

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: P232805

Luminaire Tested: **CTN-10-8-D-E1-T2-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232805
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-7)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-10-8-D-E1-T2-7050
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 5000K LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 81279 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B5 - U0 - G5

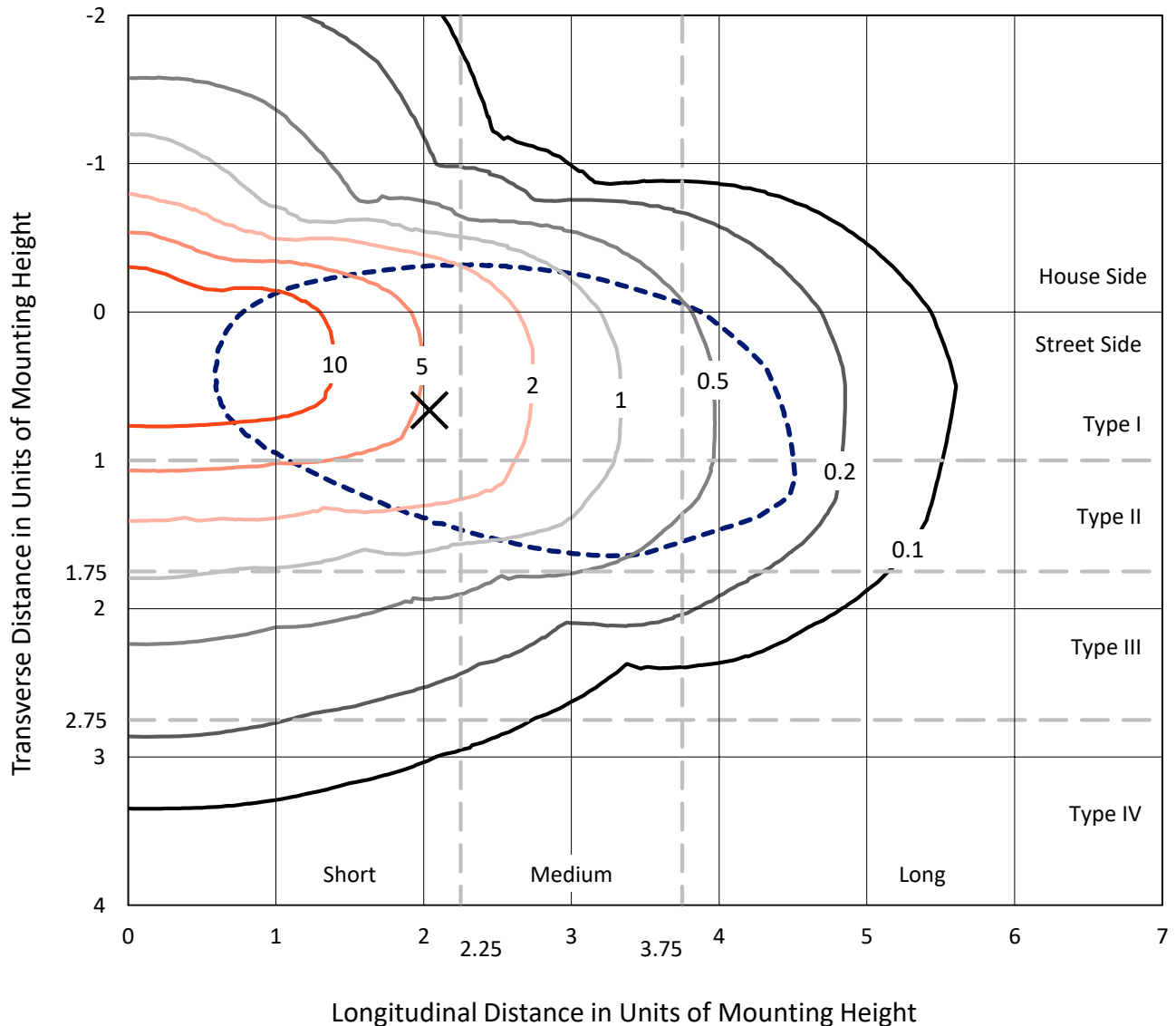
Input Watts (W): 631
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

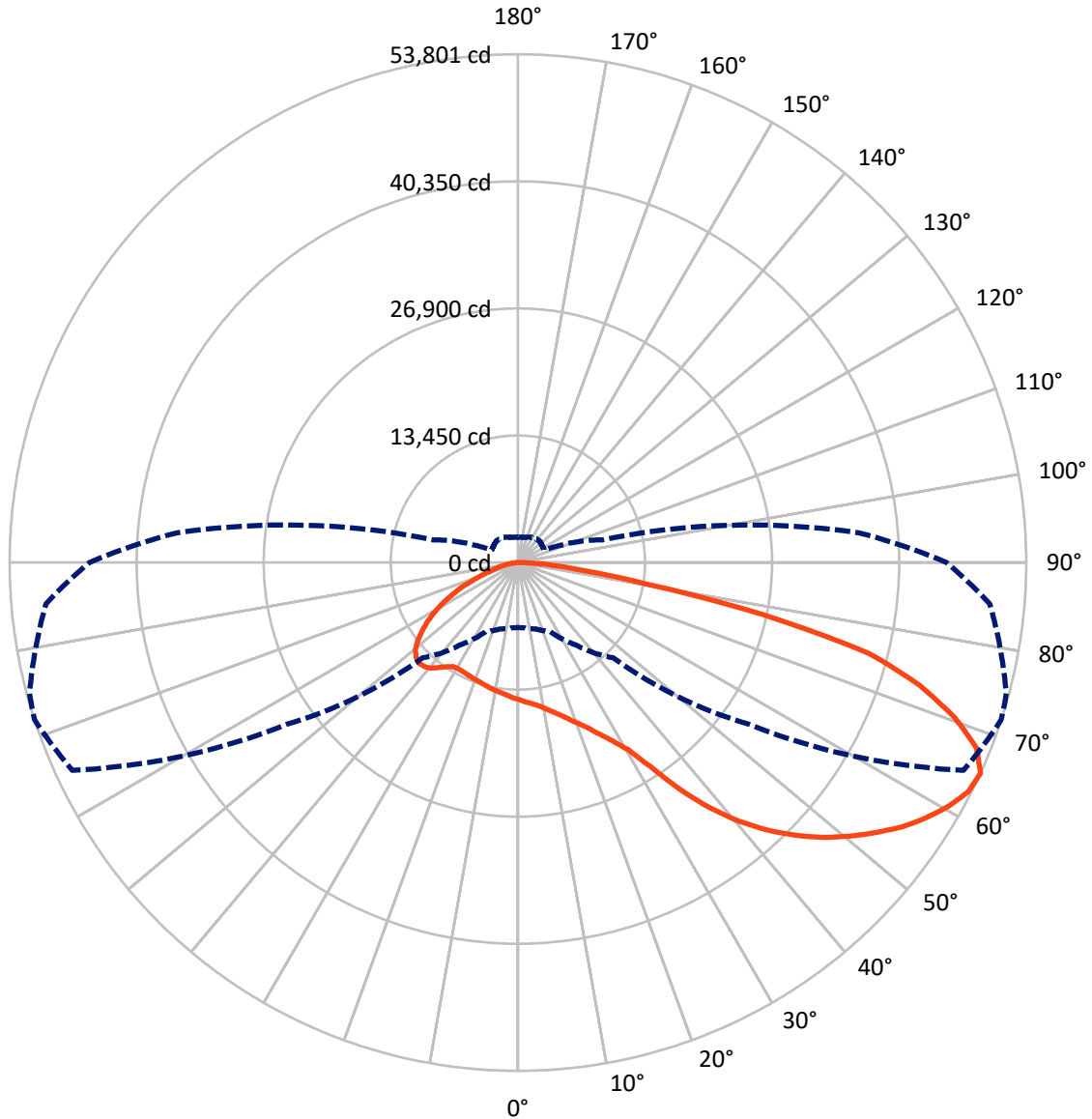


Based on 30 foot mounting height. Maximum calculated value = 18.9 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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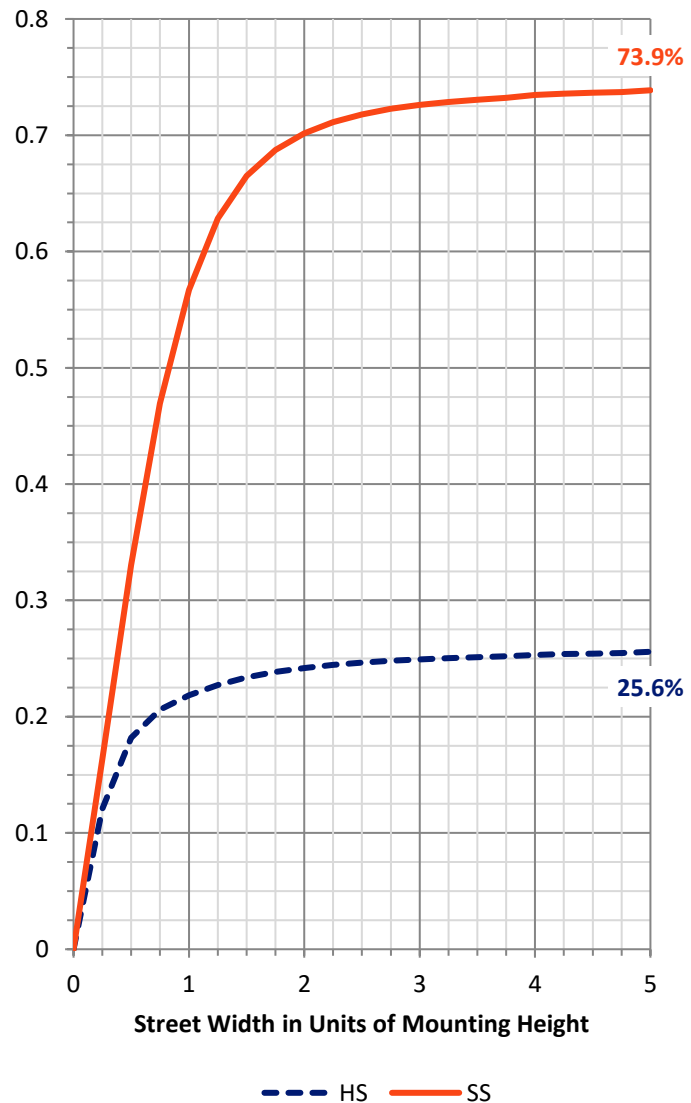
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21172.4	0.0	21172.4
	% Fixture	26.0	0.0	26.0
Street Side	Lumens	60106.6	0.0	60106.6
	% Fixture	74.0	0.0	74.0
Total	Lumens	81279.0	0.0	81279.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1395.0	1.7
10°-20°	4251.9	5.2
20°-30°	7122.1	8.8
30°-40°	10337.7	12.7
40°-50°	13978.8	17.2
50°-60°	16317.0	20.1
60°-70°	16246.4	20.0
70°-80°	9851.7	12.1
80°-90°	1778.3	2.2
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°	81279.0	100.0
0°-180°	81279.0	100.0



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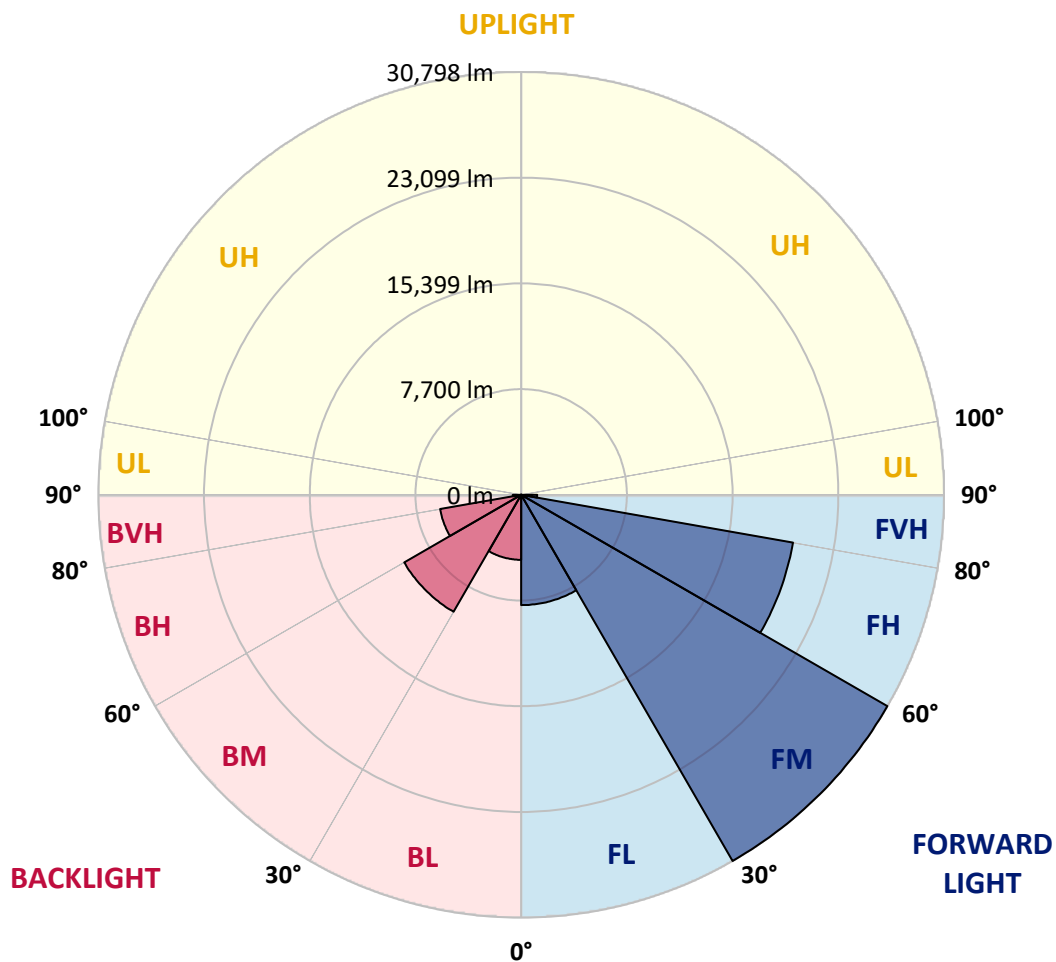
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	8033.3	9.9			
FM (30°-60°)	30798.4	37.9			
FH (60°-80°)	20105.0	24.7			G5
FVH (80°-90°)	1169.8	1.4			G5
BL (0°-30°)	4735.8	5.8	B4/5000		
BM (30°-60°)	9835.1	12.1	B5		
BH (60°-80°)	5993.0	7.4	B5		G5
BVH (80°-90°)	608.5	0.7			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7
2.5°	15262.5	15233.5	15243.1	15257.2	15083.9	15054.9	14911.5	14838.5	14758.4	14702.1	14575.5
5°	16048.0	16045.4	15982.9	15983.8	15712.0	15607.3	15342.5	15147.2	14977.5	14889.5	14625.6
7.5°	16760.6	16686.7	16680.5	16662.9	16355.9	16188.8	15837.8	15541.3	15281.8	15146.4	14737.3
10°	17430.0	17378.1	17379.0	17357.9	17043.0	16834.5	16412.2	16039.2	15692.7	15517.6	14922.0
12.5°	18144.3	18085.4	18075.7	18001.8	17712.4	17511.8	17050.0	16591.7	16172.1	15974.1	15201.8
15°	18877.1	18820.8	18792.7	18707.3	18384.5	18170.7	17783.7	17217.1	16739.5	16493.2	15569.5
17.5°	19552.7	19518.4	19470.9	19404.9	19122.5	18888.5	18501.5	17963.1	17392.2	17077.3	15992.6
20°	19969.7	19939.8	19971.4	19971.4	19808.7	19638.9	19249.2	18787.4	18170.7	17781.0	16479.1
22.5°	20289.0	20258.2	20398.9	20470.2	20486.9	20449.1	20066.4	19663.5	19021.4	18619.4	17080.8
25°	20367.3	20370.8	20609.2	20929.4	21166.9	21277.8	20983.1	20686.6	20132.4	19629.2	17903.3
27.5°	20344.4	20367.3	20672.5	21244.3	21813.5	22082.7	21976.2	21803.8	21364.8	20936.4	19002.0
30°	20311.0	20370.8	20773.7	21476.6	22299.9	22833.0	22939.5	23200.7	22985.2	22693.2	20744.7
32.5°	19895.8	19949.4	20526.5	21562.8	22714.3	23681.9	24254.6	25362.1	25713.1	25655.9	23441.8
35°	18923.7	19029.3	19885.2	21336.7	23033.6	24546.7	25905.8	28224.6	29439.4	29341.8	26553.2
37.5°	17933.2	18062.5	19089.1	20915.3	23177.9	25466.8	27712.6	31424.9	32893.1	32750.6	29543.2
40°	17035.0	17183.7	18220.0	20283.7	23139.2	26327.1	29611.0	34432.5	35968.4	35715.1	32209.6
42.5°	15997.0	16212.5	17156.4	19441.9	22837.4	26933.2	31489.1	37306.4	38697.2	38310.2	34635.7
45°	15030.2	15203.5	16110.5	18288.6	22377.4	27379.2	33207.1	39969.2	41178.8	40727.5	36871.0
47.5°	13982.5	14202.5	15113.8	17101.9	21463.4	27479.5	34780.0	42334.7	43473.0	43003.3	38955.8
50°	11218.6	11573.1	13631.6	15940.7	20044.4	27115.3	36176.9	44553.3	45535.0	45163.8	41112.8
52.5°	9781.2	9850.7	10892.2	14608.0	18316.7	26162.6	37185.0	46729.6	47473.8	47095.5	43021.7
55°	9138.1	9157.5	9623.7	12363.9	16640.9	24347.8	37673.3	48813.6	49373.0	48848.8	44828.6
57.5°	8477.5	8585.7	9054.6	10433.9	15065.4	21729.0	37334.6	50636.3	50969.7	50379.4	46487.7
60°	7931.2	8019.2	8487.2	9424.0	13336.9	18684.4	35756.4	52088.6	52382.4	51779.9	48044.7
62.5°	7436.0	7500.2	7862.6	8740.5	11775.4	15984.7	32811.3	52477.4	53463.6	52984.1	49483.9
65°	6873.8	6932.8	7268.8	8051.7	10632.7	14257.0	29848.5	52040.2	53800.5	53510.2	50131.3
67.5°	6206.2	6285.3	6588.8	7263.5	9455.7	12769.5	26350.9	50931.0	52363.1	51917.1	48735.3
70°	5329.1	5458.4	5802.4	6387.4	8080.8	10852.6	21020.9	47284.7	48986.0	48476.6	45007.2
72.5°	4201.4	4229.5	4478.5	4964.9	6399.7	8633.2	14186.6	40010.6	44453.9	44309.6	39812.7
75°	3132.5	3228.4	3627.8	4002.6	4675.5	6193.8	8623.5	29161.5	38379.7	38379.7	33552.8
77.5°	2556.4	2606.5	2872.2	3187.1	3646.3	4346.5	5482.2	16477.3	26453.8	29136.8	25219.6
80°	1997.8	1980.2	1998.6	2140.3	2574.0	2873.9	3644.5	8468.7	13666.7	15535.2	16520.4
82.5°	1094.3	1095.2	1214.8	1145.3	1419.8	1615.1	2210.6	4763.5	7141.3	7929.5	8850.5
85°	554.2	541.0	602.6	562.1	657.1	737.2	1003.7	2366.3	3644.5	3950.7	4170.6
87.5°	197.9	188.3	216.4	259.5	242.8	257.7	346.6	850.7	1408.4	1506.9	1477.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7	14507.7
2.5°	14539.4	14454.9	14352.9	14267.6	14087.2	13993.1	13918.3	13939.4	13858.5	13741.5	13739.8
5°	14529.7	14368.7	14149.7	13968.5	13678.2	13528.6	13387.9	13350.9	13230.4	13114.3	13108.1
7.5°	14563.1	14349.4	13994.0	13704.6	13326.3	13093.2	12875.0	12789.7	12648.1	12525.8	12519.6
10°	14655.5	14373.1	13886.7	13485.5	13012.3	12692.9	12410.6	12239.0	12075.4	11949.6	11947.8
12.5°	14820.9	14443.5	13792.5	13269.1	12707.0	12283.9	11923.2	11701.5	11472.8	11379.6	11374.3
15°	15054.0	14546.4	13670.3	12981.5	12331.4	11849.3	11403.3	11110.4	10857.0	10767.3	10786.7
17.5°	15353.1	14714.4	13571.7	12663.9	11917.1	11335.6	10872.0	10577.3	10204.3	10121.6	10144.5
20°	15724.3	14973.9	13550.6	12373.6	11463.1	10770.8	10201.7	9993.2	9520.8	9410.0	9395.0
22.5°	16204.6	15280.1	13541.8	12063.1	10930.9	10121.6	9446.9	9182.1	8785.4	8598.9	8556.7
25°	16799.3	15634.6	13526.9	11752.6	10338.0	9381.8	8561.1	8189.0	7940.9	7658.5	7652.4
27.5°	17582.2	16110.5	13562.1	11444.7	9691.5	8518.8	7610.1	7158.9	7016.3	6833.4	6738.4
30°	18931.6	16958.5	13657.9	11072.6	8984.2	7525.7	6568.6	6226.4	6051.3	5865.7	5834.1
32.5°	21196.8	18793.5	13954.4	10669.7	8196.9	6451.6	5716.2	5358.1	5067.8	4972.0	4946.5
35°	24033.8	20972.5	14716.2	10238.6	7345.3	5600.9	5014.2	4541.8	4264.7	4241.8	4240.1
37.5°	26582.2	23296.6	15709.4	9707.3	6406.7	4994.0	4317.5	3910.2	3701.7	3722.8	3778.2
40°	29047.1	25358.6	16762.3	9177.7	5495.4	4351.8	3641.0	3445.7	3352.5	3428.1	3465.1
42.5°	31362.4	27242.0	17520.6	8459.0	4706.3	3662.1	3174.8	3290.0	3323.4	3385.9	3411.4
45°	33526.4	29172.0	18084.5	7593.4	3996.4	3175.7	3107.9	3306.7	3401.7	3450.1	3447.5
47.5°	35620.1	31016.7	18253.4	6449.0	3447.5	3122.0	3169.5	3283.0	3431.6	3520.5	3514.3
50°	37709.3	32695.1	18111.8	5286.0	3336.6	3225.8	3228.4	3210.0	3383.3	3455.4	3428.1
52.5°	39582.2	34262.7	17311.3	4423.9	3410.5	3334.9	3297.9	3204.7	3253.9	3304.1	3279.5
55°	41265.9	35570.8	16056.0	3999.0	3473.9	3405.2	3454.5	3273.3	3175.7	3133.4	3141.3
57.5°	42832.6	36579.8	14613.3	3735.1	3460.7	3388.5	3517.0	3254.8	3112.3	2934.6	2900.3
60°	44318.4	37242.2	12988.5	3507.3	3398.2	3363.9	3381.5	3255.7	3053.4	2822.9	2766.6
62.5°	45368.7	37277.4	11123.6	3304.1	3277.7	3326.1	3275.1	3230.2	3069.2	2894.2	2859.0
65°	45347.6	36182.2	9278.9	3071.0	3127.3	3224.9	3136.9	2988.3	2744.6	2692.7	2675.1
67.5°	43379.8	33410.3	7489.6	2725.3	2883.6	3088.6	2939.0	2697.1	2486.9	2425.3	2436.7
70°	39101.0	29491.3	5531.4	2208.9	2517.7	2856.3	2763.1	2493.9	2263.4	2215.0	2266.9
72.5°	34029.6	25334.0	3932.2	1751.4	2091.0	2527.3	2490.4	2258.1	2055.8	2076.0	2122.7
75°	28410.2	20166.7	2884.5	1506.9	1641.5	2154.3	2247.6	2098.9	1970.5	2034.7	2032.9
77.5°	21173.9	14893.0	2196.6	1264.1	1359.1	1676.7	1981.0	1924.7	2274.9	2764.8	2780.7
80°	13913.9	9669.5	1482.3	1038.0	1111.9	1257.9	1616.9	1854.4	2329.4	2018.9	1994.2
82.5°	7709.5	5132.1	919.3	807.5	834.8	912.2	1171.7	1936.2	1711.0	1587.8	1594.0
85°	3418.4	1987.2	542.8	541.9	543.6	553.3	752.1	1468.2	1203.4	1165.6	1184.9
87.5°	1184.1	523.4	170.7	135.5	153.1	191.8	391.5	895.5	628.1	520.8	522.5
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)