

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: P591320

Luminaire Tested: **CTN-CA10-630-730-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591320
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-CA10-630-730-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: 49165 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B5 - U0 - G5

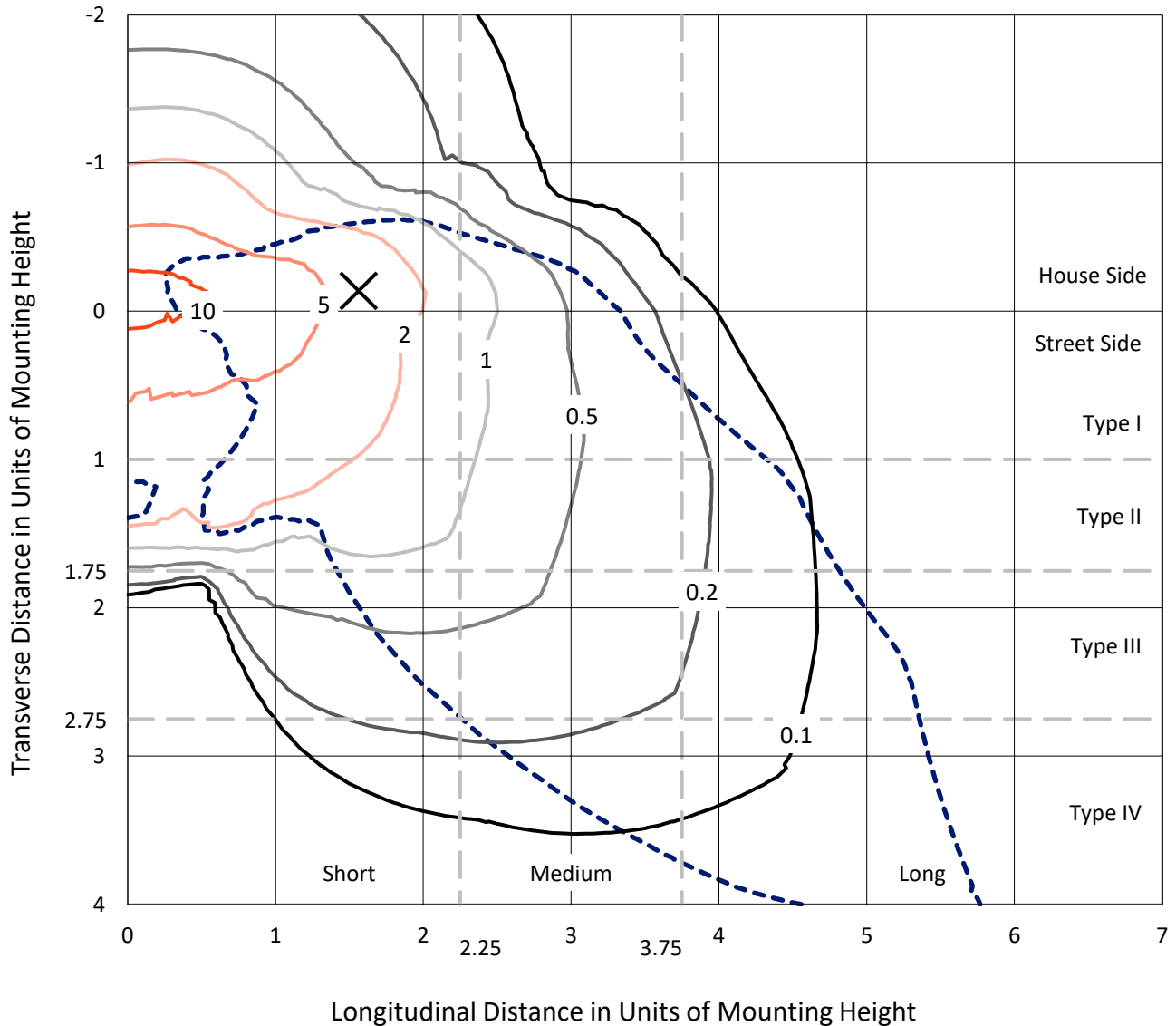
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

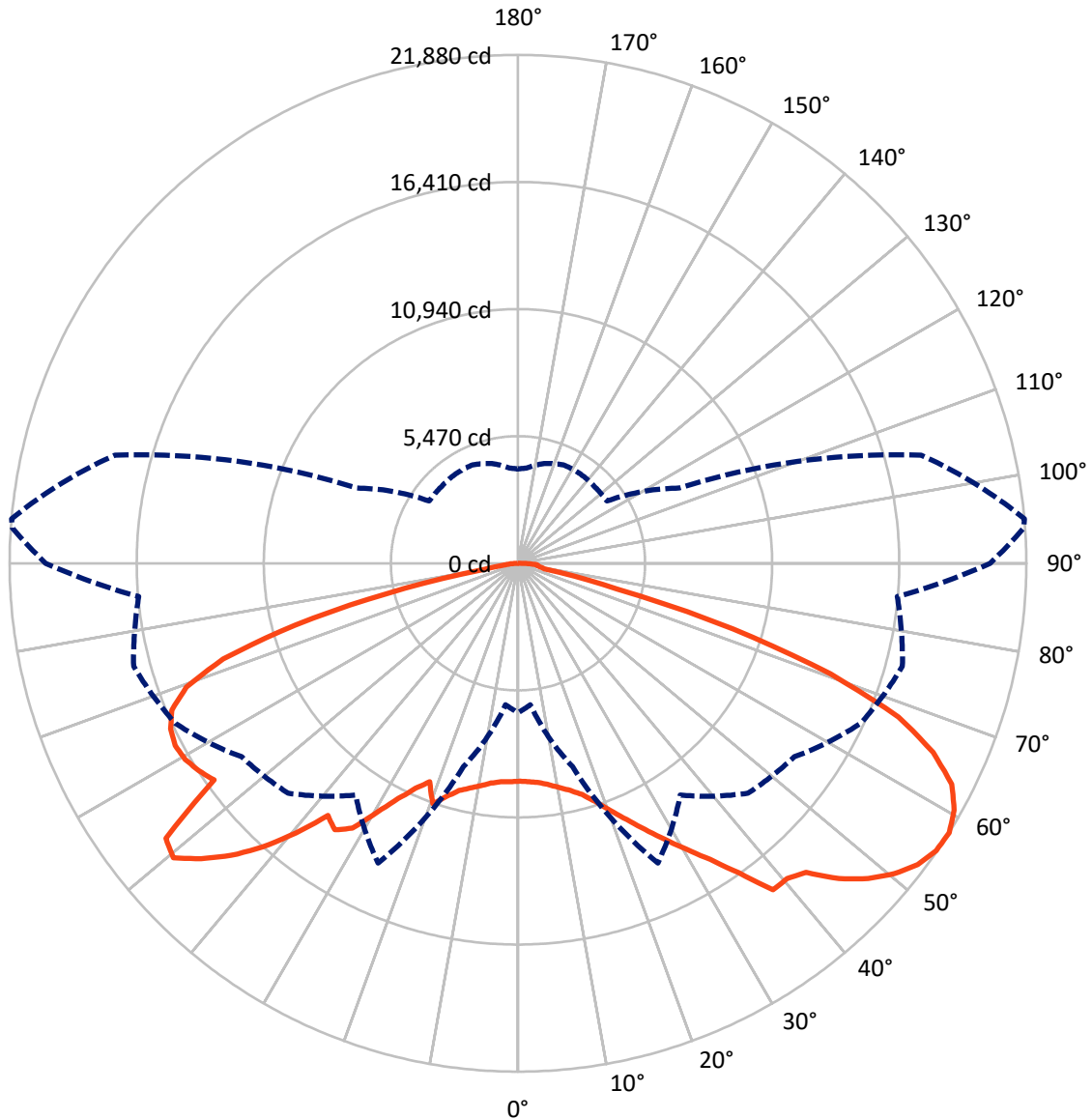
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.1 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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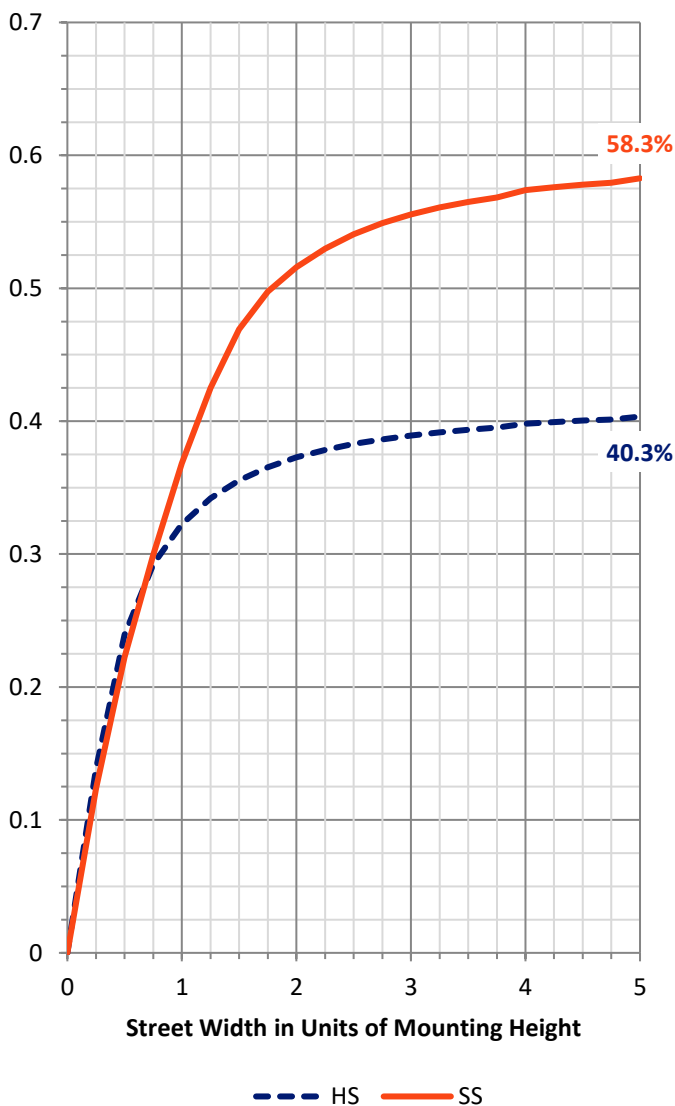
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20249.5	0.0	20249.5
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	28915.5	0.0	28915.5
	% Fixture	58.8	0.0	58.8
Total	Lumens	49165.0	0.0	49165.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	916.0	1.9
10°-20°	2801.2	5.7
20°-30°	4426.4	9.0
30°-40°	6116.5	12.4
40°-50°	8247.0	16.8
50°-60°	9714.9	19.8
60°-70°	8678.9	17.7
70°-80°	6480.4	13.2
80°-90°	1783.7	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°	49165.0	100.0
0°-180°	49165.0	100.0

Coefficient of Utilization



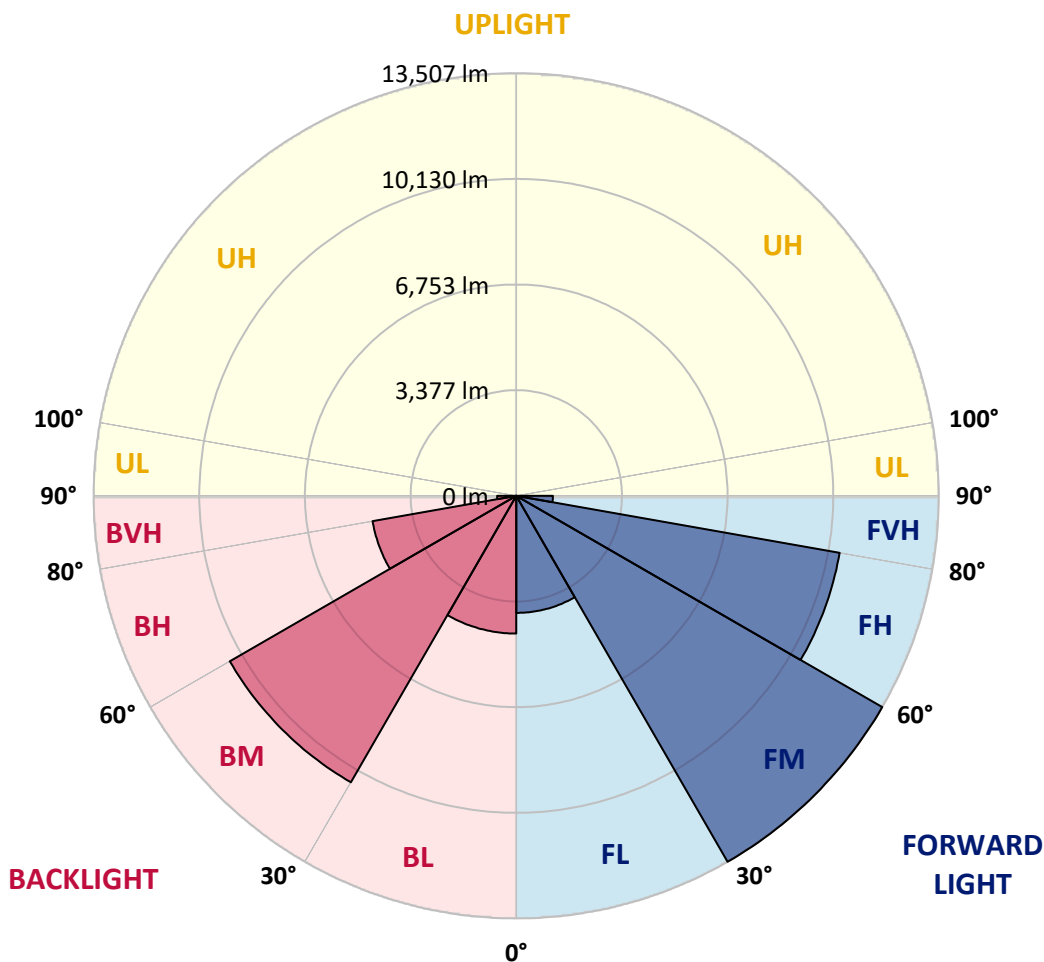
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3742.1	7.6			
FM	(30°-60°)	13506.5	27.5			
FH	(60°-80°)	10495.2	21.3			G4/12000
FVH	(80°-90°)	1171.6	2.4			G5
BL	(0°-30°)	4401.4	9.0	B4/5000		
BM	(30°-60°)	10571.9	21.5	B5		
BH	(60°-80°)	4664.1	9.5	B4/5000		G4/5000
BVH	(80°-90°)	612.1	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3
2.5°	9257.1	9198.3	9201.1	9282.3	9161.9	9248.7	9237.5	9371.9	9352.3	9405.5	9422.3
5°	9181.5	9131.1	9133.9	9237.5	9156.3	9234.7	9181.5	9304.7	9349.5	9430.7	9447.5
7.5°	9201.1	9156.3	9173.1	9271.1	9170.3	9248.7	9254.3	9369.1	9391.5	9531.5	9553.9
10°	9251.5	9203.9	9215.1	9293.5	9229.1	9369.1	9352.3	9503.5	9509.1	9705.1	9733.1
12.5°	9184.3	9150.7	9150.7	9248.7	9282.3	9422.3	9464.3	9621.1	9654.7	9881.5	9917.9
15°	9063.9	9007.9	9089.1	9234.7	9301.9	9514.7	9593.1	9828.3	9867.5	10102.7	10181.1
17.5°	8856.7	8825.9	9125.5	9170.3	8915.5	9077.9	9411.1	10069.1	10203.5	10480.7	10626.3
20°	8237.9	7890.7	7089.8	7235.4	8019.5	8604.7	8708.3	9024.7	9601.5	10982.0	11208.8
22.5°	6056.6	6356.2	7414.6	7501.4	7476.2	7960.7	9049.9	9355.1	9629.5	10136.3	11642.8
25°	6272.2	6255.4	6773.4	7873.9	7834.7	7927.1	8383.5	9867.5	10141.9	10645.9	12214.0
27.5°	6465.4	6479.4	6440.2	7476.2	8209.9	8305.1	8445.1	9458.7	10785.9	11362.8	12838.4
30°	6849.0	6790.2	6683.8	6681.0	8537.5	8677.5	8915.5	9254.3	11379.6	12295.2	13619.6
32.5°	7495.8	7428.6	7288.6	7067.4	7378.2	9063.9	9391.5	9822.7	10500.3	13440.4	14535.3
35°	7974.7	7927.1	7831.9	7677.8	7428.6	9257.1	9856.3	10427.5	11323.6	13916.4	15736.5
37.5°	8565.5	8498.3	8389.1	8198.7	8011.1	7935.5	10304.3	11113.6	12471.6	13594.4	15996.9
40°	9234.7	9195.5	8996.7	8750.3	8543.1	8333.1	10612.3	12009.6	13947.2	15039.3	15758.9
42.5°	9738.7	9707.9	9590.3	9391.5	9189.9	9055.5	9405.5	13110.0	15554.5	16436.5	16965.7
45°	10178.3	10144.7	10144.7	10091.5	10035.5	10046.7	10197.9	13899.6	17080.6	17629.4	18108.2
47.5°	10517.1	10458.3	10223.1	10270.7	10351.9	10595.5	11054.8	12085.2	18309.8	18643.0	19068.6
50°	11343.2	11253.6	10491.9	10668.3	10931.6	11323.6	11914.4	13210.8	17097.4	19508.2	19841.4
52.5°	12104.8	11690.4	8666.3	11253.6	11550.4	12130.0	12830.0	14428.9	15736.5	19228.2	20432.3
55°	10799.9	10377.1	8711.1	12328.8	12278.4	13009.2	13692.4	15428.5	16475.7	16061.3	20283.9
57.5°	6429.0	6109.8	9063.9	14238.5	12172.0	13992.1	14518.5	16282.5	17125.4	16383.3	20323.1
60°	3329.3	3500.1	3365.7	8425.5	10480.7	14423.3	15372.5	17105.8	17565.0	16624.1	20348.3
62.5°	448.0	322.0	134.4	6163.0	7448.2	12018.0	16444.9	17889.8	17887.0	16705.3	20171.8
65°	28.0	30.8	61.6	6132.2	8215.5	14258.1	18220.2	18522.6	18046.6	16562.5	19583.8
67.5°	11.2	14.0	56.0	6090.2	8865.1	14988.9	20309.1	18724.2	18063.4	16178.9	18293.0
70°	11.2	14.0	56.0	5673.0	9307.5	15117.7	20661.9	18648.6	17856.2	15235.3	15893.3
72.5°	14.0	16.8	50.4	4928.2	9038.7	14767.7	20085.0	18494.6	17114.2	13336.8	12340.0
75°	14.0	16.8	50.4	3981.7	7997.1	14003.3	19628.6	17206.6	15002.9	9965.5	8002.7
77.5°	11.2	14.0	50.4	3108.1	6667.0	12410.0	17805.8	14960.9	11864.0	5799.0	3161.3
80°	11.2	14.0	50.4	2164.5	5079.4	10172.7	14504.5	11651.2	6672.6	1657.7	890.4
82.5°	11.2	14.0	47.6	1349.6	3592.5	7481.8	9912.3	5370.6	1430.8	646.8	694.4
85°	11.2	11.2	36.4	660.8	2296.1	4970.2	4939.4	898.8	568.4	420.0	526.4
87.5°	5.6	8.4	19.6	302.4	1282.4	2620.9	1968.5	344.4	243.6	170.8	294.0
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°	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3	9380.3
2.5°	9427.9	9413.9	9453.1	9553.9	9548.3	9623.9	9565.1	9679.9	9699.5	9674.3	9713.5
5°	9478.3	9483.9	9590.3	9696.7	9657.5	9780.7	9805.9	9976.7	9982.3	9959.9	10010.3
7.5°	9604.3	9623.9	9730.3	9856.3	9912.3	10015.9	10001.9	10223.1	10203.5	10192.3	10251.1
10°	9780.7	9817.1	9931.9	10130.7	10105.5	10265.1	10192.3	10340.7	10335.1	10312.7	10377.1
12.5°	9996.3	10032.7	10178.3	10368.7	10371.5	10382.7	10323.9	10399.5	10374.3	10321.1	10371.5
15°	10287.5	10329.5	10528.3	10668.3	10547.9	10517.1	10405.1	10363.1	10267.9	10127.9	10169.9
17.5°	10746.7	10780.3	11004.4	11082.8	10875.6	10752.3	10433.1	10195.1	9926.3	9730.3	9766.7
20°	11326.4	11357.2	11539.2	11519.6	11242.4	10940.0	10444.3	10041.1	9539.9	9156.3	9145.1
22.5°	11964.8	11984.4	12158.0	11984.4	11491.6	11052.0	10421.9	9803.1	8960.3	8464.7	8411.5
25°	12667.6	12684.4	12681.6	12295.2	11634.4	10987.6	10214.7	9405.5	8324.7	7795.5	7739.4
27.5°	13454.4	13457.2	13149.2	12536.0	11572.8	10749.5	9814.3	8691.5	7742.2	7283.0	7241.0
30°	14291.7	14286.1	13577.6	12558.4	11334.8	10298.7	9195.5	8016.7	7218.6	6809.8	6751.0
32.5°	15246.5	15198.9	13958.4	12480.0	10900.8	9651.9	8397.5	7451.0	6807.0	6339.4	6252.6
35°	16470.1	16352.5	14283.3	12208.4	10256.7	8778.3	7658.2	6958.2	6409.4	5933.4	5846.6
37.5°	17985.0	17833.8	14792.9	11824.8	9514.7	8055.9	7115.0	6625.0	6123.8	5580.6	5468.6
40°	17548.2	17839.4	15400.5	11410.4	8797.9	7479.0	6795.8	6465.4	5950.2	5348.2	5241.8
42.5°	18223.0	18186.6	16232.1	10920.4	8109.1	7028.2	6667.0	6417.8	5857.8	5247.4	5124.2
45°	19371.0	19362.6	17128.2	10444.3	7437.0	6667.0	6569.0	6289.0	5726.2	5121.4	4987.0
47.5°	20303.5	20275.5	17985.0	9920.7	6815.4	6384.2	6370.2	6028.6	5491.0	4928.2	4805.0
50°	20953.1	20995.1	18461.0	9416.7	6227.4	6093.0	6039.8	5661.8	5160.6	4695.8	4600.5
52.5°	21465.5	21543.9	18668.2	9369.1	5712.2	5717.8	5625.4	5281.0	4889.0	4513.7	4412.9
55°	21717.5	21837.9	18455.4	9061.1	5208.2	5241.8	5152.2	4933.8	4701.4	4356.9	4284.1
57.5°	21821.1	21879.9	17962.6	7663.8	4667.8	4662.2	4690.2	4667.8	4449.3	4110.5	4057.3
60°	21644.7	21566.3	16890.1	5824.2	4118.9	4144.1	4323.3	4300.9	4107.7	3850.1	3777.3
62.5°	21101.5	20947.5	14927.3	4306.5	3679.3	3883.7	4074.1	4009.7	3774.5	3539.3	3483.3
65°	20065.4	19631.4	11894.8	3362.9	3469.3	3749.3	3925.7	3830.5	3561.7	3284.5	3250.9
67.5°	18206.2	17663.0	7806.7	3015.7	3379.7	3634.5	3819.3	3659.7	3399.3	3099.7	3052.1
70°	14857.3	14260.9	3696.1	2811.3	3178.1	3430.1	3564.5	3402.1	3136.1	2836.5	2802.9
72.5°	10360.3	9682.7	1990.9	2590.1	2945.7	3164.1	3253.7	3054.9	2822.5	2690.9	2682.5
75°	5163.4	4412.9	1806.1	2363.3	2646.1	2836.5	2987.7	2850.5	2646.1	2405.3	2343.7
77.5°	1374.8	1181.6	1699.7	2111.3	2408.1	2623.7	2710.5	2567.7	2332.5	2128.1	2091.7
80°	954.8	974.4	1587.7	1750.1	2100.1	2293.3	2374.5	2192.5	2074.9	1873.3	1817.3
82.5°	809.2	851.2	1282.4	1318.8	1668.9	1876.1	2018.9	1988.1	1820.1	1657.7	1635.3
85°	758.8	806.4	820.4	912.8	1195.6	1439.2	1685.7	1699.7	1587.7	1380.4	1313.2
87.5°	436.8	431.2	394.8	464.8	655.2	798.0	966.0	921.2	750.4	649.6	635.6
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)