

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: P591331

Luminaire Tested: **CTN-CA10-760-730-U-T3-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-760-730-U-T3-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 72450 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B5 - U0 - G5

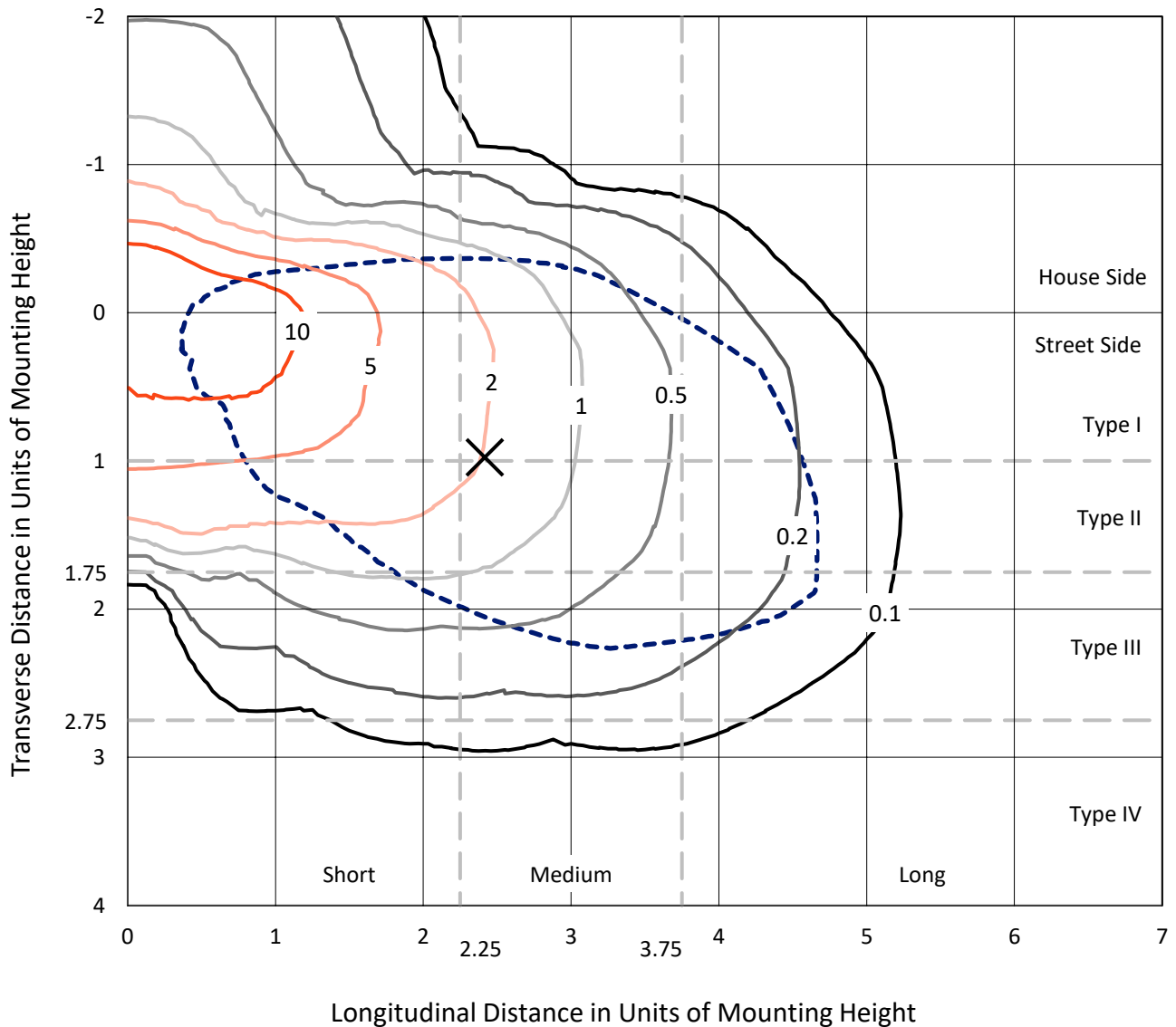
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

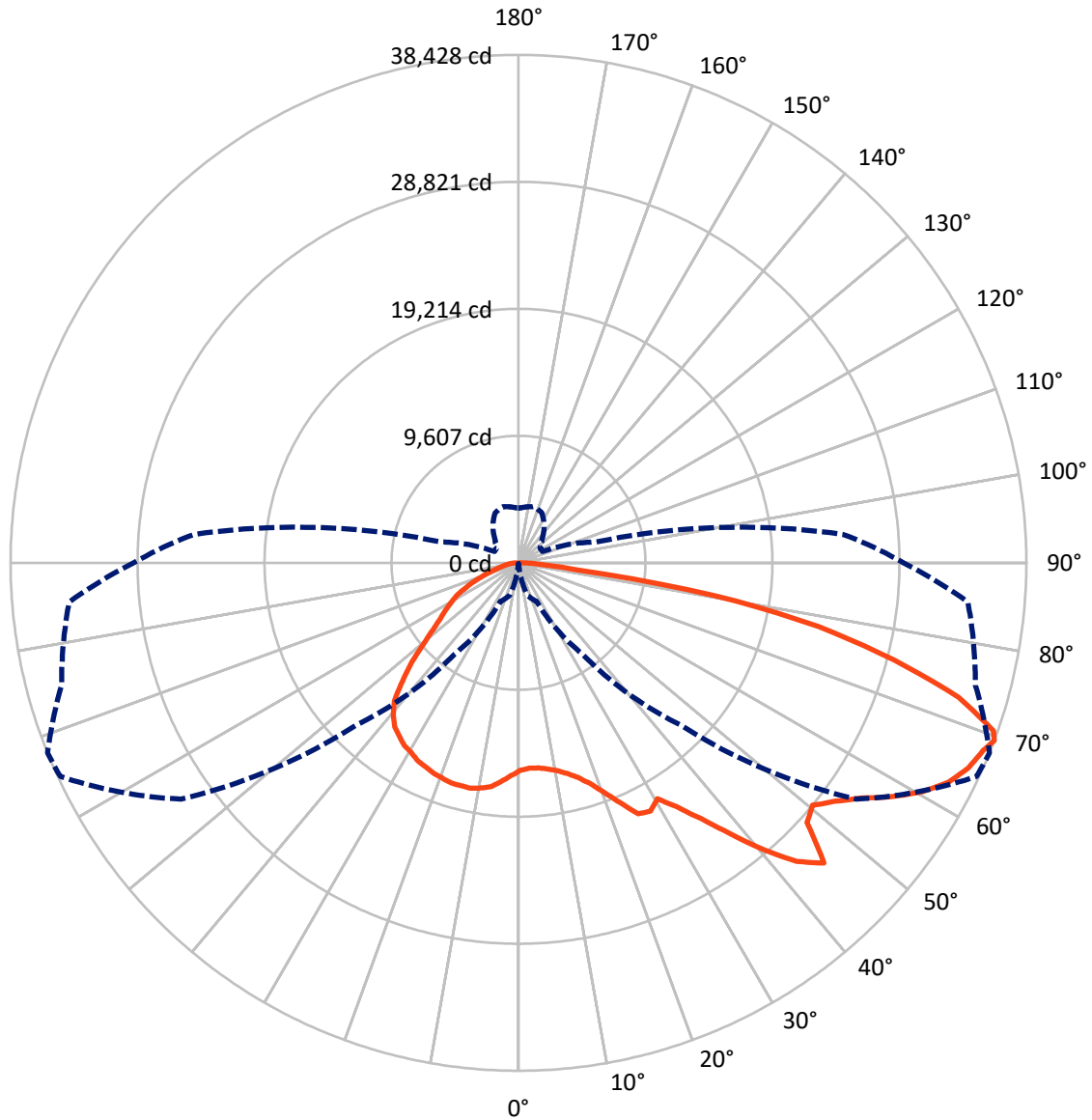
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 19.4 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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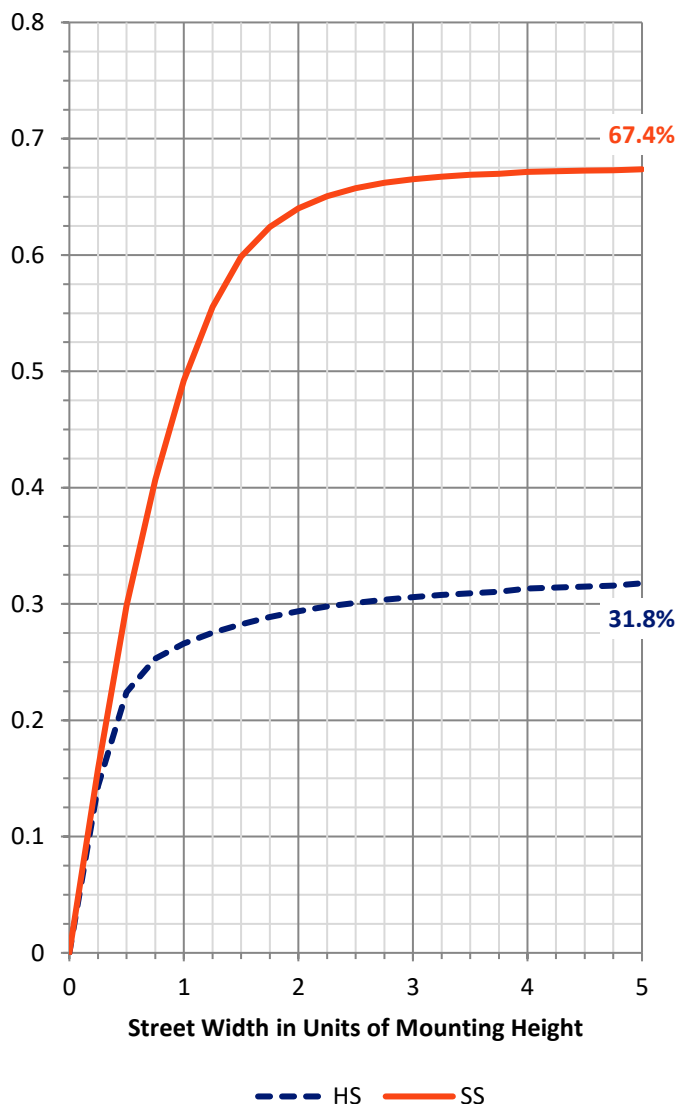
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	23632.1	0.0	23632.1
	% Fixture	32.6	0.0	32.6
Street Side	Lumens	48817.9	0.0	48817.9
	% Fixture	67.4	0.0	67.4
Total	Lumens	72450.0	0.0	72450.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1568.6	2.2
10°-20°	4853.3	6.7
20°-30°	7461.8	10.3
30°-40°	9691.5	13.4
40°-50°	11962.7	16.5
50°-60°	13435.2	18.5
60°-70°	13130.3	18.1
70°-80°	8817.3	12.2
80°-90°	1529.3	2.1
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°	72450.0	100.0
0°-180°	72450.0	100.0

Coefficient of Utilization

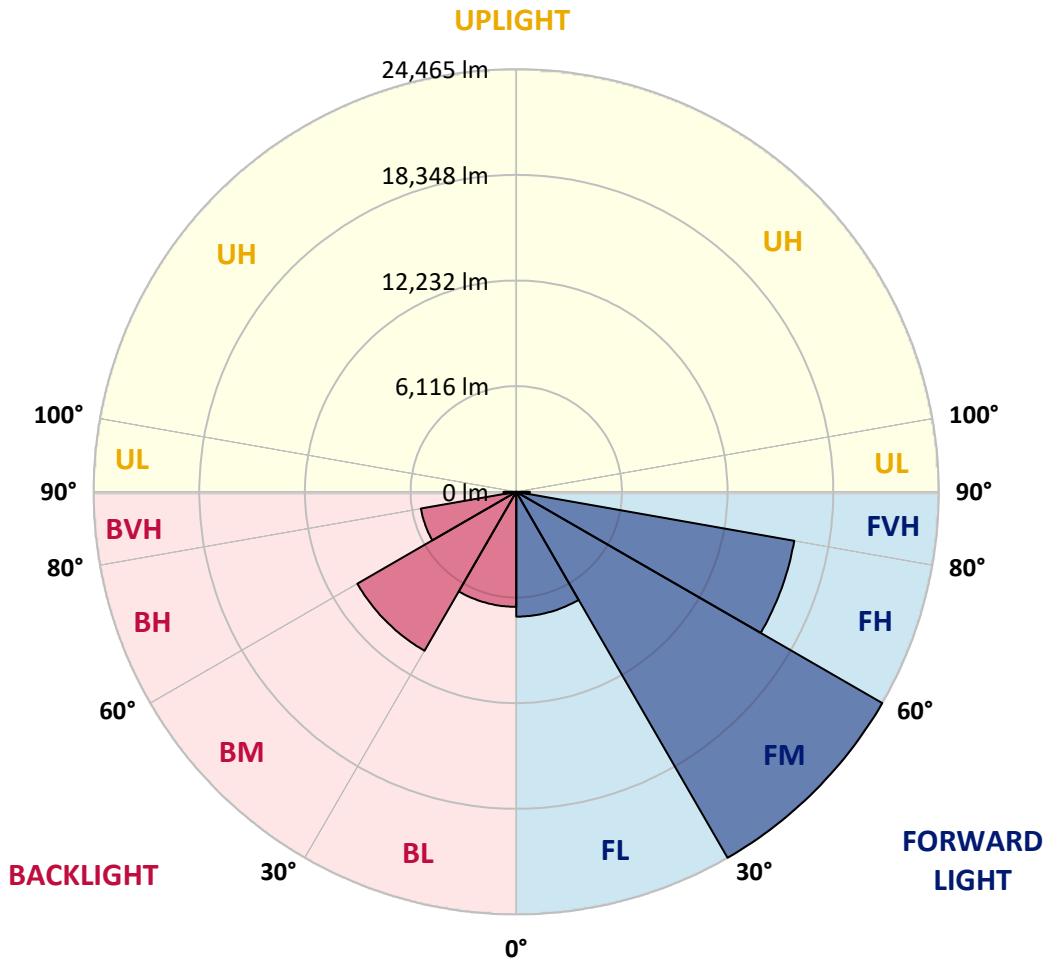


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7224.0	10.0			
FM (30°-60°)	24464.5	33.8			
FH (60°-80°)	16341.1	22.6			G5
FVH (80°-90°)	788.3	1.1			G5
BL (0°-30°)	6659.7	9.2	B5		
BM (30°-60°)	10624.9	14.7	B5		
BH (60°-80°)	5606.5	7.7	B5		G5
BVH (80°-90°)	741.0	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0
2.5°	15388.2	15294.4	15330.0	15459.3	15197.4	15368.8	15288.0	15462.5	15553.1	15514.3	15760.0
5°	15533.7	15430.2	15436.7	15527.2	15245.9	15391.4	15300.9	15488.4	15588.6	15533.7	15863.4
7.5°	15976.6	15863.4	15831.1	15824.6	15559.5	15669.4	15488.4	15640.3	15743.8	15714.7	16086.5
10°	16655.4	16519.7	16458.2	16422.7	16105.9	16073.5	15847.2	15915.1	15992.7	16025.0	16425.9
12.5°	17402.2	17218.0	17179.2	17072.5	16665.1	16594.0	16319.2	16351.6	16351.6	16425.9	16823.5
15°	18035.9	17883.9	17883.9	17774.0	17376.4	17276.1	16897.9	16859.1	16852.6	16910.8	17266.4
17.5°	17628.5	17544.5	17470.1	17415.2	16800.9	16639.3	17664.1	17596.2	17563.9	17622.1	17829.0
20°	16261.0	16487.3	16008.9	15333.2	15430.2	17376.4	18650.1	18527.2	18546.6	18604.8	18546.6
22.5°	14311.7	13752.4	14631.7	14874.2	15278.3	16716.9	19548.8	19678.1	19716.9	19720.1	19416.3
25°	12265.3	12575.6	13768.5	15617.7	15566.0	16765.4	19002.5	20841.9	21035.9	21016.5	20489.6
27.5°	12853.7	12795.5	13716.8	14932.4	16467.9	17793.4	19338.7	20156.6	21268.7	22500.4	21785.9
30°	13367.7	13319.2	13416.2	15116.6	17062.8	18821.4	20596.2	20463.7	20699.7	22930.3	23315.0
32.5°	13826.7	13791.2	13904.3	14091.8	16073.5	19930.3	21944.3	21918.5	21999.3	22173.9	25118.9
35°	14259.9	14263.2	14402.2	14709.3	16199.6	20159.8	23276.2	23551.0	23764.4	24149.1	24808.6
37.5°	14557.3	14563.8	14673.7	15045.5	15669.4	19025.1	24624.3	25603.9	25985.3	26677.2	25742.9
40°	14554.1	14602.6	14867.7	15352.6	16186.7	18275.1	25041.4	27931.5	28545.7	29050.0	27478.9
42.5°	14250.2	14276.1	14770.7	15646.8	16645.7	18844.1	23745.0	30200.9	30883.0	30744.0	28914.3
45°	13972.2	13965.7	14528.3	15608.0	17056.3	19626.4	23919.6	30136.3	32402.5	32234.4	30233.2
47.5°	13600.4	13610.1	14205.0	15439.9	17431.3	20463.7	25212.7	27404.5	29366.9	33514.6	31306.5
50°	13134.9	13193.1	13797.6	15184.5	17618.8	21246.0	26331.2	28603.9	28836.7	30100.7	32357.2
52.5°	12362.3	12258.8	13361.2	14890.3	17751.4	21815.0	27398.1	29754.8	29974.6	29515.6	33427.3
55°	7018.4	8709.2	12814.9	14547.6	17790.2	22157.7	28225.7	31064.1	31406.8	30973.6	34296.9
57.5°	4409.6	4545.3	11101.5	13639.2	17463.6	22371.1	29240.8	32861.5	33369.1	32337.8	34956.4
60°	1561.4	1684.3	5398.8	6262.0	14314.9	21782.7	30786.1	34979.0	35147.1	33621.2	35441.3
62.5°	164.9	216.6	3659.5	4597.1	11114.4	20101.6	31852.9	36682.7	36530.8	34571.7	35703.2
65°	58.2	80.8	3216.6	4112.1	10345.0	19577.9	32205.3	37410.1	37406.9	35179.4	35515.7
67.5°	45.3	61.4	2796.4	3572.3	9232.9	18456.1	31620.1	37956.4	37904.7	35780.8	35021.0
69°	45.3	64.7	2518.4	3219.9	8427.9	17382.8	31167.5	38244.2	38428.4	35790.4	34125.6
70°	45.3	64.7	2340.6	2974.2	7771.7	16400.0	30517.7	38024.3	38118.1	35480.1	33197.7
72.5°	45.3	64.7	1813.6	2301.8	5909.6	12624.1	26735.3	34649.3	34827.1	32754.8	29835.6
75°	45.3	64.7	1277.0	1674.6	3879.4	8470.0	21288.1	28859.3	29341.0	27682.6	24446.5
77.5°	45.3	64.7	762.9	1144.4	2434.3	4648.8	14647.9	22118.9	23208.3	21663.1	17473.3
80°	45.3	61.4	358.8	623.9	1386.9	2463.4	6711.3	13616.6	15035.8	13551.9	9139.2
82.5°	45.3	61.4	294.2	449.4	701.5	1225.2	2621.8	4461.3	4380.5	3934.3	2945.1
85°	42.0	55.0	242.5	329.7	504.3	775.9	1461.2	1816.8	1732.8	1532.4	1542.1
87.5°	29.1	32.3	84.1	148.7	203.7	384.7	708.0	769.4	785.6	656.3	688.6
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°	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0	15705.0
2.5°	15876.3	15895.7	15989.5	16157.6	16154.4	16335.4	16286.9	16707.2	16723.3	16716.9	16749.2
5°	16021.8	16131.7	16338.6	16697.5	16904.4	17175.9	17124.2	17547.7	17573.6	17538.0	17628.5
7.5°	16274.0	16409.7	16749.2	17192.1	17247.0	17589.7	17518.6	17861.3	17845.1	17780.5	17935.6
10°	16629.6	16791.2	17098.3	17350.5	17508.9	17709.3	17631.8	17922.7	17867.7	17796.6	17945.3
12.5°	16991.7	17069.2	17240.6	17525.1	17538.0	17583.3	17492.7	17728.7	17667.3	17560.6	17715.8
15°	17337.6	17347.3	17318.2	17447.5	17311.7	17340.8	17143.6	17292.3	17185.6	17137.1	17237.3
17.5°	17786.9	17670.5	17463.6	17408.7	17088.6	16952.9	16661.9	16655.4	16467.9	16400.0	16467.9
20°	18326.8	18074.6	17596.2	17140.4	16587.6	16309.5	15814.9	15682.4	15530.4	15384.9	15465.8
22.5°	19073.6	18585.4	17761.1	16910.8	15995.9	15449.6	14841.8	14466.8	14182.3	13901.1	13985.1
25°	19923.8	19241.7	17993.8	16519.7	15288.0	14321.4	13532.5	12892.5	12485.1	12074.5	12258.8
27.5°	21074.7	20133.9	18136.1	16228.7	14366.6	13070.3	11812.7	10978.6	10555.1	10260.9	10167.2
30°	22416.3	21288.1	18391.5	15656.5	13283.6	11531.4	9934.4	9003.4	8554.0	8415.0	8473.2
32.5°	24052.1	22691.1	18911.9	15178.0	12184.5	9898.9	8036.8	7309.4	6986.1	6963.5	6957.0
35°	26240.7	24482.1	19358.1	14434.5	10729.7	7994.7	6394.5	5793.2	5780.3	5770.6	5793.2
37.5°	27921.8	26305.4	19833.3	13707.1	9003.4	6242.6	5114.3	4749.0	4710.2	4823.4	4852.4
40°	29247.2	27611.4	20544.5	12478.7	6979.6	4661.7	3927.9	3792.1	4066.9	4315.8	4367.5
42.5°	30443.4	28710.6	20699.7	11169.4	5085.2	3578.7	3255.4	3481.7	3905.2	4189.7	4244.7
45°	31565.2	29864.7	20108.1	9223.2	3636.9	3032.4	3097.0	3436.5	3911.7	4215.6	4247.9
47.5°	32790.4	30637.3	19468.0	7416.1	2990.4	2906.3	3064.7	3452.6	3950.5	4257.6	4273.8
50°	33598.6	31190.2	17867.7	5799.7	2802.8	2828.7	3051.8	3488.2	3957.0	4176.8	4189.7
52.5°	33928.4	31633.1	16419.4	4642.3	2709.1	2770.5	3067.9	3549.6	3940.8	4063.6	4057.2
55°	34135.3	31836.7	15174.8	3863.2	2625.0	2725.3	3097.0	3594.9	3976.4	4102.4	4102.4
57.5°	34002.7	31380.9	14250.2	3291.0	2541.0	2692.9	3132.6	3662.8	4312.6	4535.6	4513.0
60°	33905.7	30527.4	12937.7	2906.3	2440.8	2657.4	3177.9	3898.8	5030.3	5256.6	5182.2
62.5°	33404.6	29806.5	11515.3	2660.6	2327.6	2638.0	3216.6	4215.6	5130.5	5117.5	4972.1
65°	32127.7	28338.8	9271.7	2411.7	2211.2	2612.1	3229.6	4354.6	4719.9	4516.2	4474.2
67.5°	30317.3	26221.3	7315.9	2162.8	2081.9	2557.2	3336.3	4189.7	4490.4	4315.8	4251.1
69°	29134.1	24653.4	6077.7	2007.6	1997.9	2511.9	3378.3	4173.6	4406.3	4209.1	4125.1
70°	28180.4	23295.6	5246.9	1907.4	1933.2	2476.3	3336.3	4170.3	4370.8	4125.1	4031.3
72.5°	24087.7	18873.2	3388.0	1668.1	1742.5	2382.6	3177.9	4063.6	4296.4	4134.8	4005.5
75°	18666.3	13739.4	2191.8	1441.8	1542.1	2224.2	3019.4	3995.8	4364.3	4070.1	3792.1
77.5°	11977.6	7351.4	1697.2	1212.3	1325.5	2001.1	2735.0	3721.0	4238.2	3973.1	3614.3
80°	5217.8	2728.5	1309.3	982.8	1073.3	1626.1	2347.0	3307.2	4018.4	3989.3	3746.8
82.5°	2214.5	1758.6	1008.6	753.2	853.5	1202.6	1839.5	2835.2	3549.6	3688.6	3953.7
85°	1254.3	1053.9	672.4	517.2	633.6	885.8	1309.3	2175.7	2890.1	3203.7	3426.8
87.5°	539.9	439.7	310.3	278.0	358.8	459.1	562.5	1021.6	1542.1	1881.5	2023.7
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)