

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: P510686

Luminaire Tested: **CTN-CA6-230-760-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510686
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-760-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31257 lumens
Efficiency: N/A
Efficacy: 137.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

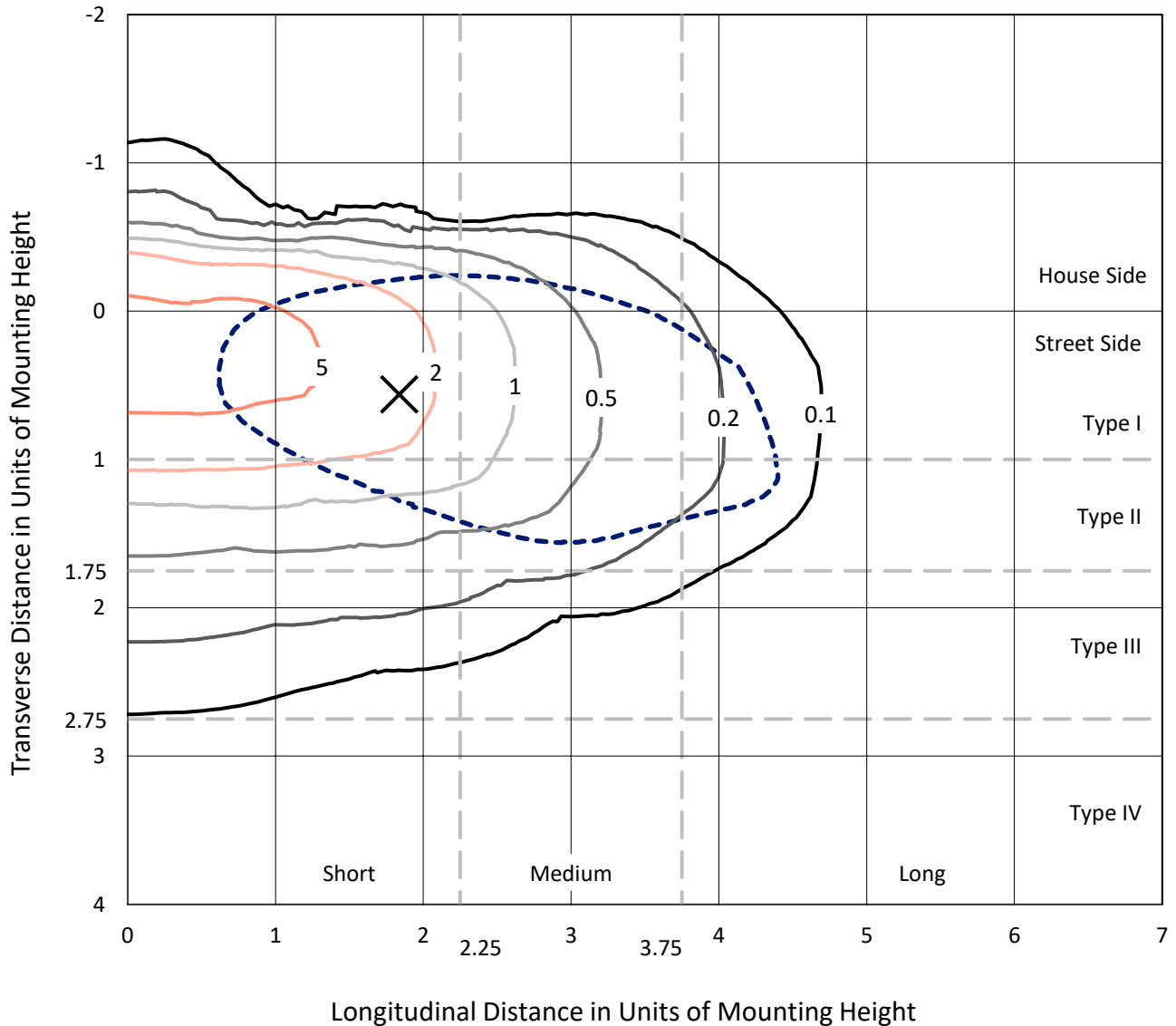
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

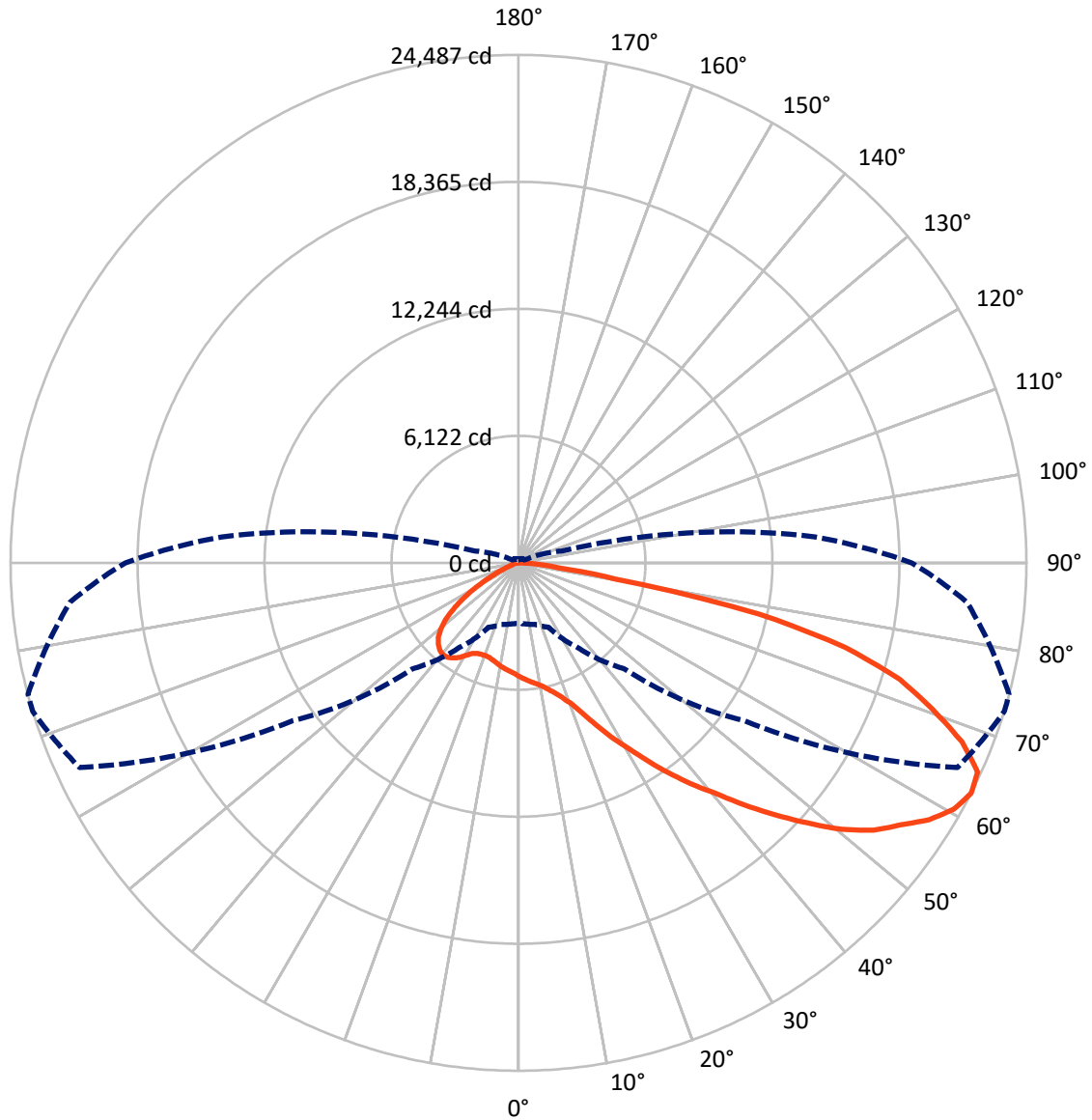
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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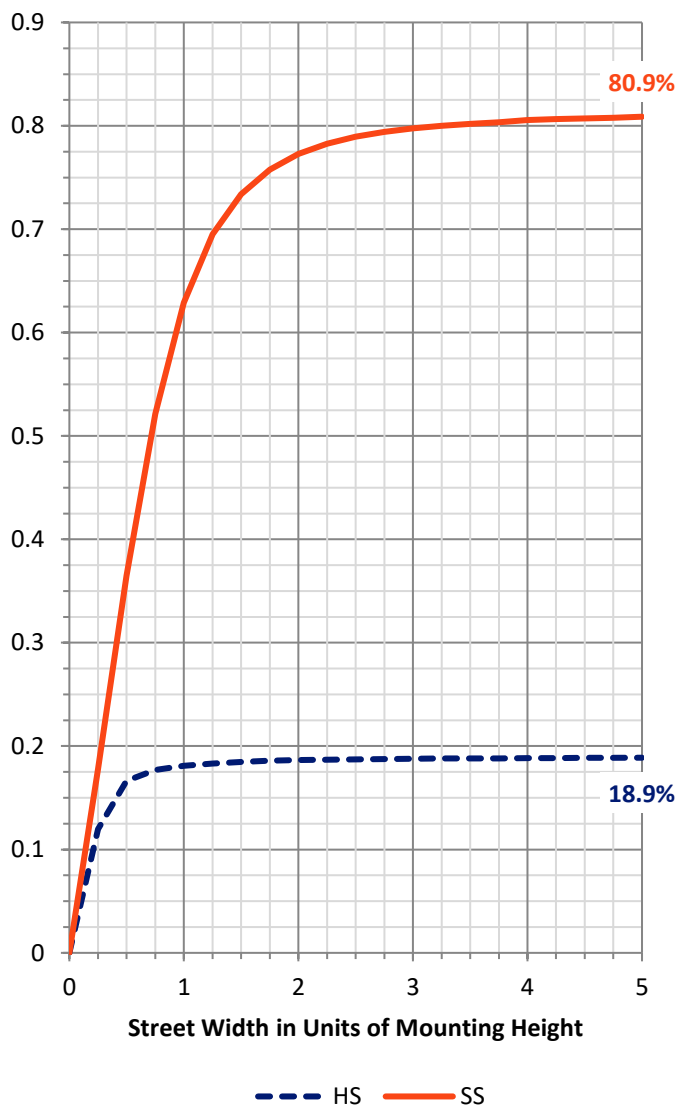
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5979.3	0.0	5979.3
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	25277.7	0.0	25277.7
	% Fixture	80.9	0.0	80.9
Total	Lumens	31257.0	0.0	31257.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	523.6	1.7
10°-20°	1574.8	5.0
20°-30°	2720.9	8.7
30°-40°	4091.6	13.1
40°-50°	5455.8	17.5
50°-60°	6425.3	20.6
60°-70°	6387.9	20.4
70°-80°	3667.4	11.7
80°-90°	409.7	1.3
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°	31257.0	100.0
0°-180°	31257.0	100.0

Coefficient of Utilization



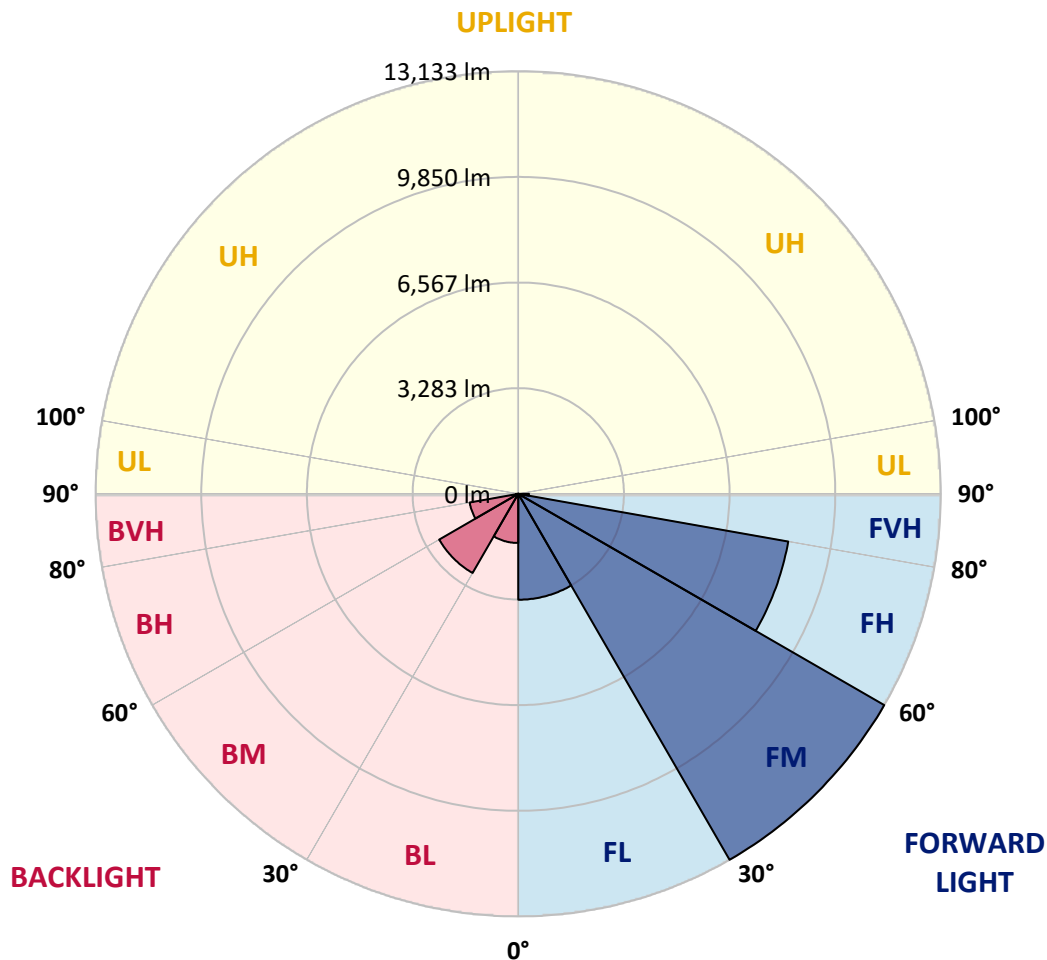
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3291.3	10.5			
FM (30°-60°)	13133.4	42.0			
FH (60°-80°)	8520.2	27.3			G4/12000
FVH (80°-90°)	332.7	1.1			G3/500
BL (0°-30°)	1528.0	4.9	B3/2500		
BM (30°-60°)	2839.3	9.1	B3/5000		
BH (60°-80°)	1535.1	4.9	B3/2500		G3/2500
BVH (80°-90°)	76.9	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8
2.5°	5864.9	5879.6	5862.0	5854.3	5845.9	5791.2	5727.3	5662.1	5609.5	5601.0	5532.3
5°	6276.7	6284.4	6255.7	6222.7	6165.8	6075.3	5961.0	5848.0	5742.8	5714.7	5589.1
7.5°	6593.1	6578.4	6571.4	6543.3	6493.5	6393.9	6220.6	6035.3	5872.6	5833.3	5642.4
10°	6889.9	6883.6	6830.3	6795.2	6715.9	6624.0	6481.6	6246.5	6017.1	5954.0	5688.7
12.5°	7211.3	7197.2	7175.5	7099.7	7035.2	6880.1	6708.2	6494.2	6238.8	6154.6	5768.0
15°	7500.3	7462.4	7450.5	7371.2	7306.0	7187.4	7014.8	6766.4	6493.5	6421.2	5918.9
17.5°	7775.4	7757.8	7731.2	7677.1	7604.2	7513.0	7374.7	7108.8	6826.8	6721.5	6175.0
20°	8009.0	7987.3	7964.1	7978.8	7962.7	7904.5	7817.5	7590.8	7246.3	7144.6	6486.5
22.5°	8171.8	8171.1	8263.7	8317.7	8348.6	8346.5	8325.4	8197.0	7850.4	7747.3	6952.4
25°	8307.2	8317.7	8434.9	8640.5	8824.3	8841.1	8989.9	8928.8	8634.1	8526.8	7653.3
27.5°	8347.2	8368.2	8580.8	8904.3	9183.5	9451.5	9669.7	9781.3	9508.4	9380.0	8406.8
30°	8376.0	8384.4	8592.8	8980.0	9568.7	9993.2	10383.3	10572.0	10337.0	10243.0	9246.7
32.5°	8173.2	8176.0	8495.2	9081.8	9851.5	10587.5	11049.1	11404.9	11343.1	11218.9	10165.1
35°	7893.9	7945.9	8312.1	8983.6	10084.4	11133.3	11762.0	12292.4	12415.9	12326.8	11082.8
37.5°	7548.7	7589.4	7981.6	8837.6	10135.6	11508.7	12316.3	13194.7	13517.4	13502.7	12190.7
40°	7124.3	7174.1	7643.5	8523.3	10110.4	11781.6	12966.7	14193.8	14603.5	14557.2	13289.4
42.5°	6622.6	6695.6	7150.9	8119.2	9925.8	11948.6	13499.2	15211.1	15948.6	15918.4	14261.9
45°	6126.6	6165.8	6581.2	7556.5	9586.2	12002.6	14000.1	16613.0	17327.9	17294.3	15433.6
47.5°	5615.1	5649.5	6083.1	6963.6	8996.9	11893.9	14396.6	17817.0	18733.3	18699.6	16597.6
50°	4425.1	4554.9	5443.9	6442.3	8325.4	11585.9	14770.5	19317.0	20203.9	20060.8	17617.0
52.5°	3785.9	3833.0	4293.9	5916.8	7655.4	11060.4	15020.3	20706.9	21413.5	21207.2	18659.6
55°	3539.0	3570.6	3796.5	4947.8	7026.0	10265.4	15314.3	22100.4	22320.7	22268.1	19510.0
57.5°	3351.6	3386.7	3548.1	4132.5	6363.0	9151.2	15222.4	23080.5	23356.3	23187.9	20413.0
60°	3086.4	3129.2	3343.2	3710.2	5609.5	8020.2	14413.4	23481.9	24109.1	23919.7	21099.9
62.5°	2919.4	2947.5	3070.3	3426.0	4985.0	7224.6	13262.0	23352.8	24487.3	24480.3	21695.5
65°	2692.8	2734.2	2865.4	3153.8	4429.3	6607.9	12175.9	22715.0	24324.5	24330.8	21818.3
67.5°	2455.7	2472.5	2610.0	2841.6	3774.7	6043.1	10770.6	21624.0	23056.7	23201.2	20968.6
70°	2159.6	2151.2	2299.9	2469.0	3085.0	5131.0	8669.2	19683.3	21183.3	21243.0	19250.4
72.5°	1699.3	1707.0	1748.4	1865.6	2342.0	4037.8	6290.7	16629.8	19225.1	19331.1	17054.3
75°	1142.2	1154.9	1347.8	1462.2	1684.6	2901.9	3955.7	11225.2	16252.4	16551.2	13958.1
77.5°	871.4	879.1	935.3	1060.1	1218.7	2068.4	2144.2	6116.7	11832.1	12541.5	10919.3
80°	617.4	620.2	564.8	502.4	649.0	1403.2	1266.4	2605.1	4714.9	5571.6	6413.5
82.5°	276.4	272.2	320.6	266.6	374.0	543.1	597.8	1264.3	1958.2	2104.9	2291.5
85°	128.4	143.8	164.9	138.2	222.4	209.8	232.9	538.8	917.7	1013.1	1007.5
87.5°	31.6	34.4	43.5	55.4	80.7	71.6	70.2	158.6	204.9	204.2	313.6
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°	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8	5481.8
2.5°	5485.3	5448.8	5362.5	5279.0	5199.7	5147.1	5088.2	5026.4	4989.2	4971.7	5009.6
5°	5512.6	5443.2	5278.3	5112.7	4972.4	4852.4	4768.2	4696.7	4658.1	4661.6	4663.7
7.5°	5535.8	5438.3	5207.4	4973.8	4754.9	4606.1	4496.0	4418.8	4374.6	4340.9	4366.2
10°	5556.1	5417.9	5124.6	4813.1	4575.3	4355.0	4205.5	4112.2	4030.8	3985.2	4021.0
12.5°	5577.9	5410.2	5032.0	4669.3	4361.3	4115.0	3910.1	3817.5	3737.5	3703.2	3724.9
15°	5672.6	5439.7	4945.7	4500.2	4150.1	3831.6	3610.5	3496.9	3433.7	3392.3	3401.5
17.5°	5835.4	5517.5	4890.3	4323.4	3914.3	3577.6	3291.3	3158.7	3054.2	3024.7	3017.0
20°	6066.9	5665.6	4890.3	4173.9	3647.0	3295.5	2965.8	2741.9	2579.2	2518.1	2565.1
22.5°	6455.6	5917.5	4938.7	4038.5	3416.9	3002.9	2610.0	2268.3	2048.7	1959.6	2011.5
25°	6999.4	6306.9	5017.3	3920.0	3207.1	2666.2	2158.9	1766.0	1523.9	1418.0	1416.6
27.5°	7709.4	6902.5	5175.9	3823.1	2955.9	2230.5	1688.1	1309.9	1082.6	1018.8	1027.9
30°	8496.6	7548.0	5475.5	3682.8	2650.7	1742.8	1229.2	962.6	802.7	718.5	719.9
32.5°	9255.8	8216.7	5831.2	3591.6	2254.3	1314.1	876.3	686.9	587.3	537.4	545.2
35°	10069.7	8793.4	6095.7	3438.6	1789.1	950.0	619.5	515.0	473.6	447.6	449.0
37.5°	10948.8	9427.7	6313.2	3233.8	1352.7	652.5	457.5	441.3	423.8	390.8	388.0
40°	11867.2	10162.3	6443.0	2902.6	940.2	451.8	388.7	406.9	397.1	354.3	350.8
42.5°	12646.0	10729.2	6475.3	2464.1	608.3	366.2	352.2	380.3	382.4	338.9	333.3
45°	13393.9	11234.4	6412.1	1886.7	421.7	344.5	329.8	368.4	371.2	331.9	322.7
47.5°	14231.0	11925.5	6297.8	1258.7	348.7	325.6	322.0	348.7	358.5	326.3	315.0
50°	15247.6	12487.5	5958.9	773.2	329.1	313.6	313.6	329.8	343.1	315.0	309.4
52.5°	16290.2	12977.2	5457.2	530.4	317.1	301.0	310.1	317.1	322.0	296.8	301.7
55°	17037.5	13411.5	4709.3	426.6	310.1	292.6	314.3	300.3	293.3	271.5	266.6
57.5°	17866.8	13927.9	3944.5	378.2	301.0	297.5	300.3	273.6	254.0	231.5	226.6
60°	18445.6	14205.7	3008.6	355.7	290.5	292.6	277.1	241.4	205.6	189.4	185.9
62.5°	18950.8	14364.3	2205.2	327.0	280.6	279.9	251.2	206.3	169.1	151.6	148.7
65°	18874.3	14116.6	1429.2	303.8	272.9	263.8	225.2	176.8	141.0	127.7	126.3
67.5°	18033.1	13020.7	900.2	279.9	259.6	243.5	202.1	157.9	129.8	114.4	113.0
70°	16267.1	11507.3	550.8	249.1	230.8	215.4	178.9	148.0	122.8	104.5	101.0
72.5°	13826.1	9855.7	389.4	219.6	201.4	183.1	151.6	141.0	117.2	94.0	91.2
75°	11359.2	7259.7	326.3	191.5	171.9	147.3	129.1	131.2	110.2	85.6	83.5
77.5°	7999.2	4526.2	303.8	156.5	135.4	117.2	111.6	120.0	101.0	78.6	76.5
80°	4668.6	2542.0	251.2	123.5	101.7	90.5	93.3	101.7	88.4	70.9	68.1
82.5°	1884.6	1006.1	176.8	96.1	74.4	72.3	76.5	82.8	73.0	59.6	58.2
85°	672.9	314.3	100.3	63.1	47.7	49.8	49.1	58.9	52.6	43.5	42.8
87.5°	176.8	62.4	44.9	25.3	20.3	20.3	18.9	27.4	25.3	19.6	21.8
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)