

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: P591045

Luminaire Tested: **CTN-CA10-210-740-U-T3-HSS-HM-EX120**

Issue Date: 12/14/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P591045  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2112-474-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 12/14/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-210-740-U-T3-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31771 lumens  
Efficiency: N/A  
Efficacy: 149.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

Input Watts (W): 212.9  
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

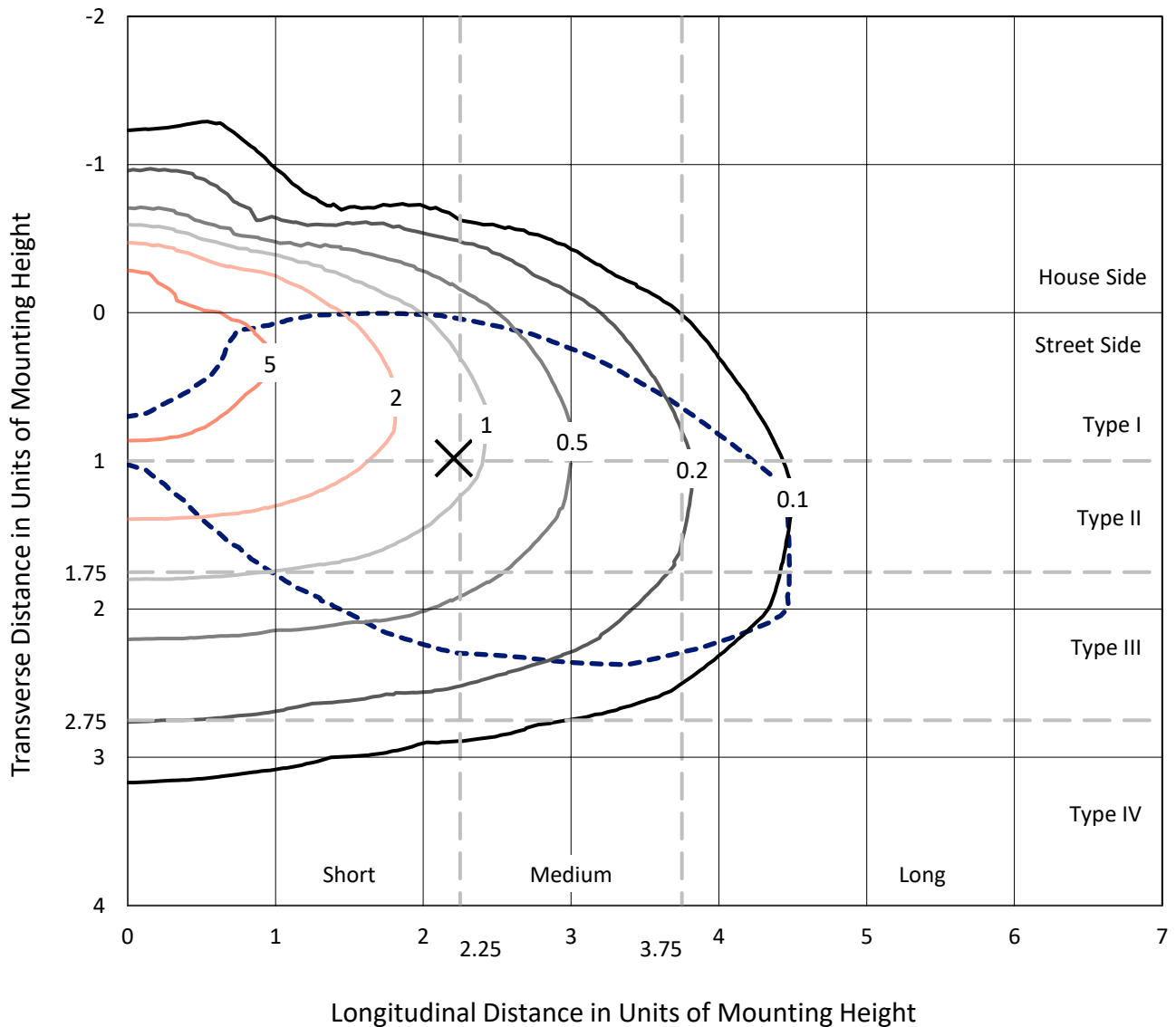




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### Iso-Footcandle Lines of Horizontal Illumination

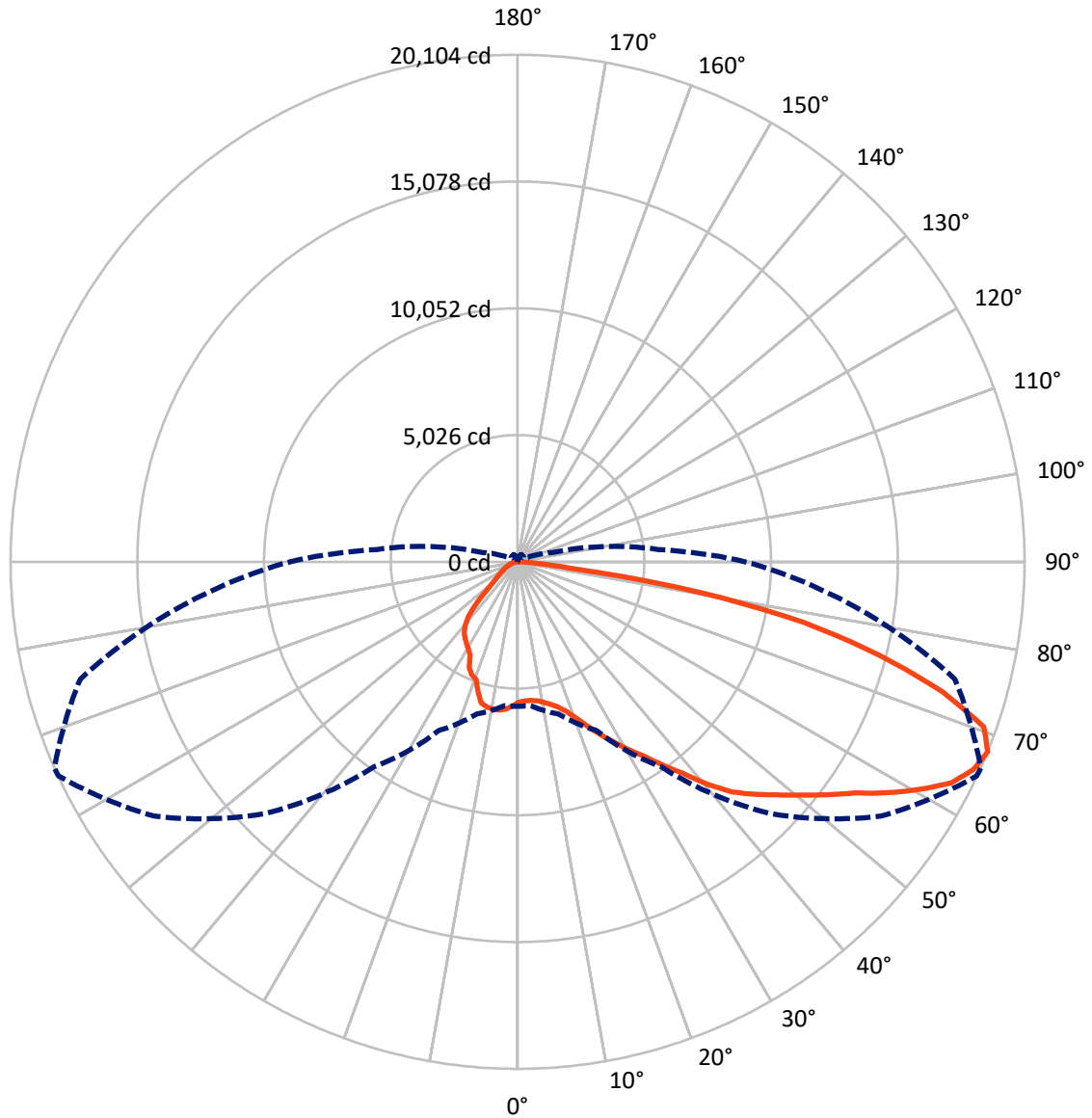
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.9 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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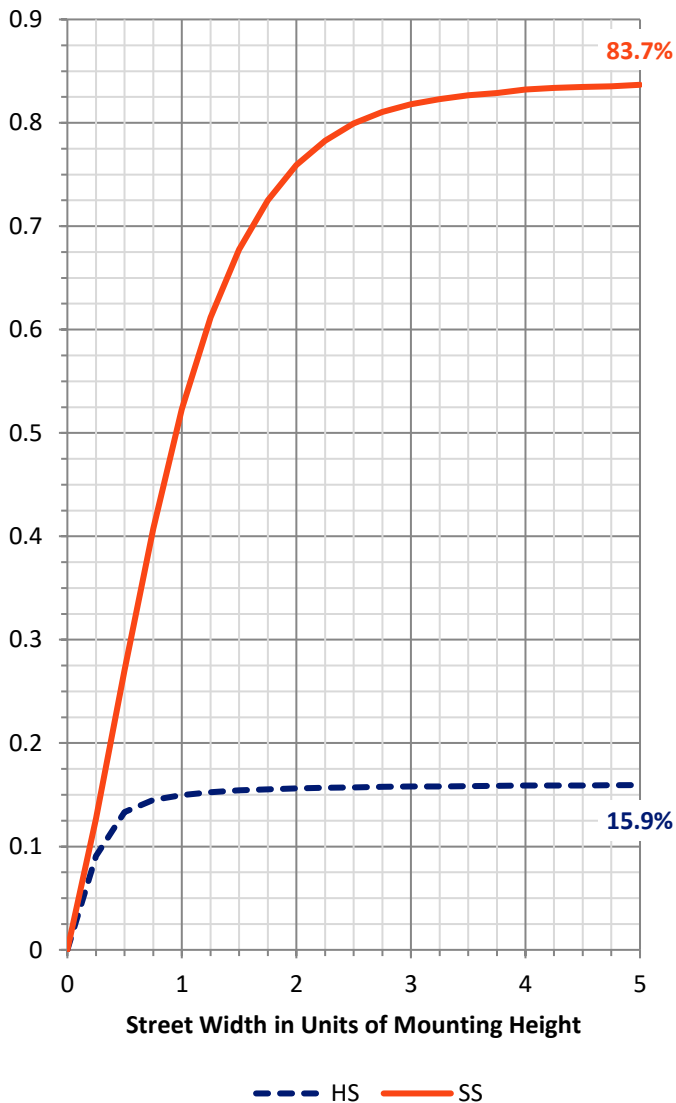
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5128.5	0.0	5128.5
	% Fixture	16.1	0.0	16.1
<b>Street Side</b>	Lumens	26642.5	0.0	26642.5
	% Fixture	83.9	0.0	83.9
<b>Total</b>	Lumens	31771.0	0.0	31771.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	551.3	1.7
10°-20°	1662.1	5.2
20°-30°	2701.8	8.5
30°-40°	3946.6	12.4
40°-50°	5256.6	16.5
50°-60°	6358.7	20.0
60°-70°	6807.7	21.4
70°-80°	4040.1	12.7
80°-90°	446.1	1.4
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°	31771.0	100.0
0°-180°	31771.0	100.0

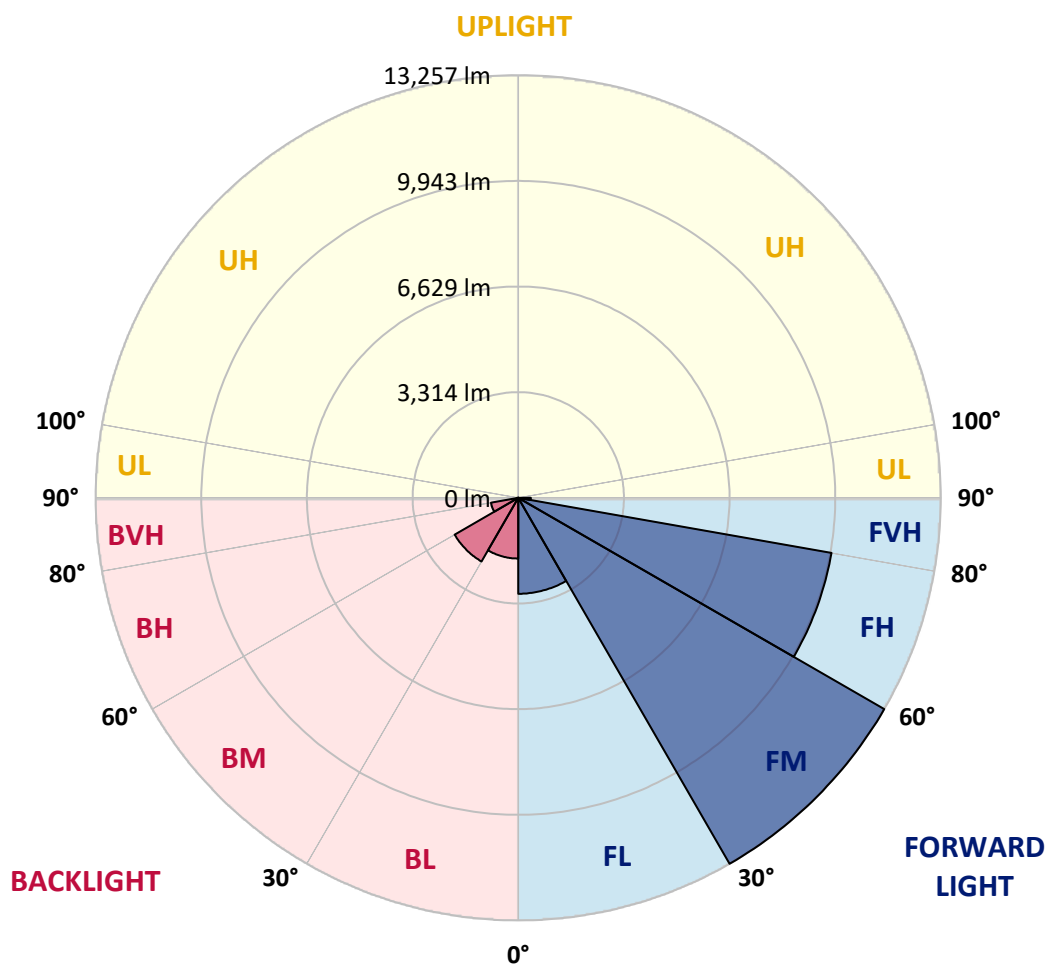


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3010.5	9.5			
FM (30°-60°)	13257.4	41.7			
FH (60°-80°)	9979.1	31.4			G4/12000
FVH (80°-90°)	395.5	1.2			G3/500
BL (0°-30°)	1904.7	6.0	B3/2500		
BM (30°-60°)	2304.5	7.3	B2/2500		
BH (60°-80°)	868.7	2.7	B2/1000		G2/1000
BVH (80°-90°)	50.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4
2.5°	5491.8	5460.8	5474.8	5511.3	5441.3	5485.8	5454.3	5509.3	5524.3	5530.3	5552.3
5°	5599.4	5558.4	5559.4	5582.4	5502.8	5522.3	5468.8	5507.3	5519.3	5535.3	5588.9
7.5°	5788.0	5742.5	5738.5	5744.5	5645.4	5623.4	5547.8	5555.8	5564.9	5574.4	5643.9
10°	6047.1	6000.6	5992.6	5977.1	5846.5	5789.0	5676.9	5659.4	5667.9	5652.4	5735.0
12.5°	6358.3	6302.3	6272.8	6228.3	6077.2	5987.1	5839.0	5791.0	5798.5	5766.0	5823.5
15°	6685.5	6626.0	6610.0	6541.4	6355.3	6232.3	6040.6	5967.6	5969.6	5932.1	5929.6
17.5°	7034.7	6981.7	6968.7	6925.2	6719.0	6572.5	6335.8	6236.8	6229.3	6192.2	6082.2
20°	7431.0	7397.5	7390.5	7365.4	7178.8	7007.2	6738.1	6605.0	6597.5	6538.9	6303.8
22.5°	7918.3	7878.7	7857.7	7836.2	7696.6	7518.0	7228.9	7041.2	7070.8	6972.2	6591.5
25°	8403.1	8371.5	8353.5	8339.5	8224.5	8055.4	7762.7	7542.5	7572.1	7466.5	6941.2
27.5°	8884.4	8814.8	8843.8	8876.9	8761.8	8627.2	8309.0	8069.4	8078.4	7964.3	7359.9
30°	9331.6	9295.1	9345.1	9376.2	9292.1	9187.0	8852.8	8621.2	8634.7	8499.1	7840.2
32.5°	9728.9	9676.3	9787.9	9848.4	9798.4	9711.9	9389.2	9169.5	9173.5	9091.5	8413.6
35°	10020.5	10024.0	10178.1	10340.7	10340.2	10218.2	9944.0	9841.9	9888.5	9851.9	9117.0
37.5°	10317.7	10291.2	10469.3	10711.0	10790.0	10681.4	10518.8	10579.4	10641.9	10754.0	9781.4
40°	10458.3	10459.3	10674.9	10954.1	11136.7	11116.2	11059.2	11463.9	11593.5	11627.0	9515.2
42.5°	10288.7	10300.7	10685.4	11179.2	11462.9	11571.5	11696.5	12386.0	12473.5	12283.9	9828.9
45°	10066.6	10083.1	10534.8	11256.8	11752.1	12057.8	12402.5	13074.9	13142.9	12890.8	10285.2
47.5°	9857.9	9888.5	10358.7	11210.3	11981.2	12605.6	13033.9	13723.8	13806.8	13474.1	10710.5
50°	9583.8	9651.8	10131.6	11086.7	12153.8	13082.4	13617.2	14504.7	14536.8	14043.5	11093.7
52.5°	9318.6	9338.6	9874.5	10928.6	12283.9	13514.6	14313.1	15307.2	15344.2	14666.8	11447.4
55°	8955.4	8985.4	9584.3	10730.5	12364.0	13876.9	15017.6	16143.7	16176.8	15415.8	11827.6
57.5°	8555.7	8577.7	9208.1	10426.3	12303.9	14198.6	15768.5	17197.4	17278.4	16186.3	12169.3
60°	8053.9	8082.9	8722.8	10004.5	12096.8	14573.8	16696.1	18323.5	18323.5	16893.7	12440.0
62.5°	7346.9	7387.5	8035.3	9397.2	11666.5	14790.9	17436.5	19304.1	19297.6	17451.0	12531.6
65°	6525.4	6531.9	7119.3	8542.6	10952.1	14675.3	17718.7	19877.0	19862.5	17854.3	12405.5
67.5°	5728.5	5721.4	6242.8	7373.9	9922.0	14106.5	17584.1	20086.1	20103.6	17951.3	11935.7
70°	4597.8	4588.8	5068.1	5992.6	8364.0	12881.3	16819.1	19555.3	19608.3	17397.0	11155.7
72.5°	3290.0	3276.5	3506.1	4117.5	6142.2	10596.4	14912.0	17515.1	17612.1	15621.4	9731.4
75°	1926.7	1941.2	2180.8	2532.5	3647.7	6970.7	12094.8	14709.4	14847.9	13289.0	7654.1
77.5°	1071.6	1068.6	1244.8	1509.4	1794.1	3491.1	8443.6	11584.0	11631.0	10413.3	5147.1
80°	517.3	514.8	562.3	709.4	1023.1	1568.4	4147.0	7197.3	7339.9	6328.8	2516.5
82.5°	372.2	374.2	400.7	389.2	381.7	691.9	1383.8	2266.9	2069.7	1597.5	778.0
85°	279.7	279.7	303.7	280.2	273.7	352.2	672.9	810.0	777.5	710.9	462.3
87.5°	131.6	125.1	133.1	126.1	117.1	156.1	295.2	342.2	316.7	276.2	202.1
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4	5563.4
2.5°	5589.9	5600.9	5658.4	5733.5	5740.5	5805.0	5825.0	5905.1	5902.1	5880.0	5903.1
5°	5627.4	5660.9	5759.5	5865.0	5892.1	5973.1	5990.6	6069.2	6074.2	6047.1	6069.7
7.5°	5687.4	5736.5	5829.5	5934.1	5946.1	6018.1	6015.1	6089.7	6076.7	6053.1	6083.2
10°	5761.0	5799.0	5861.0	5930.1	5924.6	5982.1	5964.1	6017.6	5990.6	5971.6	6006.1
12.5°	5835.0	5836.5	5841.5	5885.0	5851.0	5864.0	5828.5	5868.0	5826.5	5794.5	5815.5
15°	5909.1	5867.0	5796.5	5769.5	5674.9	5626.4	5575.4	5622.9	5525.8	5474.8	5487.8
17.5°	6013.6	5912.6	5675.4	5332.2	5041.0	4880.4	4759.9	4666.8	4668.8	4714.8	4742.4
20°	6097.2	5712.9	5133.6	4921.5	4703.8	4410.2	3954.4	3829.3	3746.8	3745.3	3758.8
22.5°	6067.7	5501.8	5134.1	4802.4	4329.1	3742.3	3545.1	3430.6	3238.0	2826.2	2792.7
25°	6339.3	5688.9	5163.6	4556.2	3732.2	3434.6	3163.9	2941.3	2455.0	2378.4	2375.4
27.5°	6665.0	5941.6	5203.6	4024.9	3493.6	3091.9	2747.7	2209.8	1976.7	1943.7	1932.2
30°	7041.7	6239.3	4959.5	3854.8	3239.5	2693.1	2236.8	1697.0	1507.4	1495.9	1498.9
32.5°	7514.0	6579.0	4704.8	3714.7	2931.8	2231.3	1525.4	1294.3	1185.7	1067.1	1105.2
35°	8017.3	6383.3	4856.9	3541.6	2546.5	1678.0	1158.7	1028.1	940.1	786.5	723.9
37.5°	7819.2	6517.9	5033.5	3351.5	2065.2	1137.7	896.5	783.5	700.9	572.8	570.3
40°	8063.4	6903.2	5159.6	3045.3	1493.4	807.0	653.4	606.4	568.3	497.3	487.3
42.5°	8494.6	7239.4	5245.2	2652.6	892.5	600.4	557.8	564.8	531.8	477.3	470.8
45°	8919.4	7533.5	5164.6	2053.7	634.9	541.3	543.8	540.8	500.8	480.8	473.8
47.5°	9306.1	7782.2	4938.0	1354.8	550.8	527.8	533.3	519.8	474.8	463.3	462.3
50°	9638.3	8044.8	3909.9	1038.1	529.8	509.8	521.8	499.8	422.3	409.7	396.7
52.5°	9842.9	7608.1	3473.6	797.5	507.8	481.8	485.3	503.3	397.7	316.7	296.7
55°	9811.9	6853.6	3229.4	663.9	472.8	442.8	449.8	478.8	359.7	247.6	224.1
57.5°	9959.5	6791.6	2976.3	564.8	407.7	401.2	387.2	436.3	327.2	164.1	155.6
60°	9935.5	6784.1	2656.1	444.3	360.2	337.2	319.7	355.2	234.6	61.0	55.5
62.5°	9896.5	6591.5	2292.4	398.2	331.7	322.7	307.7	347.7	199.6	42.5	31.5
65°	9700.8	6278.8	1880.1	348.7	309.7	291.2	290.2	329.2	164.6	23.5	10.5
67.5°	9032.9	5597.9	1398.8	321.2	296.7	287.2	304.7	317.2	158.1	24.0	9.5
70°	8202.4	4699.8	902.5	289.7	278.2	283.2	297.7	320.7	153.6	22.0	8.5
72.5°	6858.6	3635.7	547.3	258.7	251.7	266.7	293.7	320.7	142.1	18.5	7.0
75°	5217.6	2425.0	407.2	228.6	220.6	239.6	267.7	308.2	139.6	16.0	4.5
77.5°	3239.5	1145.2	321.2	192.1	183.6	203.1	224.6	254.2	141.6	15.5	2.5
80°	1310.3	478.3	252.2	154.6	144.1	154.6	182.1	216.6	112.6	22.0	0.0
82.5°	551.3	336.7	206.1	123.1	115.1	101.6	124.1	160.6	88.6	17.5	0.0
85°	364.7	233.6	147.6	83.6	73.5	49.5	60.5	72.5	50.5	0.0	0.0
87.5°	165.1	103.6	64.5	28.5	24.0	13.5	8.0	7.0	0.0	0.0	0.0
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)