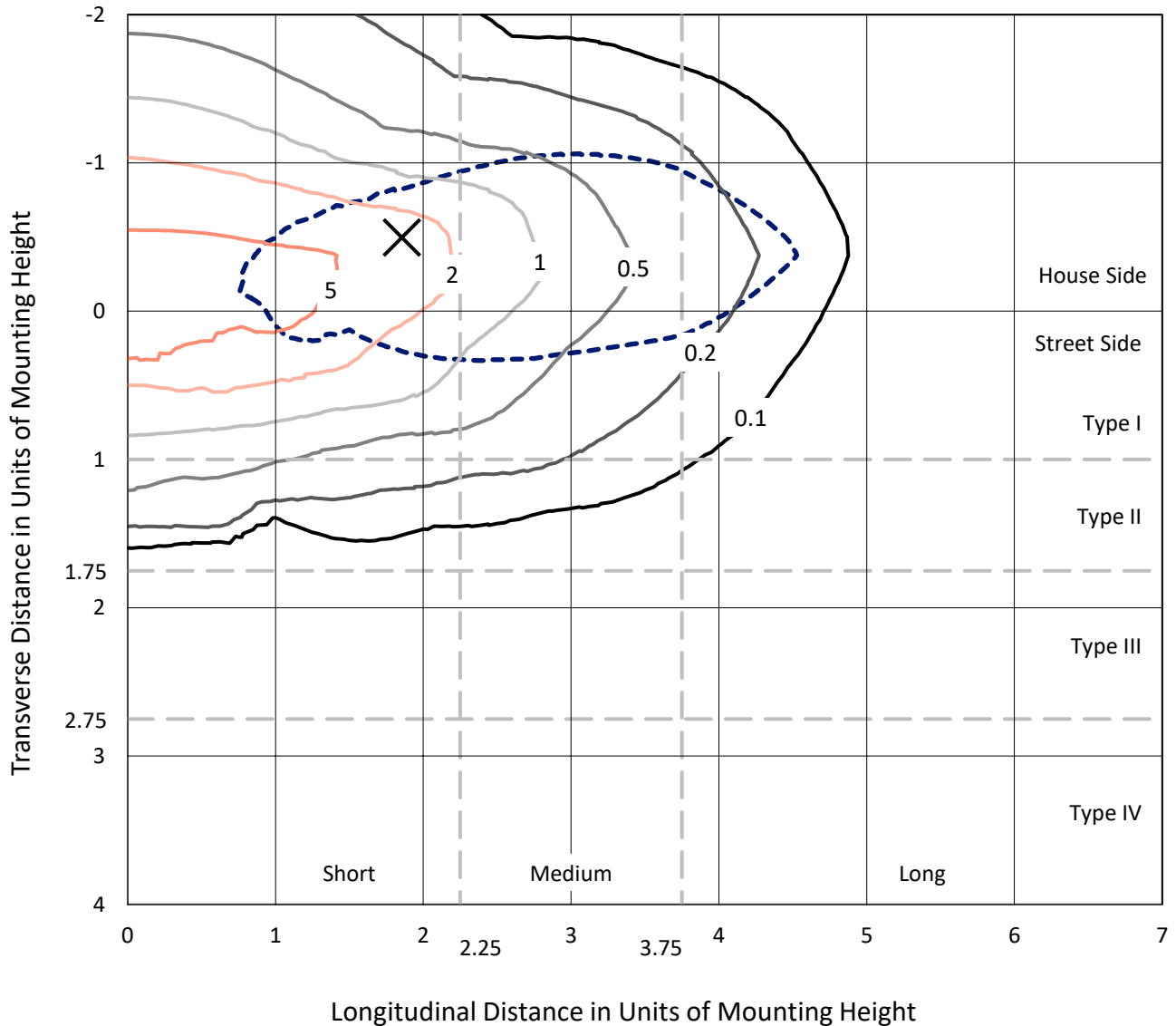
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

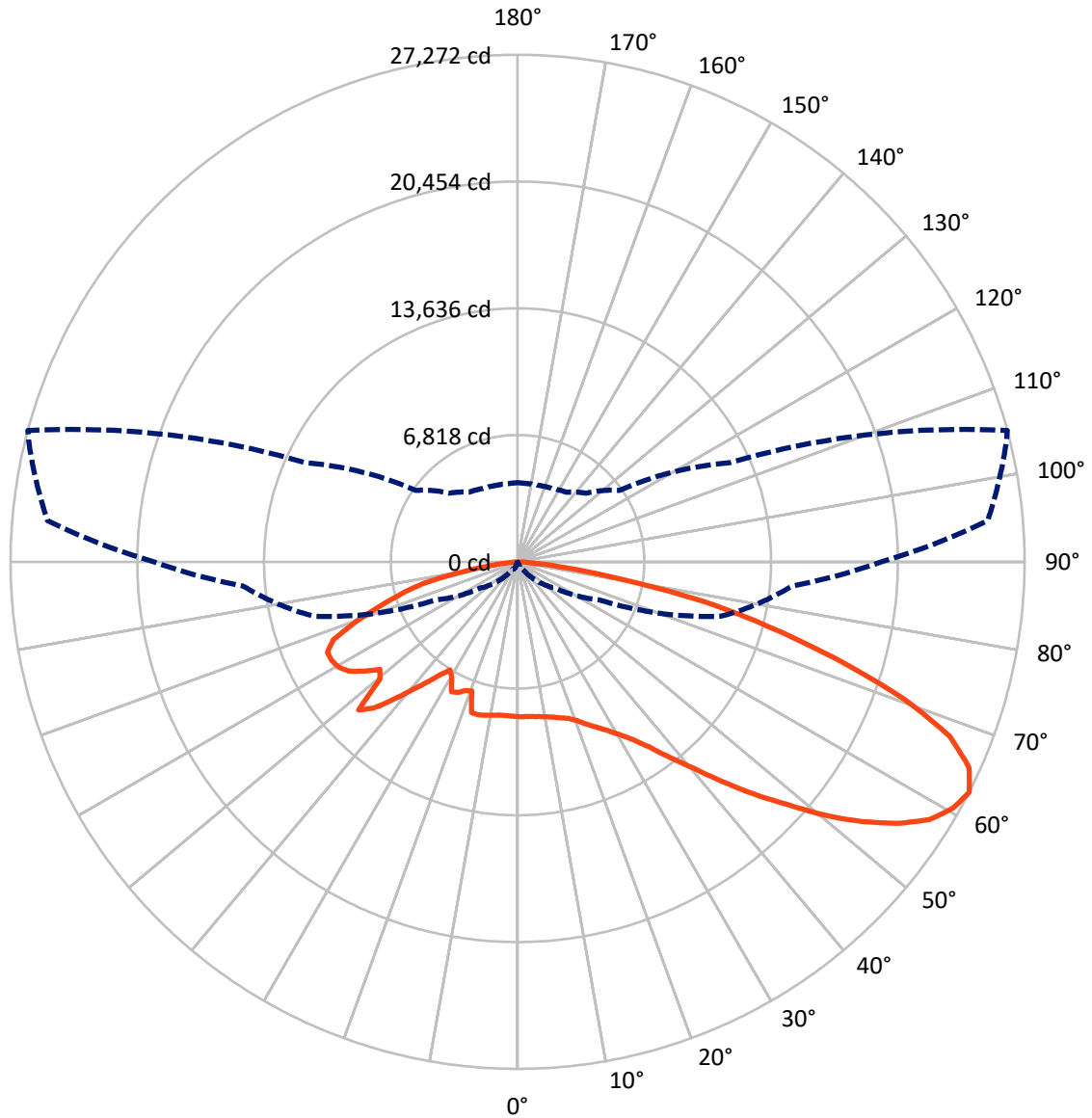
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.3 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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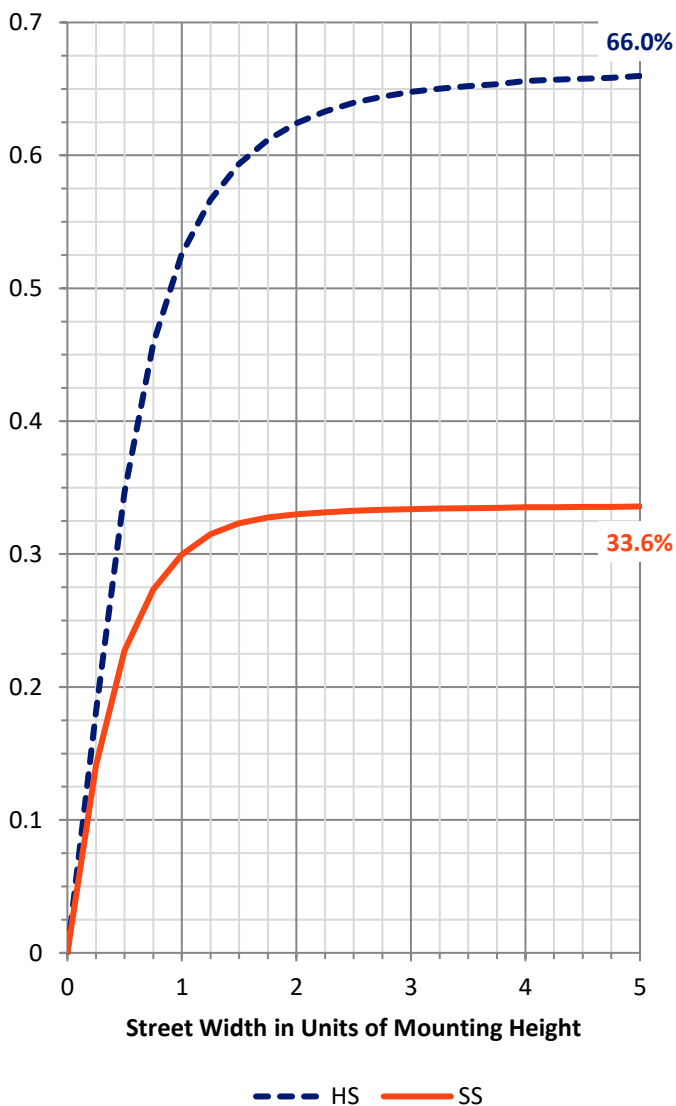
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	23296.6	0.0	23296.6
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	11715.4	0.0	11715.4
	% Fixture	33.5	0.0	33.5
Total	Lumens	35012.0	0.0	35012.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	794.7	2.3
10°-20°	2244.6	6.4
20°-30°	3163.4	9.0
30°-40°	4298.0	12.3
40°-50°	5846.9	16.7
50°-60°	6926.8	19.8
60°-70°	6792.5	19.4
70°-80°	4284.1	12.2
80°-90°	660.9	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°	35012.0	100.0
0°-180°	35012.0	100.0

Coefficient of Utilization

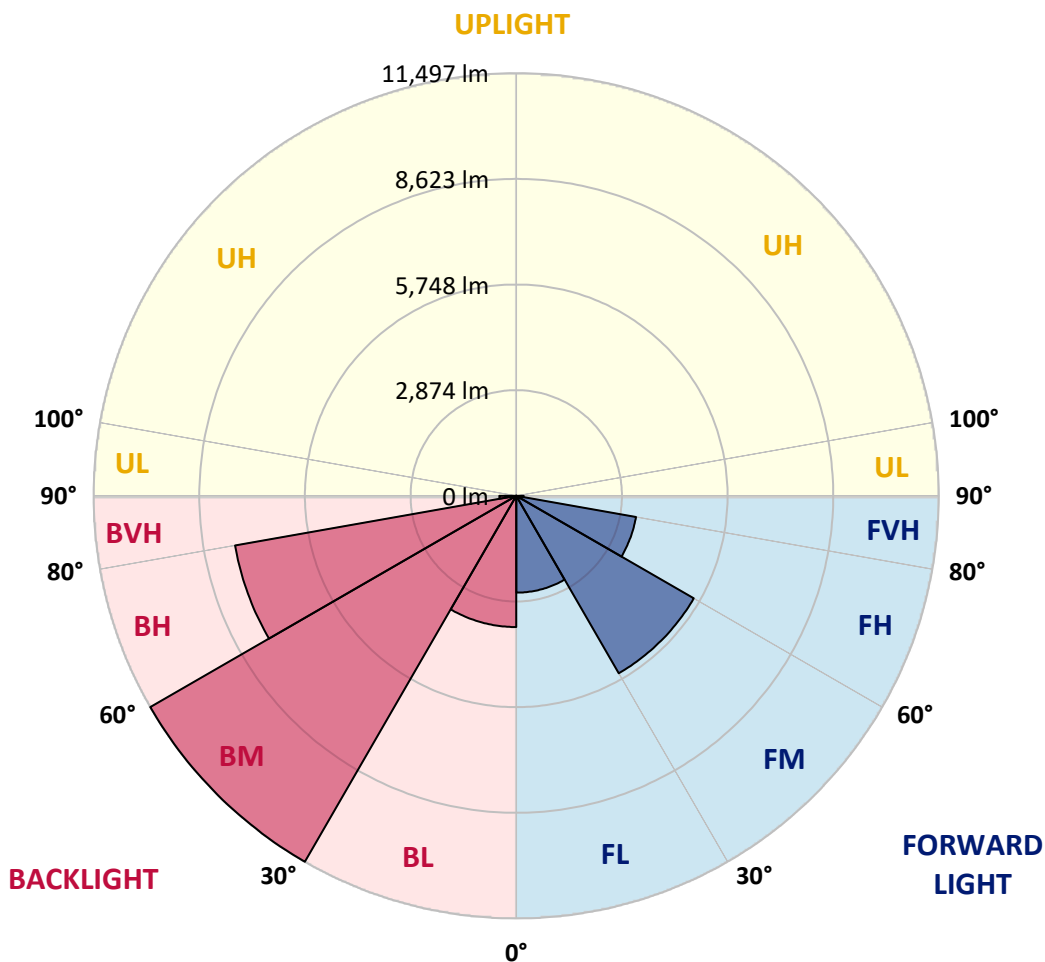


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2633.5	7.5			
FM	(30°-60°)	5574.8	15.9			
FH	(60°-80°)	3307.8	9.4			G2/5000
FVH	(80°-90°)	199.4	0.6			G2/225
BL	(0°-30°)	3569.3	10.2	B4/5000		
BM	(30°-60°)	11497.0	32.8	B5		
BH	(60°-80°)	7768.8	22.2	B5		G5
BVH	(80°-90°)	461.5	1.3			G3/500
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°	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8
2.5°	8334.4	8269.3	8315.8	8386.5	8280.4	8341.8	8239.5	8323.2	8302.8	8308.3	8347.4
5°	8269.3	8200.5	8256.3	8349.3	8245.1	8313.9	8230.2	8300.9	8293.5	8319.5	8351.1
7.5°	8207.9	8142.8	8200.5	8261.8	8207.9	8274.9	8211.6	8299.0	8304.6	8362.3	8388.3
10°	8142.8	8077.7	8133.5	8204.2	8159.5	8243.2	8217.2	8323.2	8364.1	8440.4	8462.7
12.5°	7999.6	7941.9	7988.4	8070.3	8077.7	8200.5	8217.2	8380.9	8431.1	8531.5	8565.0
15°	7138.4	7201.7	7449.0	7687.1	7789.4	8016.3	8140.9	8433.0	8503.6	8646.8	8698.9
17.5°	5775.1	5656.1	5271.1	5371.5	5936.9	6699.5	6987.8	7713.2	8479.4	8791.9	8858.9
20°	3413.0	3656.6	4409.9	4640.5	4848.9	5669.1	6638.1	7069.6	7363.5	8473.9	9078.3
22.5°	2814.1	2830.8	3370.2	4434.1	4668.4	4990.2	5739.8	7160.8	7463.9	7685.3	8358.6
25°	2609.5	2626.2	2719.2	3541.3	4540.1	4912.1	5241.3	6545.1	7722.5	7995.9	8522.2
27.5°	2445.8	2468.1	2553.7	2784.3	4233.2	4889.8	5306.4	5804.9	7837.8	8364.1	8857.0
30°	2323.1	2332.4	2419.8	2643.0	3200.9	4895.4	5401.3	5933.2	7179.4	8831.0	9325.7
32.5°	2211.5	2217.0	2308.2	2525.8	2862.4	4534.5	5544.5	6201.0	6855.7	9214.1	9969.3
35°	2125.9	2122.2	2204.0	2417.9	2752.7	3472.5	5704.4	6522.8	7372.8	8851.4	10929.0
37.5°	2044.1	2038.5	2109.2	2306.3	2656.0	3251.2	5518.4	6909.7	8114.9	9126.7	10850.9
40°	1980.8	1969.7	2029.2	2205.9	2555.6	3195.4	4346.7	7318.8	8929.6	10545.8	11507.4
42.5°	1925.0	1917.6	1967.8	2109.2	2453.3	3128.4	4050.9	7540.2	9943.2	12186.3	13205.5
45°	1841.3	1852.5	1908.3	2044.1	2343.5	3033.6	4080.7	6056.0	11016.4	13609.2	14898.1
47.5°	1806.0	1804.1	1839.5	1967.8	2248.7	2901.5	4060.2	5553.8	11691.6	15099.0	16555.3
50°	1750.2	1740.9	1517.7	1878.5	2151.9	2737.8	3974.7	5698.8	9729.3	16560.9	18076.7
52.5°	1646.0	1463.8	1328.0	1815.3	2053.4	2559.3	3783.1	5762.1	9394.5	16300.5	19384.3
55°	874.2	974.6	1257.3	1726.0	1938.1	2399.3	3502.3	5717.4	10118.1	13034.4	17994.9
57.5°	775.6	771.9	799.8	1363.3	1009.9	2224.5	3163.8	5512.9	10802.5	13629.6	18331.5
60°	61.4	63.2	74.4	453.8	535.7	1566.1	2799.2	5259.9	11165.2	14332.7	19148.0
62.5°	29.8	33.5	44.6	405.5	489.2	1424.7	2470.0	4828.4	11317.7	14840.4	19551.6
65°	7.4	9.3	20.5	357.1	425.9	1268.5	2138.9	4322.5	11330.7	14860.9	19877.1
67.5°	5.6	9.3	20.5	323.6	388.7	1130.8	1848.8	3969.1	10776.5	14784.6	19713.5
70°	5.6	9.3	20.5	290.2	351.5	980.2	1592.1	3623.2	9361.1	14500.1	19157.3
72.5°	5.6	11.2	20.5	254.8	308.7	831.4	1352.2	3241.9	7856.4	13311.6	17918.6
75°	5.6	11.2	22.3	206.5	264.1	662.1	1110.4	2776.9	6534.0	11542.8	15865.3
77.5°	5.6	11.2	22.3	160.0	213.9	494.7	840.7	2200.3	5213.4	8512.9	11146.6
80°	5.6	11.2	22.3	113.5	174.8	347.8	611.9	1501.0	3109.8	4475.0	5676.5
82.5°	5.6	11.2	22.3	81.8	126.5	251.1	377.6	740.3	1484.2	2148.2	2695.0
85°	3.7	9.3	20.5	53.9	67.0	152.5	225.1	329.2	444.5	587.7	794.2
87.5°	3.7	5.6	13.0	20.5	27.9	53.9	83.7	74.4	83.7	174.8	251.1
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°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8	8328.8
2.5°	8341.8	8334.4	8336.2	8377.2	8341.8	8349.3	8287.9	8410.6	8399.5	8382.7	8431.1
5°	8351.1	8347.4	8362.3	8397.6	8343.7	8353.0	8295.3	8438.5	8403.2	8397.6	8455.3
7.5°	8397.6	8392.0	8406.9	8423.7	8364.1	8364.1	8313.9	8427.4	8406.9	8369.7	8434.8
10°	8481.3	8460.8	8475.7	8485.0	8393.9	8390.2	8297.2	8431.1	8379.0	8360.4	8444.1
12.5°	8598.5	8552.0	8574.3	8559.4	8438.5	8416.2	8291.6	8379.0	8313.9	8302.8	8379.0
15°	8756.6	8695.2	8711.9	8684.0	8531.5	8466.4	8265.6	8302.8	8198.6	8189.3	8245.1
17.5°	8903.5	8866.3	8857.0	8857.0	8678.5	8516.6	8241.4	8189.3	8051.7	8042.4	8070.3
20°	9169.5	9119.3	9113.7	9069.0	8804.9	8557.6	8202.3	8042.4	7837.8	7791.3	7843.4
22.5°	9255.0	9498.7	9482.0	9284.8	8911.0	8591.0	8122.3	7858.2	7577.4	7488.1	7514.1
25°	9509.9	9876.3	9846.5	9560.1	9018.8	8609.6	8025.6	7655.5	7268.6	7112.4	7118.0
27.5°	9913.5	10287.3	10266.8	9853.9	9152.7	8615.2	7917.7	7441.6	6961.7	6757.1	6773.9
30°	10426.8	10804.4	10774.6	10181.3	9355.5	8626.4	7835.9	7184.9	6680.9	6459.6	6455.8
32.5°	11141.0	11483.2	11395.8	10618.4	9599.1	8672.9	7728.0	6941.3	6424.2	6191.7	6173.1
35°	12219.8	12346.3	12238.4	11139.2	9857.7	8702.6	7555.1	6703.2	6186.1	5957.4	5940.6
37.5°	13678.0	13521.7	13376.7	11725.0	10125.5	8695.2	7335.6	6472.6	5981.6	5763.9	5763.9
40°	13821.2	14872.0	14604.2	12342.5	10367.3	8654.3	7127.3	6247.5	5816.0	5639.3	5667.2
42.5°	14492.6	16525.5	16149.8	12939.6	10542.1	8535.2	6904.1	6042.9	5661.6	5518.4	5529.6
45°	16142.4	18030.2	17810.7	13516.2	10637.0	8325.1	6645.6	5842.1	5488.7	5375.2	5397.5
47.5°	17916.8	19819.5	19497.7	14048.1	10584.9	8014.5	6370.3	5657.9	5308.3	5235.7	5276.6
50°	19594.4	21701.7	21433.9	14421.9	10354.3	7579.2	6076.4	5462.6	5166.9	5109.2	5129.7
52.5°	21240.5	23411.0	23210.1	14624.7	9893.0	7123.6	5804.9	5276.6	5034.8	4962.3	4990.2
55°	22598.2	25031.0	24835.7	14604.2	9199.2	6647.4	5535.2	5075.8	4900.9	4835.8	4858.2
57.5°	23658.4	26292.1	26152.6	14293.6	8392.0	6210.3	5230.1	4878.6	4724.2	4666.6	4685.2
60°	24607.0	27091.8	26911.4	13607.3	7536.5	5728.6	4915.8	4644.3	4515.9	4469.4	4499.2
62.5°	25384.4	27108.6	27272.2	12614.1	6697.6	5219.0	4566.1	4356.0	4263.0	4235.1	4253.7
65°	25583.4	26610.1	26690.1	11386.5	5847.6	4713.1	4145.8	4008.2	3969.1	3952.4	3989.6
67.5°	25308.1	25559.2	25083.1	10348.7	5072.0	4140.2	3692.0	3606.4	3630.6	3634.3	3682.7
70°	24597.7	22747.0	22012.3	9480.1	4348.5	3506.0	3193.5	3165.6	3230.7	3284.6	3320.0
72.5°	22786.1	18675.6	17976.3	8252.5	3427.9	2683.9	2514.6	2603.9	2581.6	2605.8	2669.0
75°	19616.7	14414.5	13981.1	6716.2	2611.4	1951.1	1724.2	1733.5	1761.4	1884.1	1951.1
77.5°	13973.7	10367.3	10173.9	5152.0	1729.7	1147.6	1186.6	1318.7	1357.8	1361.5	1408.0
80°	7404.4	5778.8	5516.6	3035.4	1143.9	820.2	892.8	950.4	1002.5	1056.4	1069.5
82.5°	3336.7	2613.2	2540.7	1508.4	725.4	632.4	649.1	747.7	790.5	799.8	809.1
85°	1296.4	902.1	859.3	626.8	476.1	427.8	474.3	574.7	615.6	597.0	591.5
87.5°	345.9	212.0	193.4	210.2	223.2	236.2	269.7	306.9	351.5	338.5	327.3
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)