

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: P591136

Luminaire Tested: **CTN-CA10-760-722-U-T2-SSS-HM-EX90**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591136  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/19/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-760-722-U-T2-SSS-HM-EX90  
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (10) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 63086 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type II - Short  
BUG Rating: B5 - U0 - G5

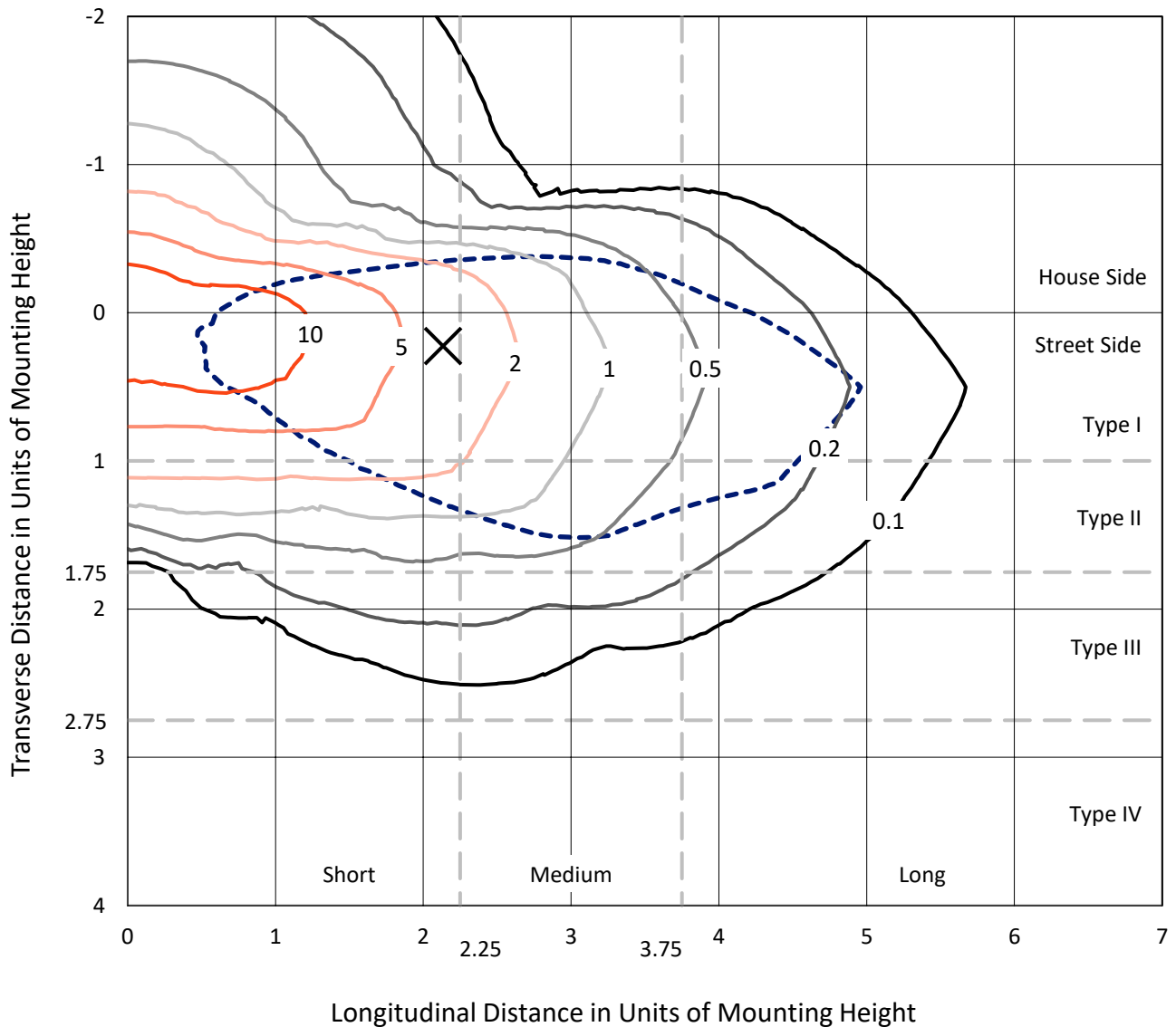
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

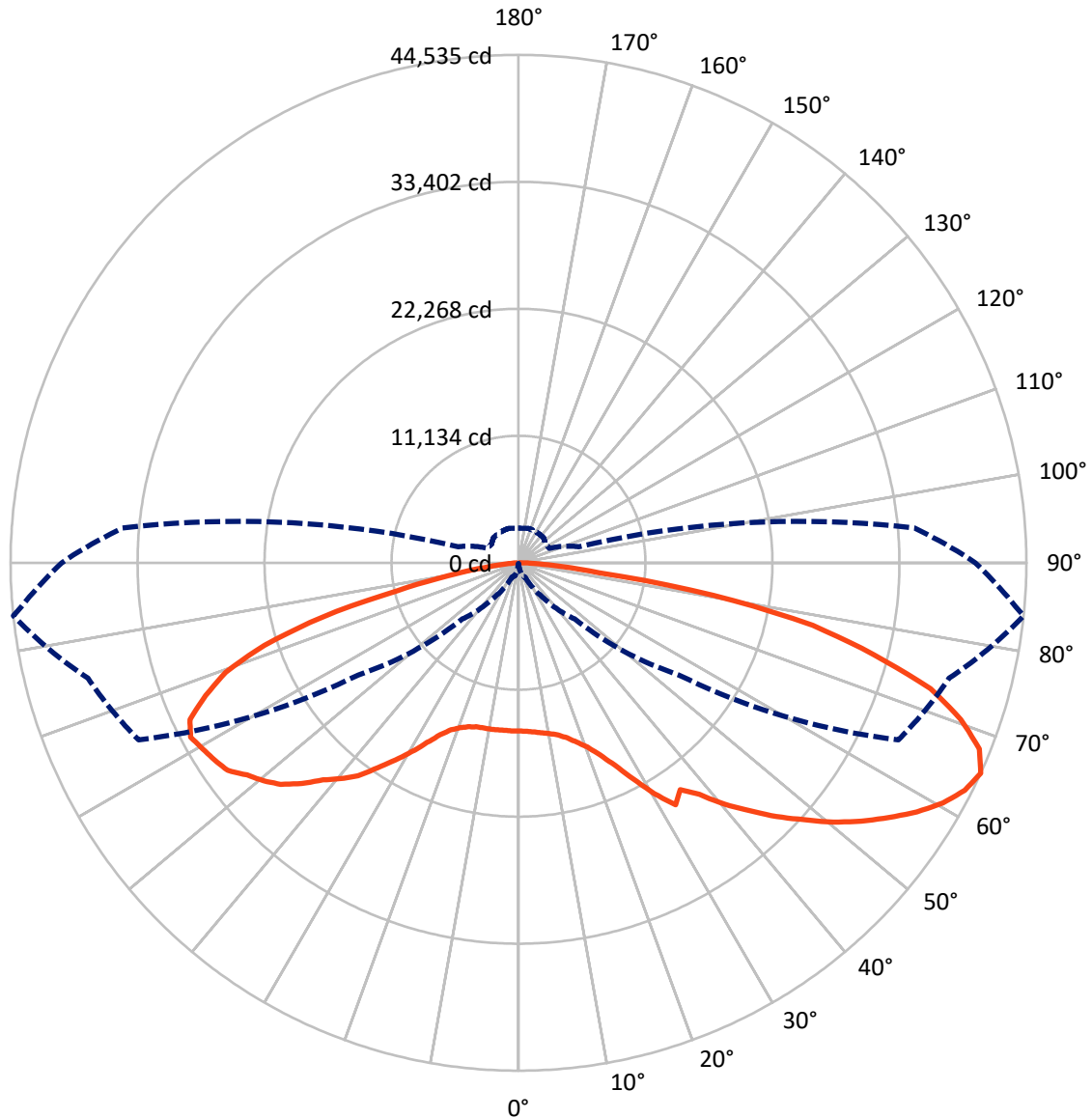
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 19 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 84-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical



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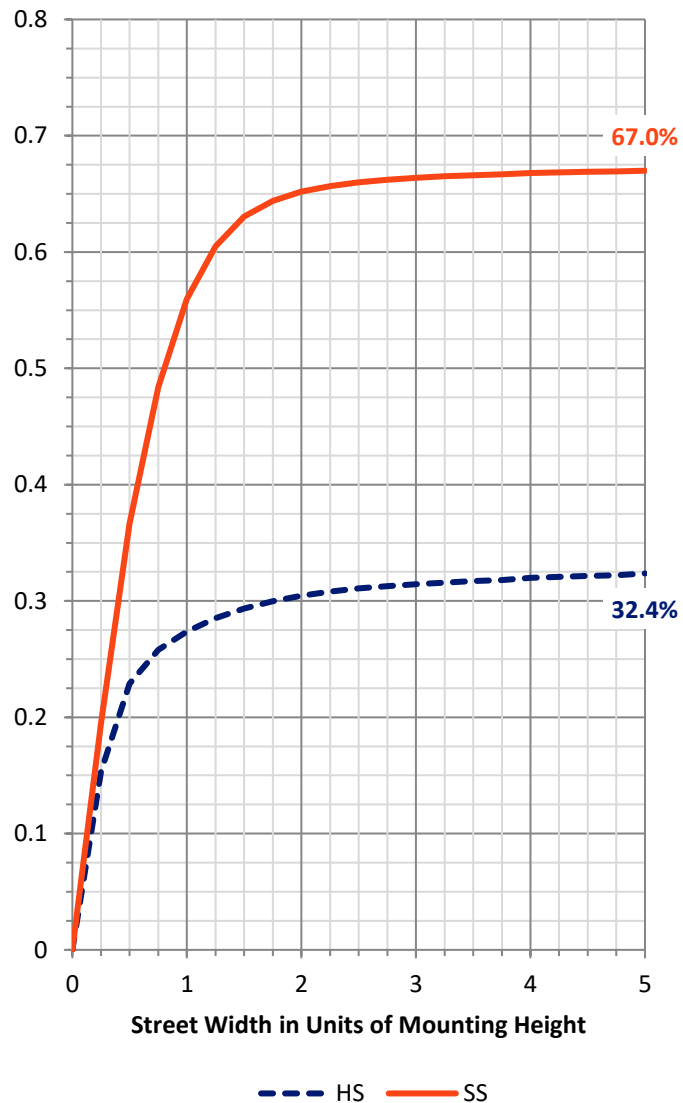
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	20884.6	0.0	20884.6
	% Fixture	33.1	0.0	33.1
<b>Street Side</b>	Lumens	42201.4	0.0	42201.4
	% Fixture	66.9	0.0	66.9
<b>Total</b>	Lumens	63086.0	0.0	63086.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1423.7	2.3
10°-20°	4237.8	6.7
20°-30°	6367.1	10.1
30°-40°	8467.0	13.4
40°-50°	10454.2	16.6
50°-60°	11747.6	18.6
60°-70°	11521.8	18.3
70°-80°	7491.9	11.9
80°-90°	1374.9	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°	63086.0	100.0
0°-180°	63086.0	100.0

**Coefficient of Utilization**

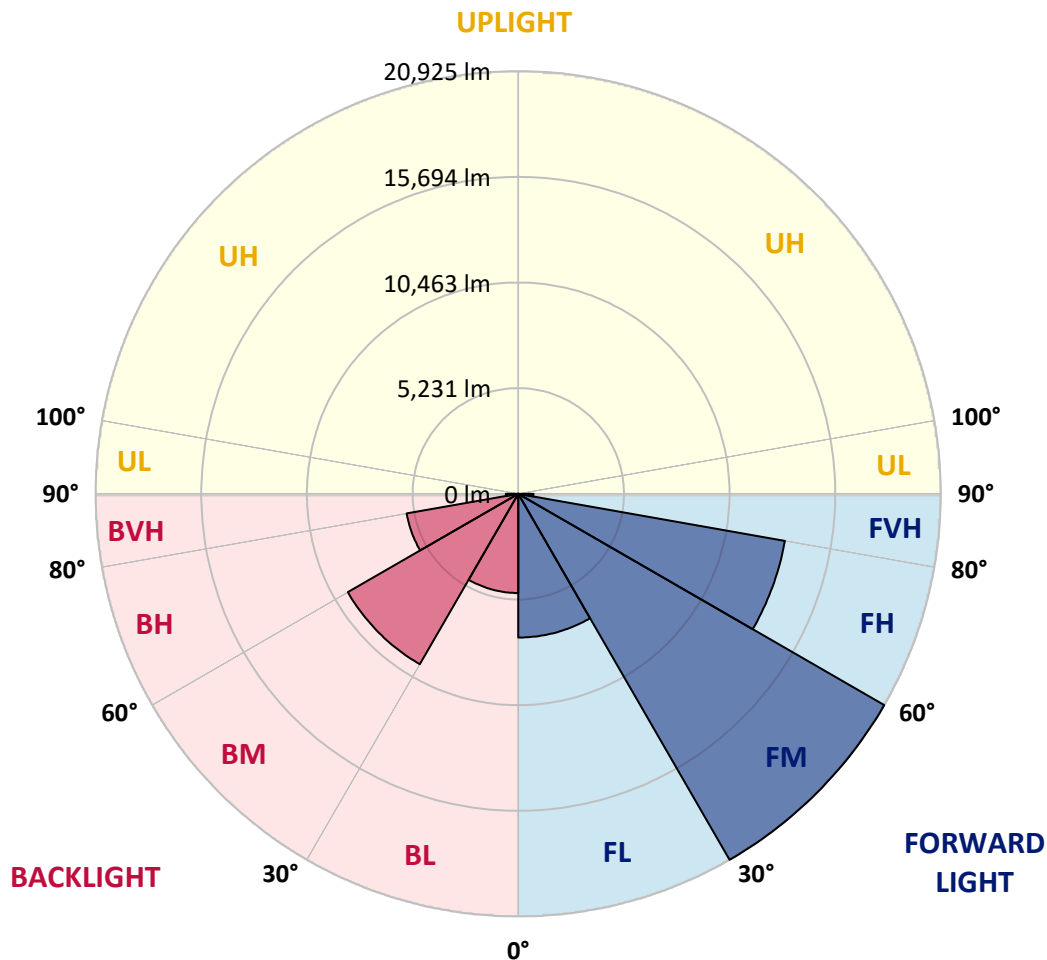


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7115.8	11.3			
FM (30°-60°)	20925.4	33.2			
FH (60°-80°)	13404.9	21.2			G5
FVH (80°-90°)	755.3	1.2			G5
BL (0°-30°)	4912.8	7.8	B4/5000		
BM (30°-60°)	9743.5	15.4	B5		
BH (60°-80°)	5608.7	8.9	B5		G5
BVH (80°-90°)	619.6	1.0			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°	75°	84°	85°
0°	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6
2.5°	15380.9	15236.0	15252.1	15321.9	15053.5	15142.1	14991.8	15018.6	14838.9	14806.7	14825.4
5°	16462.3	16306.6	16306.6	16349.6	15898.8	15778.0	15359.4	15289.7	15024.0	14905.9	14911.3
7.5°	17020.4	16867.5	16837.9	16878.2	16553.5	16580.3	16151.0	15740.5	15268.2	15058.9	15048.2
10°	17841.5	17669.8	17567.8	17570.5	17133.1	16966.7	16650.1	16363.0	15641.2	15233.3	15182.3
12.5°	18504.3	18372.8	18319.2	18278.9	17795.9	17685.9	17090.2	16856.7	16086.6	15499.0	15431.9
15°	18888.0	18764.6	18686.8	18595.5	18327.2	18147.4	17889.8	17358.5	16615.2	15925.6	15842.4
17.5°	17887.1	17675.2	17307.5	17146.5	17084.8	17345.1	18453.3	18182.3	17296.8	16532.0	16443.5
20°	15246.7	15439.9	15719.0	15085.7	15281.6	17216.3	19295.9	19271.7	18249.4	17259.2	17143.8
22.5°	12971.3	12461.4	13341.6	14307.6	14924.7	16749.4	19623.3	20530.2	19540.1	18281.6	18147.4
25°	10634.1	10923.9	12109.9	14055.3	14919.4	16395.2	19443.5	21496.2	21190.3	19674.2	19515.9
27.5°	10317.4	10322.8	11463.2	12952.5	15214.5	17216.3	19639.4	21533.8	23055.2	21474.8	21168.9
30°	10250.4	10218.2	10526.7	12335.3	14694.0	17983.7	20900.5	21869.2	23508.7	23487.3	23079.4
32.5°	9936.4	9917.6	10239.6	11060.7	13580.4	18796.8	22094.6	23433.6	23345.0	25301.2	25191.2
35°	9488.3	9555.4	9955.2	10808.5	13057.1	18120.6	23320.9	25226.1	25376.3	24421.1	24858.4
37.5°	9021.4	9059.0	9445.4	10475.8	12182.4	16937.2	24254.7	26983.7	27498.9	25773.5	25424.6
40°	8385.4	8463.2	8916.7	10075.9	12005.3	15839.7	23594.6	28985.4	29787.7	27837.0	27300.3
42.5°	7711.9	7749.5	8302.2	9426.6	11710.1	15855.8	22239.5	30713.5	31896.8	29720.7	29175.9
45°	7121.6	7132.3	7650.2	8656.4	11127.8	15756.6	21383.5	30783.3	34421.9	31738.5	31054.3
47.5°	6399.8	6501.7	7014.2	8017.8	10384.5	15423.8	21783.3	28617.8	36954.9	33662.5	33037.3
50°	4907.8	4988.3	5981.2	7392.6	9571.5	14868.4	22057.0	30362.0	34132.1	35750.1	35302.0
52.5°	4220.9	4084.0	4797.8	6689.6	8828.2	13942.6	22172.4	32809.2	34126.7	37639.2	37191.1
55°	1805.9	2769.2	4322.9	5492.8	8149.3	12708.3	22089.2	35202.7	35790.4	39420.9	39265.3
57.5°	1427.5	1494.6	3177.1	4443.6	7344.3	11248.6	21713.6	36785.9	37250.1	41205.3	40762.6
60°	263.0	297.9	1561.7	1878.3	5318.4	9069.7	20345.1	37011.3	38315.4	42759.0	42192.8
62.5°	120.8	142.2	1255.8	1564.4	4253.1	7459.7	19172.5	36938.8	39300.2	43912.8	43413.7
65°	56.4	72.5	1124.3	1419.5	3681.5	6960.6	17141.2	36743.0	39082.8	44535.4	43725.0
67.5°	42.9	61.7	1033.1	1274.6	3061.7	6464.2	15211.8	34687.5	38036.3	43572.0	42447.7
70°	42.9	61.7	944.5	1159.2	2597.5	5833.6	12348.7	32114.2	35648.2	41138.3	40201.8
72.5°	45.6	61.7	839.9	1049.2	2251.3	5036.6	9646.6	28006.0	32785.0	37778.7	36793.9
75°	45.6	61.7	724.5	928.4	1897.1	4218.2	6458.8	20017.7	28239.5	32154.4	31059.6
77.5°	45.6	61.7	601.1	775.5	1545.6	3370.3	4178.0	10792.4	22218.0	26369.2	24965.8
80°	45.6	61.7	448.1	587.7	1161.9	2377.4	2495.5	5441.8	11954.3	17323.6	17567.8
82.5°	45.6	59.0	311.3	429.3	759.4	1304.1	1379.2	2627.0	4411.4	7105.5	7204.8
85°	42.9	51.0	222.7	284.4	415.9	491.1	670.8	1306.8	2114.5	3032.2	3008.0
87.5°	26.8	26.8	72.5	112.7	169.1	193.2	300.5	483.0	729.9	1000.9	944.5
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°	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6	14747.6
2.5°	14822.8	14761.0	14683.2	14661.8	14479.3	14393.4	14219.0	14296.8	14208.3	14135.8	14219.0
5°	14844.2	14753.0	14589.3	14396.1	14007.0	13829.9	13583.1	13609.9	13481.1	13381.8	13438.2
7.5°	14897.9	14785.2	14527.6	14092.9	13628.7	13349.6	13092.0	13293.3	13204.7	13129.6	13185.9
10°	14924.7	14836.2	14380.0	13921.2	13253.0	13100.1	12778.1	12753.9	12762.0	12753.9	12842.5
12.5°	14997.2	14871.1	14208.3	13623.3	13054.4	12649.3	12450.7	12448.0	12193.1	12083.1	12131.4
15°	15211.8	14938.1	14092.9	13269.1	12641.2	12372.9	11745.0	11747.7	11640.3	11514.2	11511.5
17.5°	15641.2	15139.4	14092.9	13030.3	12260.2	11718.1	11170.7	10872.9	10800.4	10816.5	10805.8
20°	16207.4	15477.5	14087.5	12678.8	11723.5	11162.7	10373.8	10121.6	9893.5	9909.6	9909.6
22.5°	17020.4	15976.6	14098.3	12356.8	11211.0	10448.9	9560.7	9241.4	8997.2	9005.3	9005.3
25°	18187.7	16832.6	14224.4	12160.9	10524.1	9609.0	8712.8	8216.4	7966.8	7969.5	7974.9
27.5°	19674.2	18026.7	14661.8	11745.0	9952.5	8616.2	7634.1	7269.2	7019.6	6955.2	6955.2
30°	21356.7	19459.6	15227.9	11474.0	9067.0	7497.2	6681.5	6410.5	6110.0	6021.4	6021.4
32.5°	23221.6	20897.8	15812.9	11141.2	8232.5	6536.6	5857.7	5608.2	5232.5	5122.5	5084.9
35°	25161.7	22384.4	16524.0	10674.3	7183.3	5745.0	5144.0	4840.7	4569.7	4424.8	4389.9
37.5°	26208.2	24077.6	17165.3	10202.1	6372.9	5119.8	4449.0	4212.8	4033.1	3931.1	3912.3
40°	27646.4	25309.2	17498.0	9421.2	5500.8	4483.9	3807.7	3796.9	3821.1	3729.8	3724.5
42.5°	29111.5	26524.8	17406.8	8374.7	4822.0	3834.5	3485.7	3670.8	3805.0	3724.5	3729.8
45°	30944.3	28161.6	17739.6	7274.5	4151.1	3474.9	3418.6	3635.9	3821.1	3802.3	3802.3
47.5°	32798.4	29744.8	17125.1	5927.5	3700.3	3370.3	3426.6	3579.6	3810.3	3872.1	3858.6
50°	34309.2	30828.9	16746.7	4784.4	3445.4	3373.0	3453.5	3509.8	3762.0	3861.3	3858.6
52.5°	35530.1	31862.0	15335.3	4038.4	3300.5	3383.7	3539.3	3499.1	3676.2	3780.8	3842.5
55°	37258.2	33292.2	13728.0	3751.3	3225.4	3373.0	3568.8	3536.6	3609.1	3657.4	3703.0
57.5°	38594.5	34003.3	11575.9	3566.2	3158.3	3356.9	3544.7	3547.4	3582.3	3563.5	3544.7
60°	39716.1	34652.6	9469.5	3386.4	3072.4	3322.0	3442.7	3480.3	3469.6	3445.4	3397.1
62.5°	40263.5	35355.7	7355.0	3195.9	2981.2	3220.0	3276.4	3319.3	3295.1	3214.6	3209.3
65°	40056.9	34851.2	5452.5	2989.2	2871.2	3107.3	3104.6	3123.4	3134.1	3032.2	3042.9
67.5°	38897.7	32634.8	4153.8	2726.3	2745.1	2946.3	2932.9	2943.6	2914.1	2844.3	2855.1
70°	35527.4	30117.8	2946.3	2283.5	2487.5	2694.1	2712.9	2758.5	2691.4	2568.0	2576.0
72.5°	30544.4	25792.2	2066.2	1819.3	2184.2	2447.2	2436.5	2433.8	2342.6	2390.9	2449.9
75°	26052.5	19752.1	1569.8	1465.1	1725.4	2106.4	2227.2	2235.2	2248.6	2731.6	2766.5
77.5°	20055.3	11948.9	1336.3	1156.5	1339.0	1746.9	1972.3	2063.5	2833.6	2935.6	2881.9
80°	11951.6	6901.5	1033.1	901.6	1081.4	1333.6	1685.1	2178.9	2847.0	2543.8	2433.8
82.5°	5817.5	3201.2	751.3	686.9	797.0	968.7	1322.9	2538.4	2409.6	1966.9	1940.1
85°	2170.8	1081.4	450.8	469.6	531.3	636.0	1006.3	2423.1	1848.8	1602.0	1513.4
87.5°	542.0	198.6	182.5	187.8	238.8	319.3	515.2	1167.3	896.2	743.3	727.2
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)