

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: P510491

Luminaire Tested: **CTN-CA10-310-740-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-310-740-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47807 lumens
Efficiency: N/A
Efficacy: 153.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

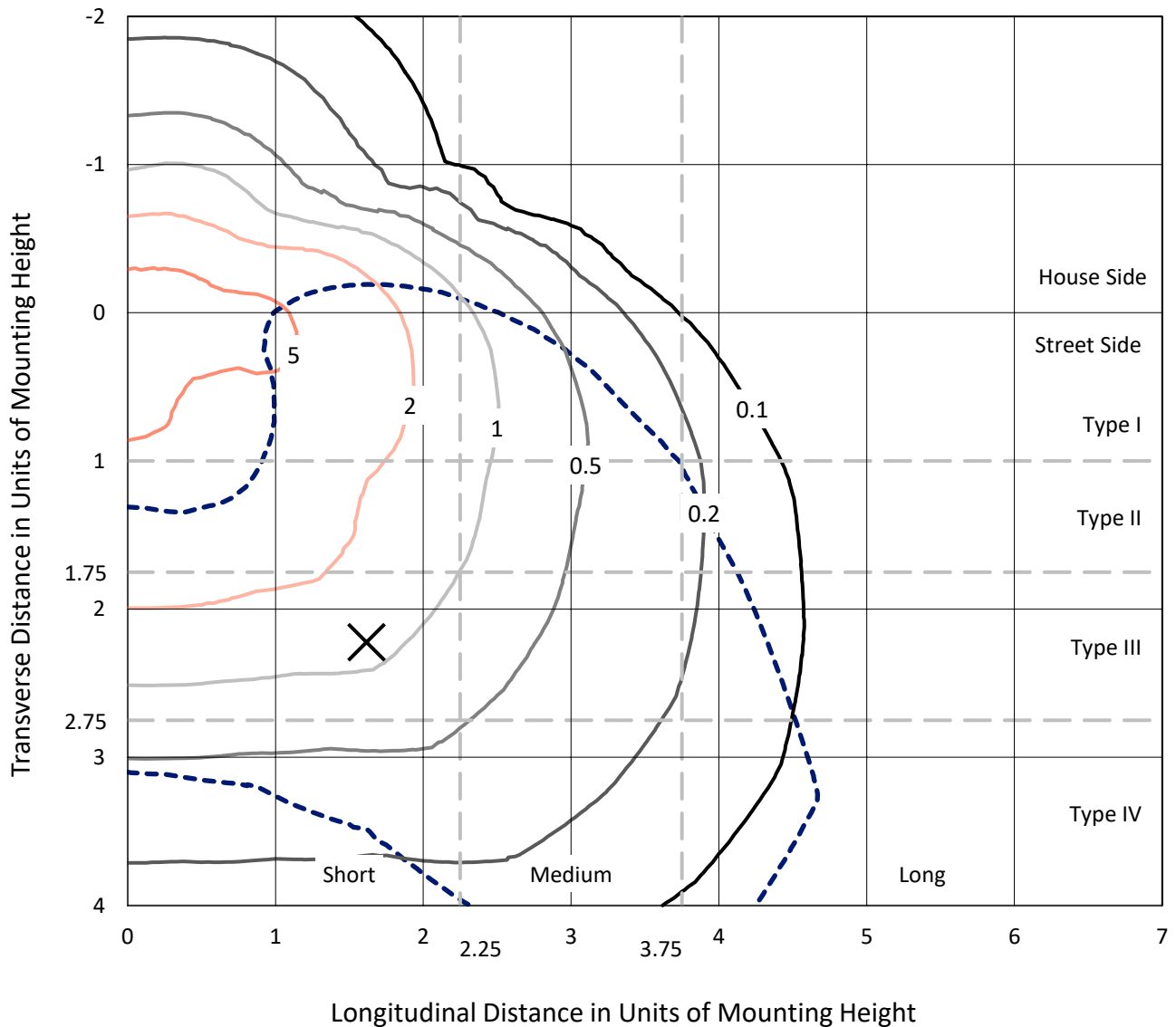
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

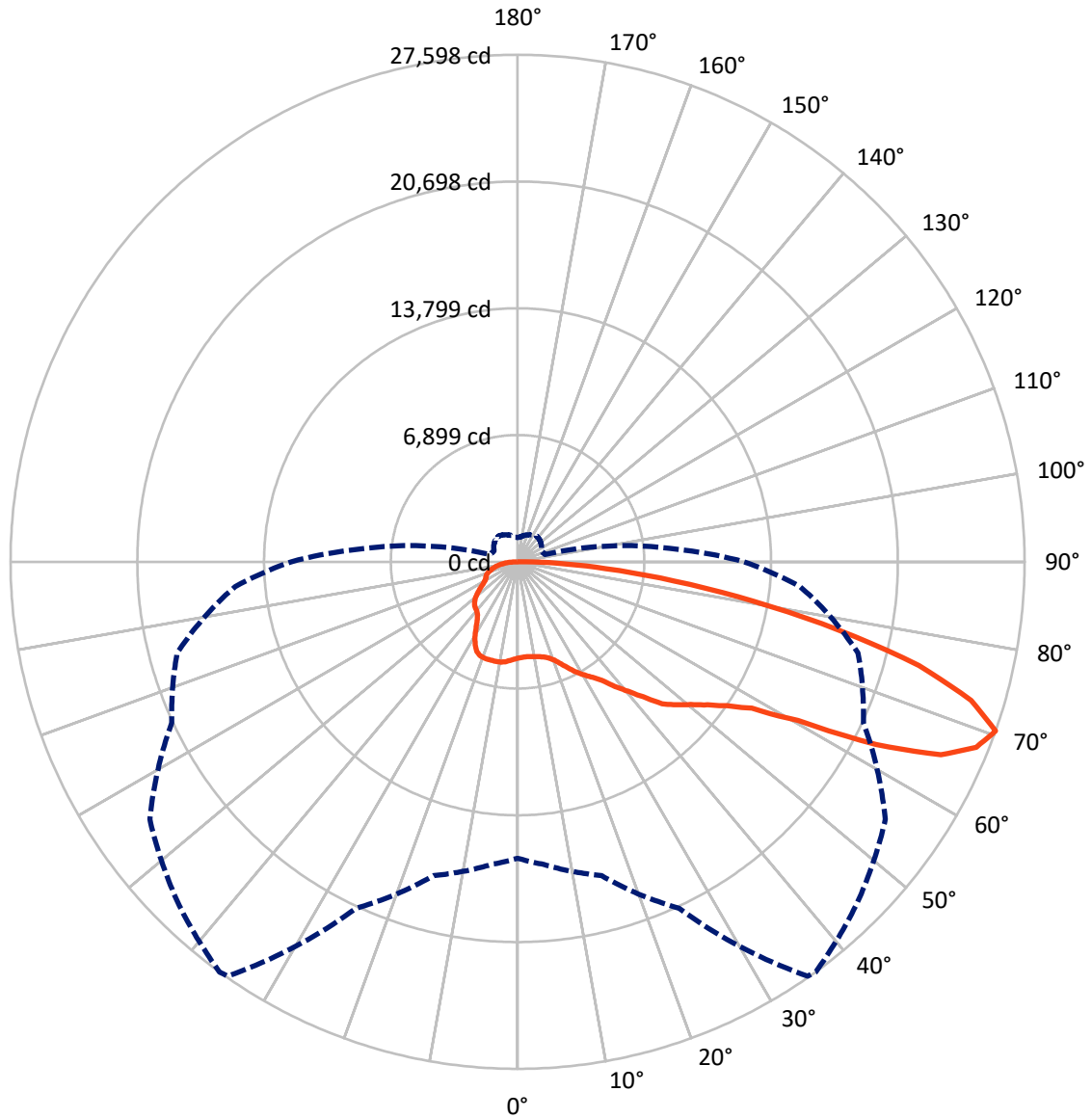
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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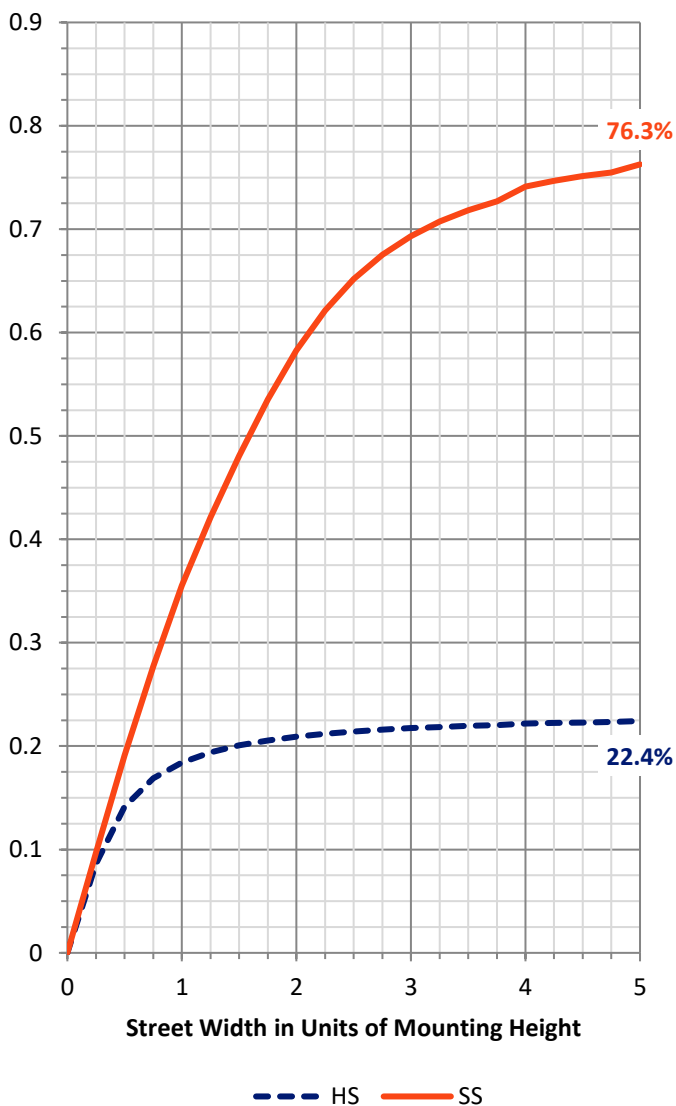
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10892.5	0.0	10892.5
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	36914.5	0.0	36914.5
	% Fixture	77.2	0.0	77.2
Total	Lumens	47807.0	0.0	47807.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	507.3	1.1
10°-20°	1568.3	3.3
20°-30°	2828.9	5.9
30°-40°	4381.5	9.2
40°-50°	6655.5	13.9
50°-60°	9224.9	19.3
60°-70°	11995.5	25.1
70°-80°	8858.6	18.5
80°-90°	1786.6	3.7
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°	47807.0	100.0
0°-180°	47807.0	100.0

Coefficient of Utilization

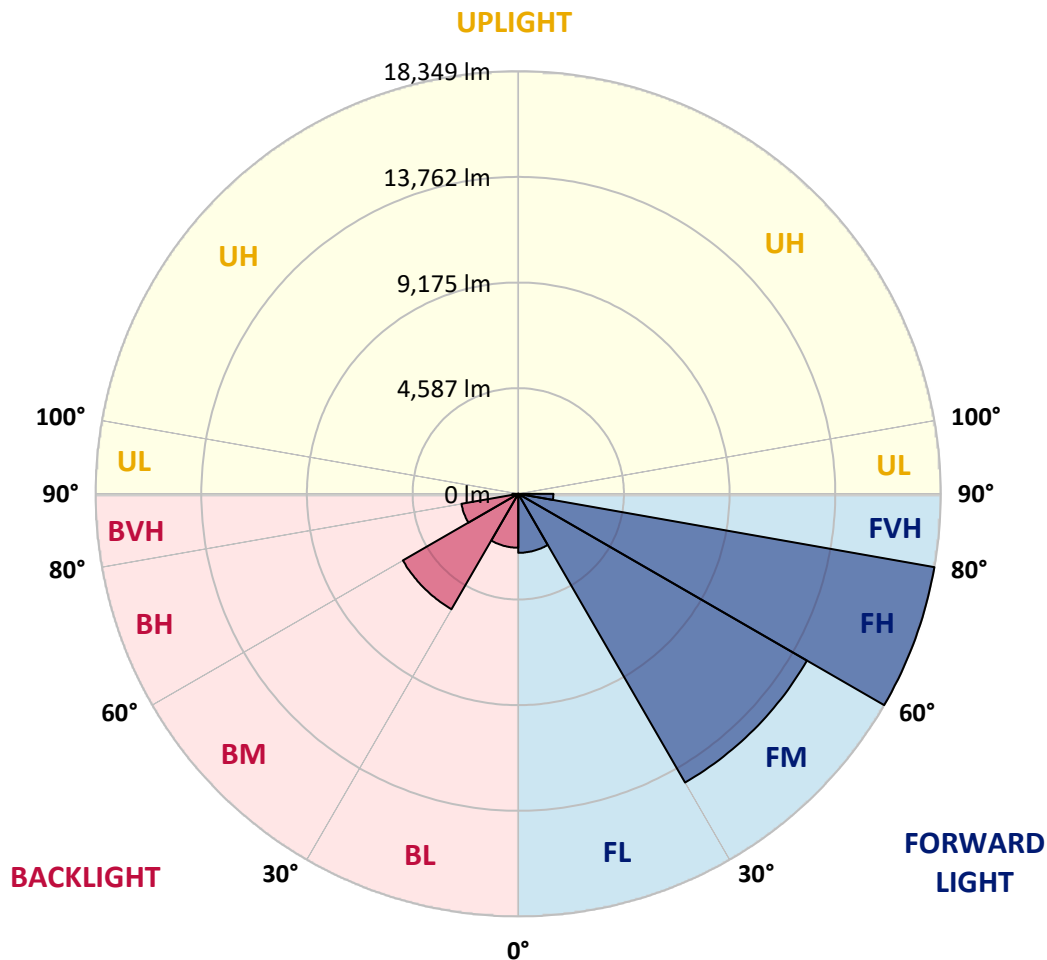


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2562.9	5.4			
FM (30°-60°)	14475.8	30.3			
FH (60°-80°)	18349.4	38.4			G5
FVH (80°-90°)	1526.3	3.2			G5
BL (0°-30°)	2341.6	4.9	B3/2500		
BM (30°-60°)	5786.0	12.1	B4/8500		
BH (60°-80°)	2504.7	5.2	B4/5000		G4/5000
BVH (80°-90°)	260.3	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3
2.5°	5204.6	5197.7	5193.7	5201.6	5204.6	5205.6	5207.6	5205.6	5200.7	5218.5	5240.3
5°	5205.6	5201.6	5193.7	5186.8	5186.8	5186.8	5187.8	5210.6	5220.5	5218.5	5245.2
7.5°	5213.5	5210.6	5195.7	5190.8	5202.6	5206.6	5226.4	5219.5	5230.4	5248.2	5270.9
10°	5214.5	5210.6	5197.7	5208.6	5242.2	5248.2	5257.1	5276.9	5280.8	5302.6	5325.4
12.5°	5224.4	5224.4	5229.4	5253.1	5288.8	5295.7	5329.3	5345.2	5368.9	5379.8	5407.5
15°	5276.9	5275.9	5287.8	5314.5	5371.9	5375.9	5417.4	5464.9	5482.8	5509.5	5554.0
17.5°	5401.6	5407.5	5408.5	5428.3	5496.6	5498.6	5566.9	5611.4	5652.0	5699.5	5801.5
20°	5697.6	5686.7	5674.8	5674.8	5701.5	5715.4	5767.8	5839.1	5922.3	6006.4	6126.2
22.5°	6069.7	6091.5	6048.0	6025.2	6038.1	6022.2	6061.8	6119.2	6216.2	6342.0	6493.4
25°	6514.2	6516.2	6513.2	6421.1	6392.4	6402.3	6435.0	6488.4	6617.1	6717.1	6936.8
27.5°	6947.7	6938.8	6907.2	6810.1	6782.4	6796.3	6795.3	6942.8	7074.4	7202.1	7460.5
30°	7341.7	7365.5	7309.0	7145.7	7148.7	7146.7	7192.2	7382.3	7622.8	7860.4	8125.7
32.5°	8036.6	7964.3	7888.1	7565.4	7506.0	7499.1	7525.8	7808.9	8165.2	8566.1	8884.9
35°	8690.9	8673.0	8597.8	8270.2	7926.7	7920.8	7884.1	8228.6	8729.5	9471.8	9869.8
37.5°	9360.0	9334.3	9260.0	8980.9	8639.4	8606.7	8298.9	8676.0	9353.1	10531.0	11098.2
40°	10157.8	10142.0	10027.2	9669.8	9319.4	9269.9	8950.2	9146.2	10140.0	11941.5	12341.4
42.5°	10857.6	10854.7	10723.0	10391.4	10093.5	10044.0	9771.8	9975.7	11233.8	13323.3	13558.9
45°	11371.4	11449.6	11455.5	11266.4	11060.6	11017.0	10944.7	11225.9	12498.8	14577.5	14542.8
47.5°	11804.9	11872.2	11801.9	11704.9	11634.7	11637.6	11749.5	12307.8	13748.0	15670.3	15401.0
50°	12529.5	12487.9	12122.7	12065.2	12154.3	12206.8	12531.5	13475.8	15178.3	16695.8	16171.1
52.5°	13574.8	13415.4	12698.8	12581.9	12919.5	12939.3	13456.0	14520.1	16607.7	17575.7	16875.9
55°	15005.1	14873.4	14063.7	13524.3	13694.5	13828.2	14555.7	15590.1	17774.7	18403.2	17418.3
57.5°	17119.4	17129.3	16469.1	15463.4	14884.3	15026.9	15595.0	16630.4	18738.8	19096.1	17756.9
60°	18814.0	19127.8	18930.8	18471.5	17640.1	17543.1	17110.5	17714.3	19562.4	19685.1	18080.5
62.5°	19989.0	20131.5	20808.6	20905.6	21855.8	21896.4	19824.7	18984.3	20467.1	20071.1	18148.8
65°	19929.6	20017.7	21087.7	22390.3	25197.6	25323.3	24110.7	20905.6	21086.7	20243.4	17949.9
67.5°	18541.8	18674.5	20034.5	22469.5	26978.3	26930.8	26161.7	23580.1	21290.6	19967.2	17001.6
70°	16131.5	16540.3	17682.6	20799.7	27534.6	27597.9	26180.5	24434.4	20765.0	19186.2	15420.8
72.5°	13295.6	13424.3	14503.2	17991.5	25908.3	25815.2	25107.5	23306.9	19814.8	17773.7	12654.2
75°	10111.3	10111.3	11417.9	14337.9	22248.8	22575.4	22850.6	21109.5	17554.0	14486.4	8616.6
77.5°	6712.2	6952.7	8004.9	10774.5	17611.4	17852.9	18803.1	17993.4	14372.6	10623.0	3935.6
80°	3560.5	3590.2	4718.6	7159.6	12596.8	13052.1	14358.7	13877.7	10338.0	4977.0	994.8
82.5°	1245.2	1359.1	2074.7	4149.4	8299.9	8584.0	9525.3	8246.4	3651.5	1101.7	550.4
85°	618.7	640.4	913.6	1975.7	4673.1	4810.7	5564.9	3212.1	588.0	481.1	374.2
87.5°	297.9	304.9	350.4	706.8	2031.2	2125.2	2249.9	1045.3	217.8	183.1	162.3
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°	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3	5236.3
2.5°	5245.2	5254.1	5270.9	5275.9	5264.0	5285.8	5306.6	5325.4	5324.4	5331.3	5356.1
5°	5257.1	5275.9	5293.7	5325.4	5356.1	5373.9	5390.7	5406.5	5411.5	5426.3	5441.2
7.5°	5293.7	5312.5	5353.1	5408.5	5410.5	5455.0	5483.8	5488.7	5492.7	5492.7	5527.3
10°	5350.1	5384.8	5450.1	5488.7	5523.3	5508.5	5538.2	5519.4	5505.5	5511.5	5535.2
12.5°	5447.1	5477.8	5571.9	5614.4	5582.7	5576.8	5547.1	5504.5	5456.0	5451.1	5472.9
15°	5599.6	5657.0	5741.1	5781.7	5702.5	5632.2	5532.3	5445.1	5351.1	5316.5	5330.3
17.5°	5845.0	5914.3	6006.4	5978.7	5834.2	5695.6	5530.3	5346.2	5164.0	5037.3	5070.0
20°	6204.4	6255.8	6331.1	6219.2	6008.4	5779.7	5508.5	5217.5	4909.6	4679.0	4652.3
22.5°	6581.5	6659.7	6614.2	6407.3	6131.1	5812.4	5463.0	5030.4	4554.3	4265.3	4221.7
25°	7035.8	7061.6	6904.2	6592.4	6165.8	5760.9	5315.5	4757.2	4191.0	3918.8	3905.9
27.5°	7517.9	7459.5	7166.5	6677.5	6127.2	5608.5	5019.5	4325.6	3862.4	3621.9	3584.2
30°	8062.3	7926.7	7383.3	6686.4	5981.6	5311.5	4645.4	3988.1	3595.1	3353.6	3315.0
32.5°	8763.1	8443.4	7584.2	6594.4	5674.8	4876.0	4196.0	3700.0	3354.6	3112.1	3077.4
35°	9658.9	9119.5	7797.0	6428.1	5296.7	4440.5	3823.8	3455.6	3159.6	2867.6	2821.1
37.5°	10691.3	10062.8	8051.4	6218.2	4881.9	4057.4	3572.4	3300.2	3015.1	2684.5	2629.0
40°	11891.0	11007.1	8443.4	5967.8	4509.7	3781.2	3450.6	3246.7	2934.9	2590.4	2527.1
42.5°	12930.4	12005.9	8909.6	5698.6	4158.3	3551.6	3396.2	3211.1	2884.4	2520.2	2447.9
45°	13891.5	12830.4	9364.9	5371.9	3788.1	3394.2	3330.8	3122.0	2795.3	2433.0	2357.8
47.5°	14672.5	13496.6	9760.9	5072.0	3492.2	3249.7	3188.3	2952.7	2645.9	2328.1	2272.7
50°	15272.4	13997.4	9977.7	4833.4	3179.4	3085.4	3004.2	2761.7	2466.7	2192.5	2145.0
52.5°	15886.1	14499.3	10084.6	4845.3	2888.4	2840.9	2757.7	2549.8	2324.2	2113.3	2061.9
55°	16243.4	14705.2	9971.7	4557.3	2621.1	2565.7	2493.4	2385.5	2250.9	2063.8	2015.3
57.5°	16452.3	14832.9	9628.2	3716.9	2299.4	2247.0	2258.8	2249.9	2139.1	1942.1	1897.5
60°	16602.7	14555.7	8924.5	2732.0	2025.2	1985.6	2083.6	2052.0	1955.9	1802.5	1764.9
62.5°	16481.0	14028.1	7657.5	2053.9	1801.5	1885.7	1971.8	1913.4	1782.7	1643.1	1599.6
65°	15738.6	12992.7	5820.3	1650.1	1729.3	1845.1	1914.4	1820.3	1687.7	1522.4	1502.6
67.5°	14387.4	11116.0	3432.8	1512.5	1674.8	1797.6	1855.0	1730.3	1613.5	1455.1	1431.3
70°	12325.6	8321.6	1533.3	1408.6	1579.8	1701.5	1739.2	1621.4	1494.7	1346.2	1322.4
72.5°	9173.9	5017.5	1033.4	1300.7	1439.2	1547.1	1588.7	1464.0	1373.9	1306.6	1299.7
75°	5094.7	1742.1	953.2	1177.9	1285.8	1382.8	1434.3	1346.2	1274.9	1182.9	1145.3
77.5°	1622.4	740.4	905.7	1053.2	1189.8	1270.0	1262.1	1129.4	1106.6	994.8	984.9
80°	647.4	645.4	837.4	862.2	1015.6	1082.9	1065.1	897.8	927.5	862.2	836.4
82.5°	507.8	590.9	671.1	658.2	789.9	869.1	844.3	659.2	745.4	685.0	626.6
85°	386.0	517.7	430.6	428.6	551.3	645.4	661.2	506.8	507.8	462.3	411.8
87.5°	199.0	191.0	165.3	164.3	184.1	262.3	321.7	288.0	227.7	171.2	164.3
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)