

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: P591043

Luminaire Tested: **CTN-CA8-330-730-U-T3-HSS-HM-EX120**

Issue Date: 12/14/2021

Test Information

Test Method: LM-79-08
Report Number: P591043
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-CA8-330-730-U-T3-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43751 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

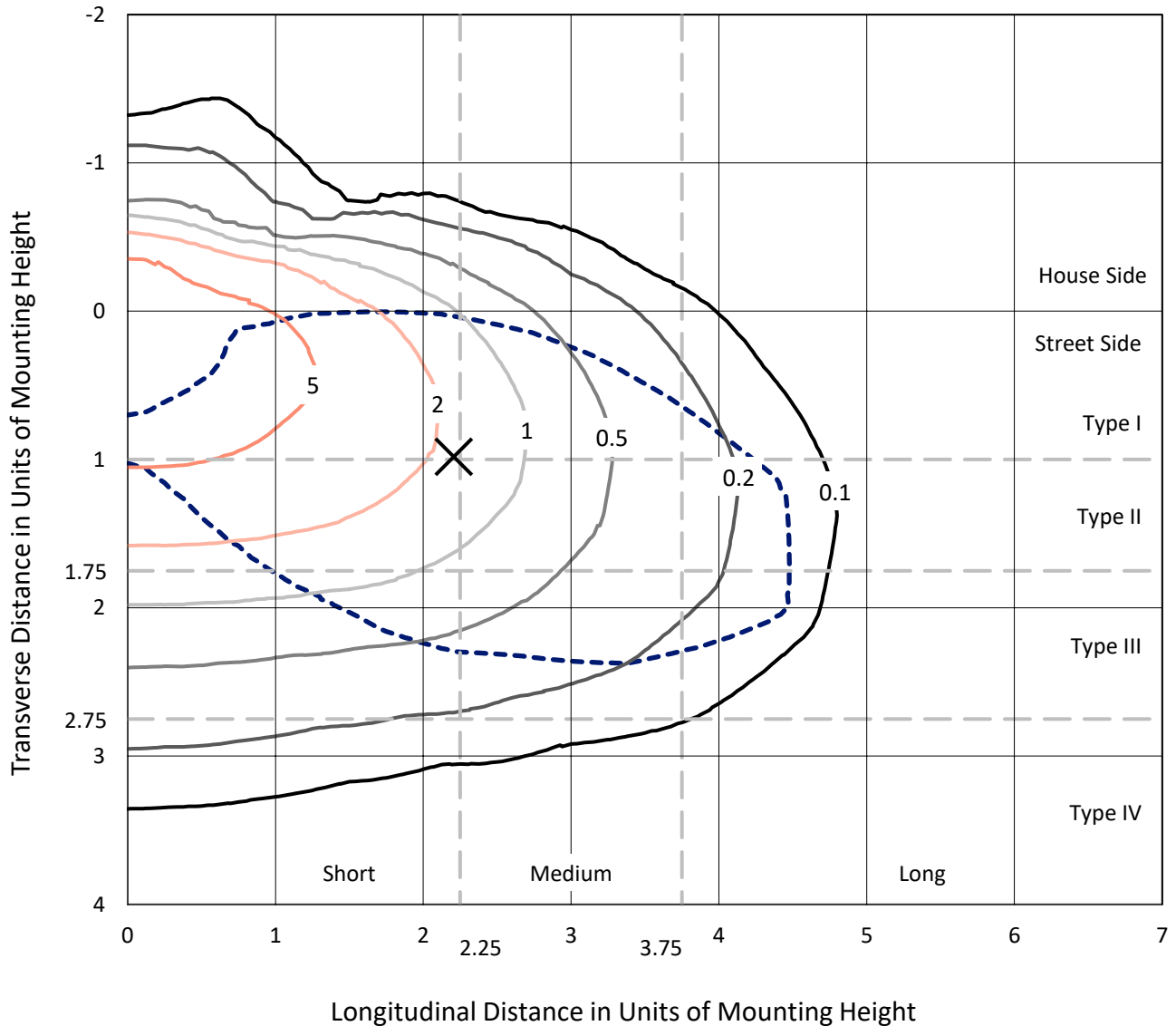
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

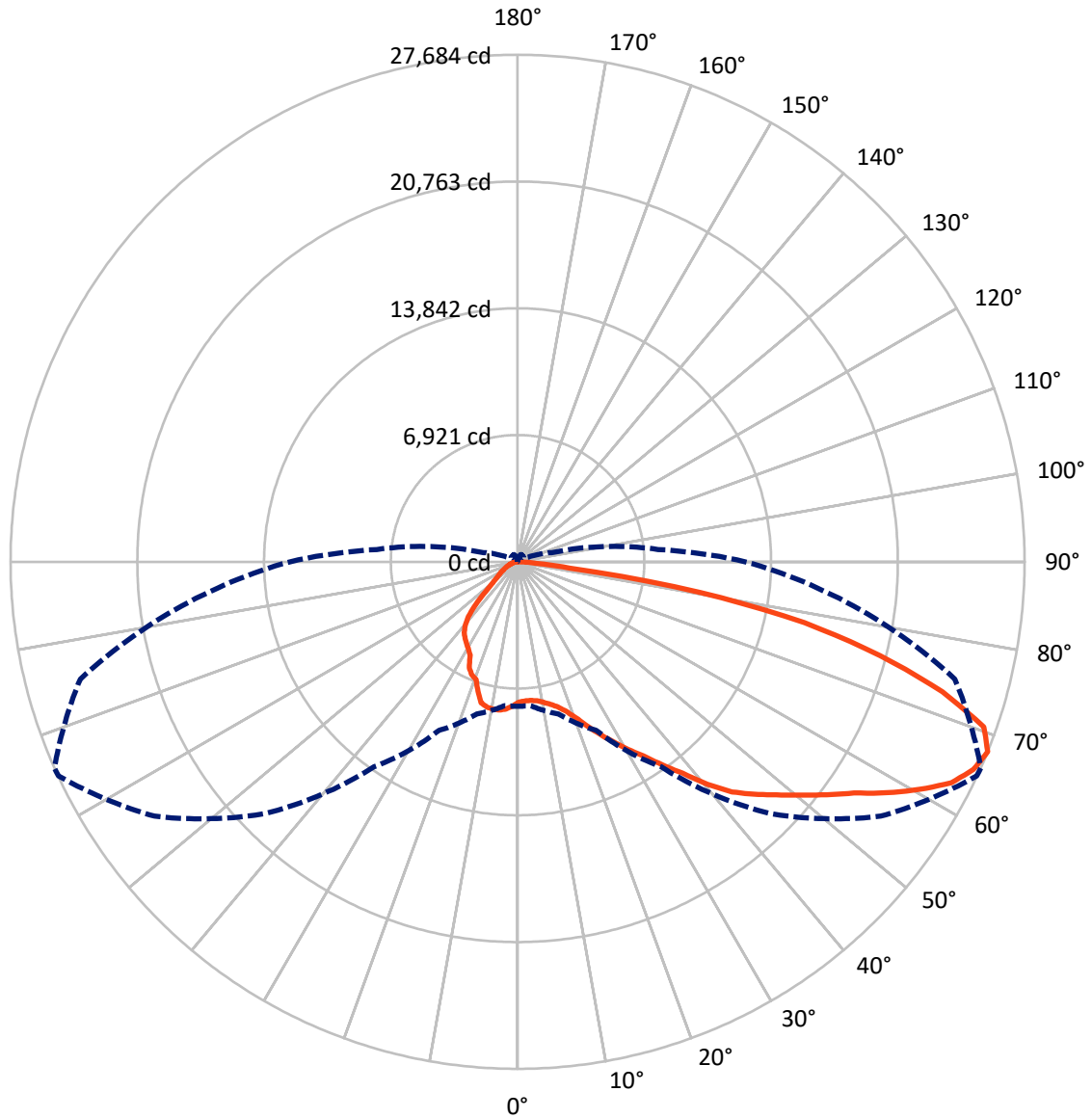
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.5 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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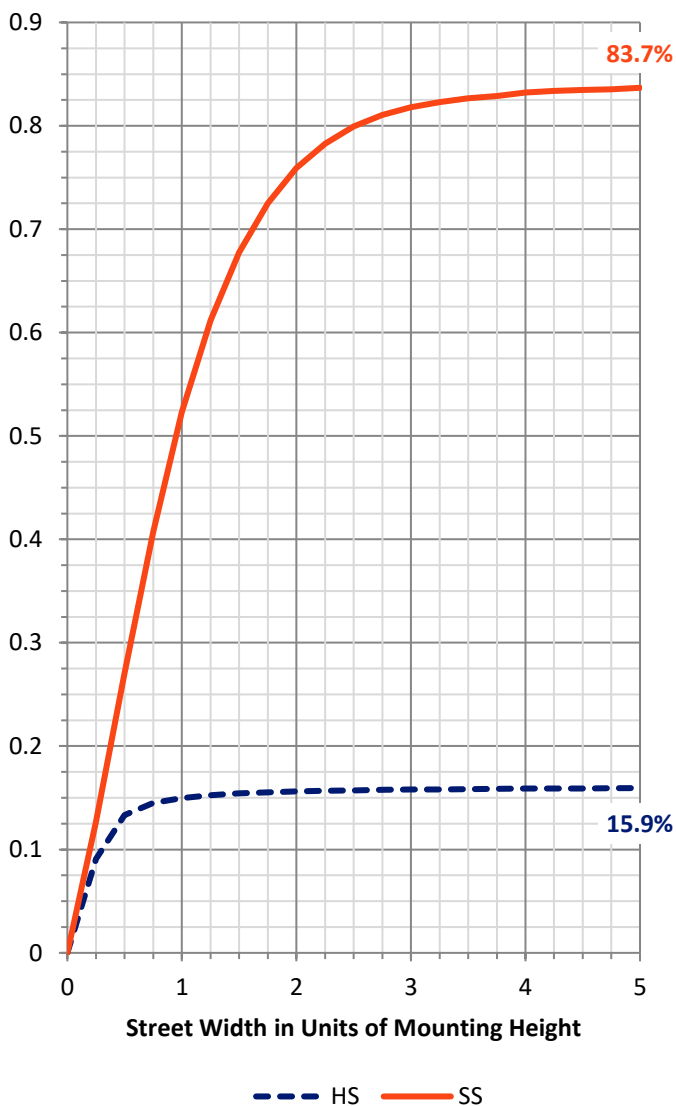
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7062.3	0.0	7062.3
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	36688.7	0.0	36688.7
	% Fixture	83.9	0.0	83.9
Total	Lumens	43751.0	0.0	43751.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	759.1	1.7
10°-20°	2288.8	5.2
20°-30°	3720.6	8.5
30°-40°	5434.8	12.4
40°-50°	7238.7	16.5
50°-60°	8756.5	20.0
60°-70°	9374.7	21.4
70°-80°	5563.5	12.7
80°-90°	614.3	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°	43751.0	100.0
0°-180°	43751.0	100.0

Coefficient of Utilization

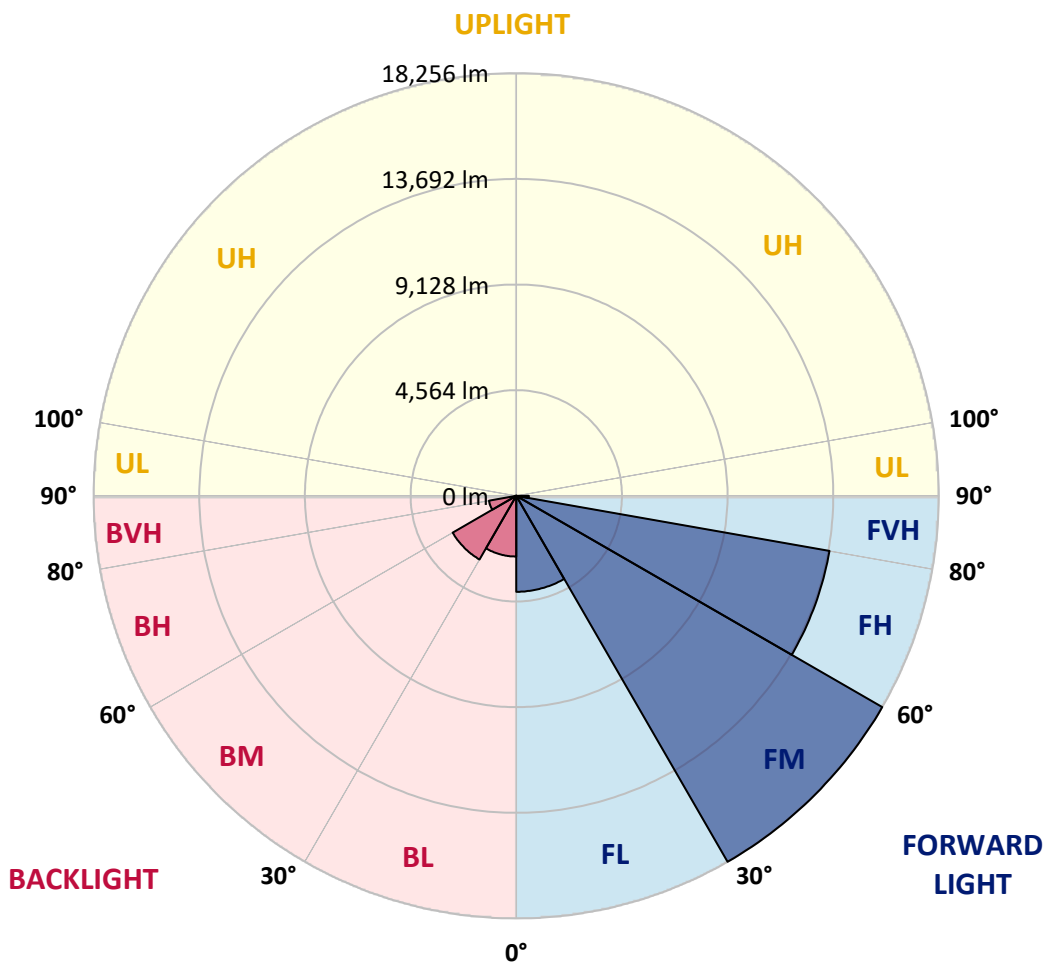


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4145.7	9.5			
FM (30°-60°)	18256.5	41.7			
FH (60°-80°)	13742.0	31.4			G5
FVH (80°-90°)	544.6	1.2			G4/750
BL (0°-30°)	2622.9	6.0	B4/5000		
BM (30°-60°)	3173.5	7.3	B3/5000		
BH (60°-80°)	1196.3	2.7	B3/2500		G3/2500
BVH (80°-90°)	69.7	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1
2.5°	7562.6	7519.9	7539.2	7589.5	7493.0	7554.4	7511.0	7586.7	7607.4	7615.7	7646.0
5°	7710.8	7654.3	7655.6	7687.3	7577.8	7604.7	7530.9	7584.0	7600.5	7622.6	7696.3
7.5°	7970.5	7907.8	7902.3	7910.5	7774.1	7743.8	7639.8	7650.8	7663.2	7676.3	7772.1
10°	8327.4	8263.3	8252.3	8230.9	8051.1	7971.9	7817.5	7793.4	7805.1	7783.8	7897.5
12.5°	8755.9	8678.7	8638.1	8576.8	8368.7	8244.7	8040.8	7974.6	7985.0	7940.2	8019.4
15°	9206.5	9124.5	9102.4	9008.0	8751.8	8582.3	8318.4	8217.8	8220.6	8168.9	8165.5
17.5°	9687.4	9614.3	9596.4	9536.5	9252.6	9050.8	8724.9	8588.5	8578.1	8527.2	8375.6
20°	10233.0	10186.8	10177.2	10142.8	9885.8	9649.5	9278.8	9095.5	9085.2	9004.6	8680.8
22.5°	10904.0	10849.6	10820.7	10791.1	10598.8	10352.9	9954.7	9696.3	9737.0	9601.2	9076.9
25°	11571.6	11528.2	11503.4	11484.1	11325.7	11092.8	10689.8	10386.6	10427.3	10281.9	9558.5
27.5°	12234.4	12138.6	12178.6	12224.1	12065.6	11880.3	11442.1	11112.1	11124.5	10967.4	10135.2
30°	12850.3	12800.0	12868.9	12911.6	12795.9	12651.2	12191.0	11872.0	11890.6	11703.9	10796.6
32.5°	13397.4	13325.0	13478.7	13562.0	13493.1	13373.9	12929.6	12627.1	12632.6	12519.6	11586.1
35°	13799.0	13803.8	14016.0	14239.9	14239.3	14071.2	13693.6	13553.1	13617.1	13566.8	12554.8
37.5°	14208.3	14171.7	14417.0	14749.8	14858.6	14709.1	14485.2	14568.6	14654.7	14809.0	13469.7
40°	14401.9	14403.2	14700.2	15084.6	15336.1	15307.8	15229.3	15786.6	15965.1	16011.2	13103.2
42.5°	14168.3	14184.8	14714.6	15394.6	15785.3	15934.8	16107.0	17056.4	17177.0	16915.8	13535.2
45°	13862.4	13885.1	14507.3	15501.4	16183.5	16604.4	17079.1	18005.1	18098.8	17751.5	14163.5
47.5°	13575.1	13617.1	14264.8	15437.3	16499.0	17358.8	17948.6	18898.6	19013.0	18554.9	14749.1
50°	13197.6	13291.3	13952.0	15267.2	16736.7	18015.4	18751.9	19974.1	20018.2	19338.9	15276.8
52.5°	12832.4	12860.0	13597.8	15049.5	16915.8	18610.7	19710.2	21079.2	21130.2	20197.3	15763.9
55°	12332.2	12373.6	13198.3	14776.6	17026.1	19109.5	20680.3	22231.1	22276.6	21228.7	16287.5
57.5°	11781.8	11812.1	12680.2	14357.8	16943.4	19552.5	21714.4	23682.0	23793.6	22289.7	16758.1
60°	11090.7	11130.7	12011.9	13777.0	16658.2	20069.2	22991.7	25232.9	25232.9	23263.8	17130.8
62.5°	10117.3	10173.1	11065.3	12940.6	16065.7	20368.2	24011.4	26583.2	26574.3	24031.3	17256.9
65°	8986.0	8995.0	9803.8	11763.9	15081.8	20209.0	24399.9	27372.1	27352.1	24586.6	17083.3
67.5°	7888.5	7878.9	8596.7	10154.5	13663.3	19425.7	24214.6	27660.0	27684.2	24720.3	16436.3
70°	6331.5	6319.1	6979.1	8252.3	11517.9	17738.4	23161.2	26929.1	27002.1	23956.9	15362.3
72.5°	4530.5	4511.9	4828.2	5670.1	8458.3	14592.0	20534.9	24119.5	24253.2	21511.8	13400.8
75°	2653.2	2673.1	3003.1	3487.5	5023.1	9599.2	16655.4	20255.9	20446.7	18299.9	10540.3
77.5°	1475.7	1471.6	1714.1	2078.6	2470.6	4807.5	11627.4	15952.0	16016.8	14339.8	7087.9
80°	712.4	708.9	774.4	976.9	1408.9	2159.9	5710.7	9911.3	10107.6	8715.2	3465.4
82.5°	512.6	515.3	551.9	536.0	525.7	952.8	1905.6	3121.6	2850.2	2199.8	1071.3
85°	385.1	385.1	418.2	385.8	376.9	485.0	926.6	1115.4	1070.6	979.0	636.6
87.5°	181.2	172.2	183.3	173.6	161.2	215.0	406.5	471.2	436.1	380.3	278.3
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°	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1	7661.1
2.5°	7697.7	7712.8	7792.0	7895.4	7905.0	7993.9	8021.5	8131.7	8127.6	8097.3	8128.9
5°	7749.3	7795.5	7931.2	8076.6	8113.8	8225.4	8249.5	8357.7	8364.6	8327.4	8358.4
7.5°	7832.0	7899.5	8027.7	8171.7	8188.2	8287.4	8283.3	8385.9	8368.0	8335.6	8377.0
10°	7933.3	7985.6	8071.1	8166.1	8158.6	8237.8	8213.0	8286.7	8249.5	8223.3	8270.9
12.5°	8035.2	8037.3	8044.2	8104.1	8057.3	8075.2	8026.3	8080.7	8023.5	7979.4	8008.4
15°	8137.2	8079.3	7982.2	7945.0	7814.8	7748.0	7677.7	7743.1	7609.5	7539.2	7557.1
17.5°	8281.2	8142.0	7815.5	7342.9	6941.9	6720.7	6554.7	6426.5	6429.3	6492.7	6530.6
20°	8396.3	7867.1	7069.3	6777.2	6477.5	6073.1	5445.5	5273.2	5159.6	5157.5	5176.1
22.5°	8355.6	7576.4	7070.0	6613.2	5961.5	5153.4	4881.9	4724.1	4458.9	3891.9	3845.7
25°	8729.7	7834.1	7110.7	6274.3	5139.6	4729.7	4356.9	4050.3	3380.7	3275.3	3271.1
27.5°	9178.2	8182.0	7165.8	5542.6	4811.0	4257.7	3783.7	3043.1	2722.0	2676.6	2660.7
30°	9697.0	8591.9	6829.6	5308.4	4461.0	3708.6	3080.3	2336.9	2075.8	2060.0	2064.1
32.5°	10347.4	9059.7	6478.9	5115.5	4037.3	3072.7	2100.6	1782.3	1632.8	1469.5	1521.9
35°	11040.5	8790.3	6688.3	4877.1	3506.8	2310.7	1595.6	1415.8	1294.5	1083.0	996.9
37.5°	10767.6	8975.7	6931.5	4615.3	2844.0	1566.7	1234.6	1078.9	965.2	788.9	785.4
40°	11103.8	9506.2	7105.2	4193.7	2056.5	1111.3	899.8	835.0	782.6	684.8	671.0
42.5°	11697.7	9969.1	7223.0	3652.8	1229.1	826.7	768.2	777.8	732.4	657.3	648.3
45°	12282.6	10374.2	7112.1	2828.1	874.3	745.4	748.9	744.8	689.6	662.1	652.4
47.5°	12815.2	10716.6	6800.0	1865.7	758.5	726.8	734.4	715.8	653.8	638.0	636.6
50°	13272.7	11078.3	5384.2	1429.6	729.6	702.0	718.6	688.3	581.5	564.3	546.3
52.5°	13554.4	10476.9	4783.4	1098.2	699.3	663.5	668.3	693.1	547.7	436.1	408.5
55°	13511.7	9438.0	4447.2	914.2	651.1	609.7	619.4	659.3	495.4	341.0	308.7
57.5°	13715.0	9352.5	4098.6	777.8	561.5	552.5	533.2	600.8	450.6	226.0	214.3
60°	13681.9	9342.2	3657.6	611.8	496.0	464.4	440.2	489.2	323.1	84.1	76.5
62.5°	13628.2	9076.9	3156.8	548.4	456.8	444.4	423.7	478.8	274.9	58.6	43.4
65°	13358.8	8646.3	2589.1	480.2	426.5	401.0	399.6	453.3	226.7	32.4	14.5
67.5°	12439.0	7708.7	1926.3	442.3	408.5	395.5	419.6	436.8	217.7	33.1	13.1
70°	11295.4	6472.0	1242.9	398.9	383.1	389.9	409.9	441.6	211.5	30.3	11.7
72.5°	9444.8	5006.6	753.7	356.2	346.5	367.2	404.4	441.6	195.7	25.5	9.6
75°	7185.1	3339.4	560.8	314.9	303.8	330.0	368.6	424.4	192.2	22.0	6.2
77.5°	4461.0	1577.0	442.3	264.6	252.8	279.7	309.3	350.0	195.0	21.4	3.4
80°	1804.4	658.6	347.2	212.9	198.4	212.9	250.8	298.3	155.0	30.3	0.0
82.5°	759.2	463.7	283.8	169.5	158.5	139.9	170.9	221.2	121.9	24.1	0.0
85°	502.2	321.7	203.2	115.1	101.3	68.2	83.4	99.9	69.6	0.0	0.0
87.5°	227.4	142.6	88.9	39.3	33.1	18.6	11.0	9.6	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)