

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: P510531

Luminaire Tested: **CTN-CA10-630-727-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510531
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-CA10-630-727-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 77094 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U0 - G5

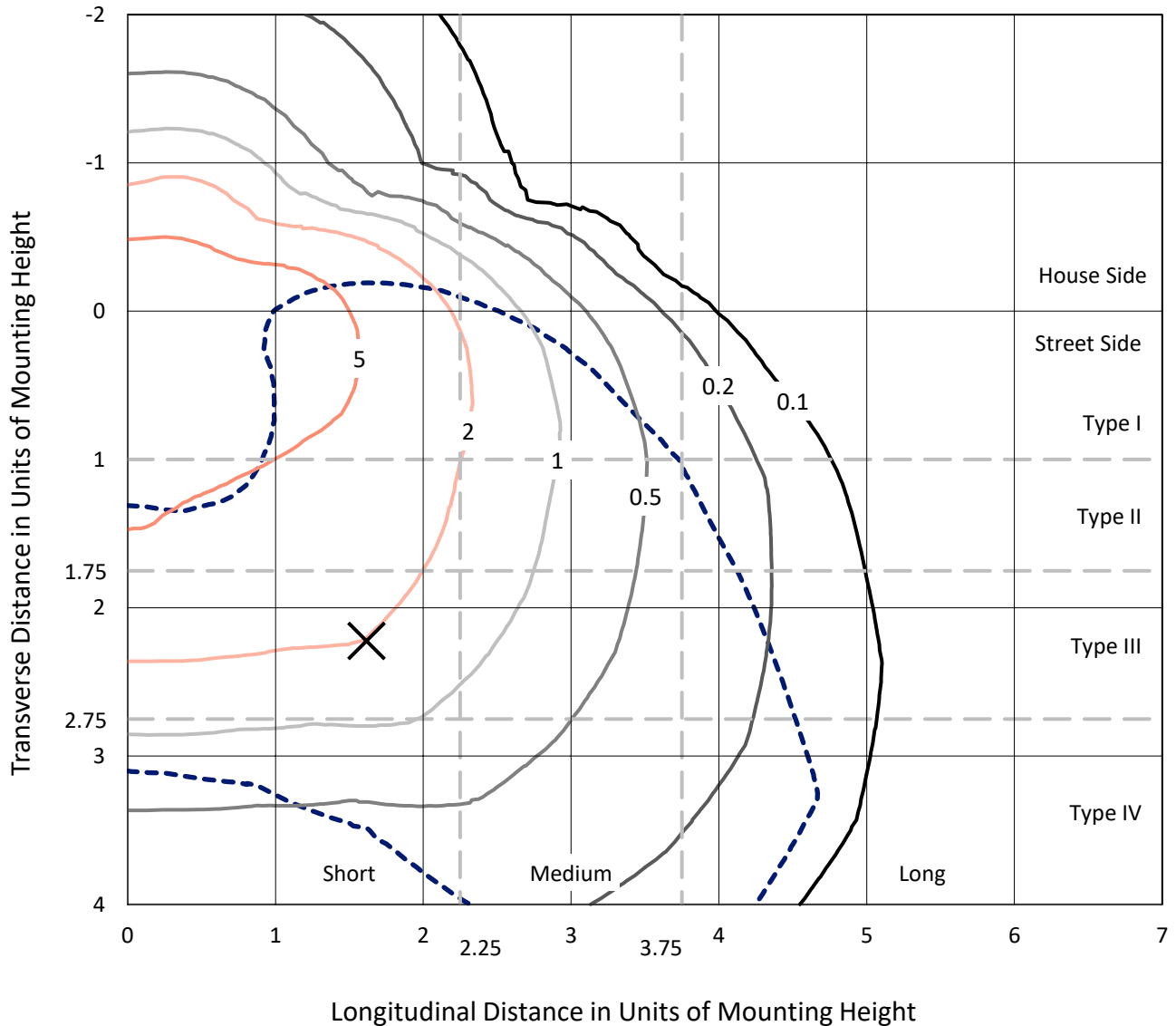
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

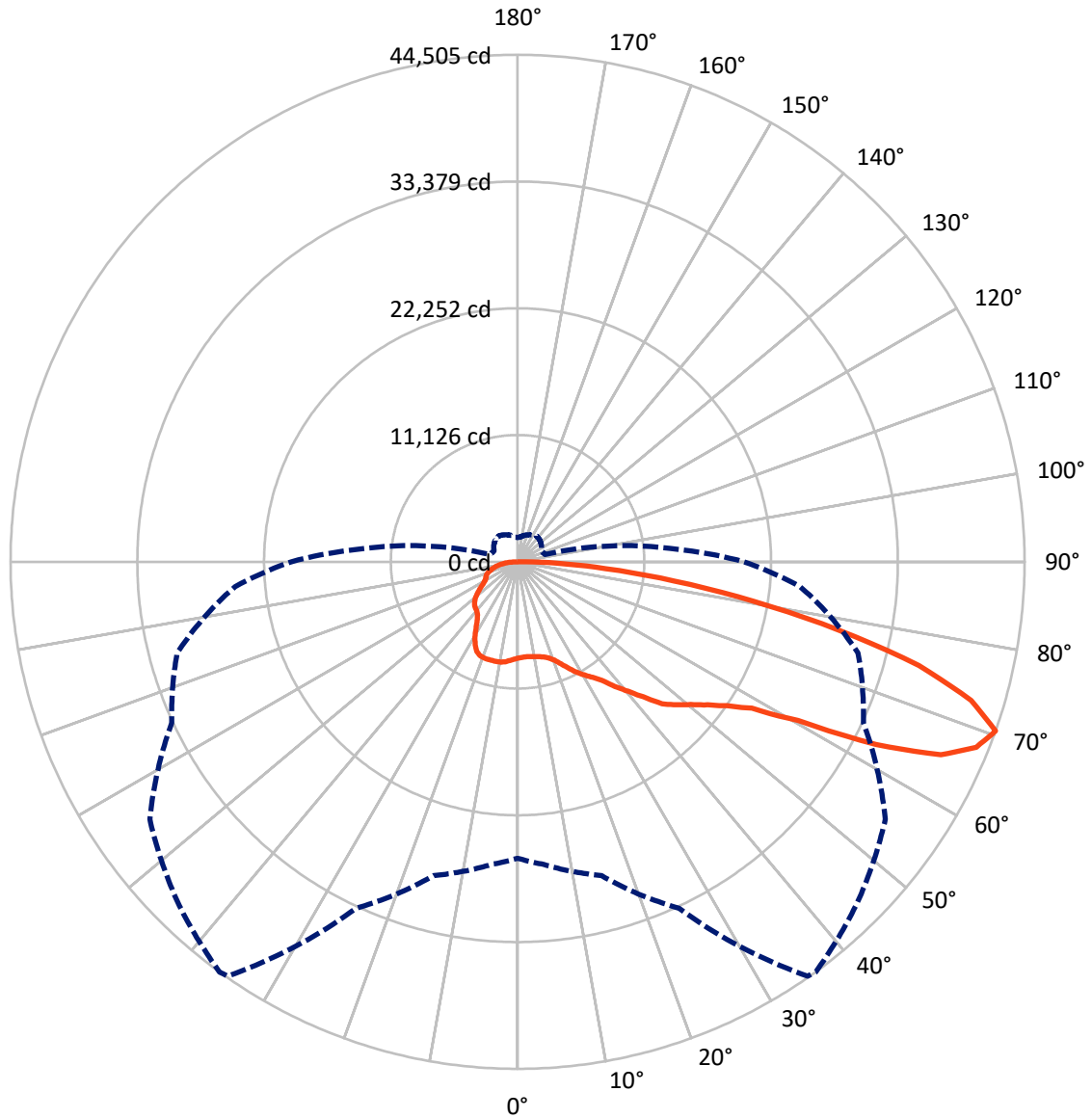
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.8 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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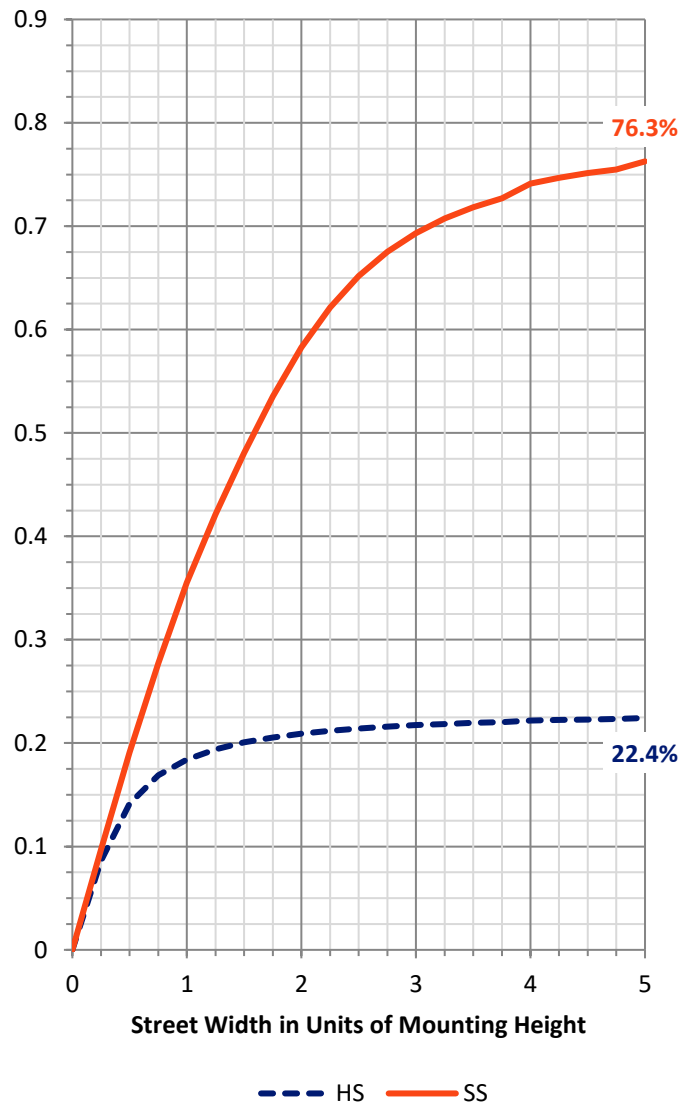
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17565.4	0.0	17565.4
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	59528.6	0.0	59528.6
	% Fixture	77.2	0.0	77.2
Total	Lumens	77094.0	0.0	77094.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	818.1	1.1
10°-20°	2529.1	3.3
20°-30°	4562.0	5.9
30°-40°	7065.6	9.2
40°-50°	10732.6	13.9
50°-60°	14876.1	19.3
60°-70°	19344.1	25.1
70°-80°	14285.4	18.5
80°-90°	2881.0	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°	77094.0	100.0
0°-180°	77094.0	100.0

Coefficient of Utilization



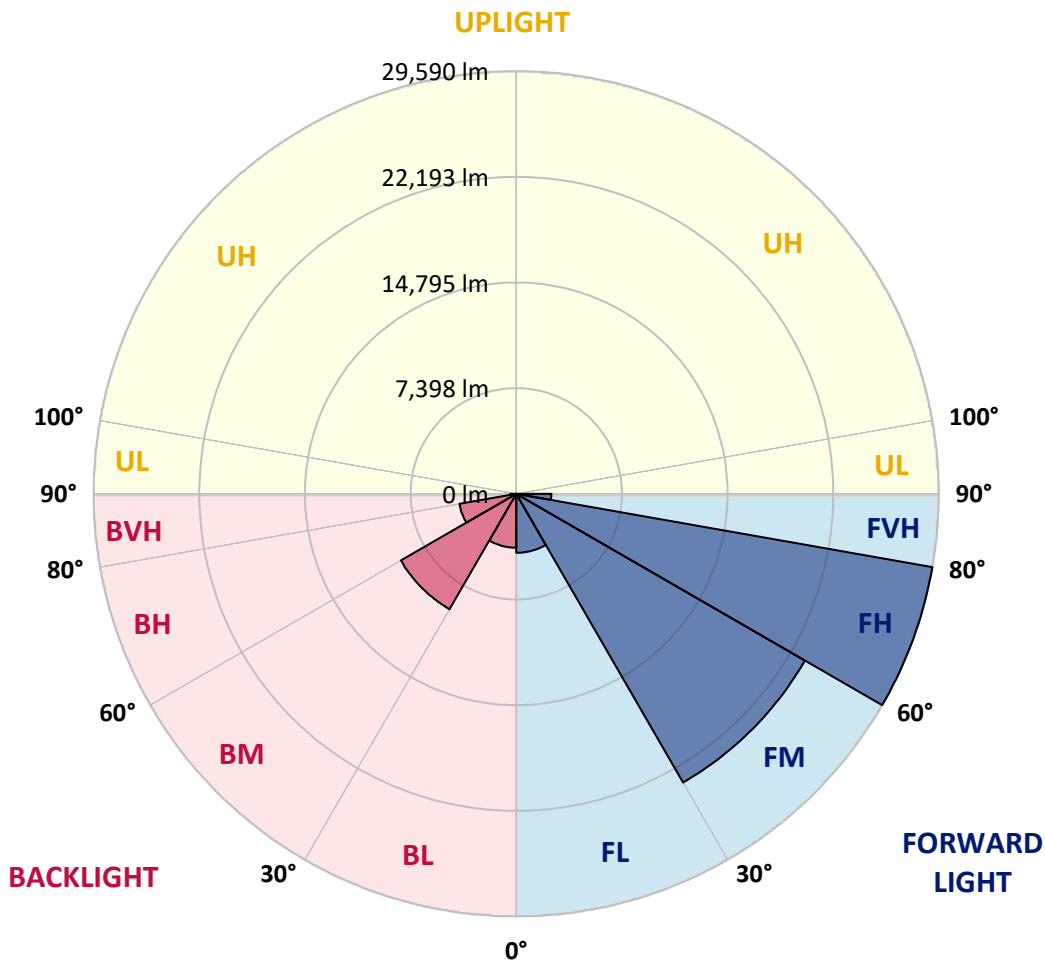
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4133.0	5.4			
FM (30°-60°)	23343.9	30.3			
FH (60°-80°)	29590.4	38.4			G5
FVH (80°-90°)	2461.3	3.2			G5
BL (0°-30°)	3776.1	4.9	B4/5000		
BM (30°-60°)	9330.5	12.1	B5		
BH (60°-80°)	4039.1	5.2	B4/5000		G4/5000
BVH (80°-90°)	419.7	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1
2.5°	8393.0	8381.8	8375.5	8388.2	8393.0	8394.6	8397.8	8394.6	8386.6	8415.4	8450.5
5°	8394.6	8388.2	8375.5	8364.3	8364.3	8364.3	8365.9	8402.6	8418.6	8415.4	8458.5
7.5°	8407.4	8402.6	8378.6	8370.7	8389.8	8396.2	8428.1	8417.0	8434.5	8463.2	8500.0
10°	8409.0	8402.6	8381.8	8399.4	8453.7	8463.2	8477.6	8509.5	8515.9	8551.0	8587.8
12.5°	8424.9	8424.9	8432.9	8471.2	8528.7	8539.9	8594.1	8619.7	8658.0	8675.5	8720.2
15°	8509.5	8507.9	8527.1	8570.2	8662.8	8669.2	8736.2	8812.8	8841.6	8884.7	8956.5
17.5°	8710.7	8720.2	8721.8	8753.8	8863.9	8867.1	8977.2	9049.1	9114.5	9191.1	9355.5
20°	9187.9	9170.4	9151.2	9151.2	9194.3	9216.7	9301.3	9416.2	9550.3	9686.0	9879.1
22.5°	9788.1	9823.2	9753.0	9716.3	9737.0	9711.5	9775.4	9867.9	10024.4	10227.1	10471.3
25°	10504.8	10508.0	10503.2	10354.8	10308.5	10324.5	10377.1	10463.3	10670.8	10832.1	11186.4
27.5°	11204.0	11189.6	11138.5	10982.1	10937.4	10959.8	10958.2	11196.0	11408.3	11614.2	12030.8
30°	11839.3	11877.6	11786.6	11523.2	11528.0	11524.8	11598.3	11904.7	12292.6	12675.7	13103.5
32.5°	12959.8	12843.3	12720.4	12200.0	12104.3	12093.1	12136.2	12592.7	13167.4	13813.8	14327.8
35°	14015.0	13986.2	13864.9	13336.6	12782.7	12773.1	12714.0	13269.5	14077.2	15274.4	15916.1
37.5°	15094.0	15052.5	14932.8	14482.7	13932.0	13879.3	13382.8	13991.0	15082.8	16982.4	17897.0
40°	16380.6	16355.0	16169.9	15593.6	15028.6	14948.8	14433.2	14749.2	16351.8	19257.0	19901.9
42.5°	17509.1	17504.3	17292.0	16757.3	16276.8	16197.0	15758.0	16086.9	18115.7	21485.3	21865.2
45°	18337.6	18463.7	18473.2	18168.4	17836.3	17766.1	17649.6	18102.9	20155.7	23507.8	23451.9
47.5°	19036.7	19145.3	19031.9	18875.5	18762.2	18767.0	18947.3	19847.6	22170.1	25270.0	24835.8
50°	20205.2	20138.1	19549.1	19456.5	19600.2	19684.8	20208.4	21731.2	24476.7	26923.7	26077.7
52.5°	21890.8	21633.8	20478.1	20289.8	20834.1	20866.0	21699.2	23415.2	26781.7	28342.8	27214.2
55°	24197.4	23985.1	22679.3	21809.4	22083.9	22299.4	23472.7	25140.7	28663.6	29677.2	28089.0
57.5°	27606.9	27622.9	26558.2	24936.4	24002.6	24232.5	25148.7	26818.4	30218.4	30794.6	28634.9
60°	30339.7	30845.7	30528.0	29787.4	28446.5	28290.1	27592.5	28566.2	31546.4	31744.4	29156.9
62.5°	32234.4	32464.3	33556.1	33712.5	35244.9	35310.3	31969.4	30614.2	33005.4	32366.9	29267.0
65°	32138.6	32280.7	34006.2	36106.9	40633.8	40836.5	38881.1	33712.5	34004.6	32644.6	28946.2
67.5°	29900.7	30114.6	32307.8	36234.6	43505.4	43428.8	42188.5	38025.5	34333.5	32199.3	27417.0
70°	26013.9	26673.1	28515.2	33541.7	44402.5	44504.7	42218.9	39403.1	33485.9	30939.9	24867.8
72.5°	21440.6	21648.2	23388.1	29013.2	41779.9	41629.8	40488.5	37585.0	31953.5	28662.0	20406.3
75°	16305.6	16305.6	18412.6	23121.5	35878.6	36405.4	36849.1	34041.3	28307.7	23360.9	13895.2
77.5°	10824.1	11212.0	12908.8	17375.0	28400.2	28789.7	30322.1	29016.4	23177.4	17130.8	6346.6
80°	5741.7	5789.6	7609.3	11545.6	20313.7	21048.0	23155.0	22379.2	16671.1	8025.9	1604.2
82.5°	2008.1	2191.6	3345.7	6691.4	13384.4	13842.6	15360.6	13298.2	5888.5	1776.6	887.5
85°	997.6	1032.8	1473.3	3186.1	7535.8	7757.7	8974.0	5179.8	948.2	775.8	603.4
87.5°	480.5	491.6	565.1	1139.7	3275.5	3427.1	3628.2	1685.6	351.2	295.3	261.8
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°	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1	8444.1
2.5°	8458.5	8472.8	8500.0	8507.9	8488.8	8523.9	8557.4	8587.8	8586.2	8597.3	8637.2
5°	8477.6	8507.9	8536.7	8587.8	8637.2	8666.0	8693.1	8718.6	8726.6	8750.6	8774.5
7.5°	8536.7	8567.0	8632.4	8721.8	8725.0	8796.9	8843.2	8851.1	8857.5	8857.5	8913.4
10°	8627.7	8683.5	8788.9	8851.1	8907.0	8883.1	8930.9	8900.6	8878.3	8887.8	8926.2
12.5°	8784.1	8833.6	8985.2	9053.9	9002.8	8993.2	8945.3	8876.7	8798.5	8790.5	8825.6
15°	9029.9	9122.5	9258.2	9323.6	9195.9	9082.6	8921.4	8780.9	8629.3	8573.4	8595.7
17.5°	9425.8	9537.5	9686.0	9641.3	9408.2	9184.7	8918.2	8621.3	8327.6	8123.2	8175.9
20°	10005.2	10088.2	10209.5	10029.2	9689.2	9320.4	8883.1	8413.8	7917.3	7545.4	7502.3
22.5°	10613.4	10739.5	10666.1	10332.4	9887.1	9373.1	8809.6	8112.1	7344.3	6878.2	6807.9
25°	11346.0	11387.6	11133.8	10630.9	9943.0	9290.1	8571.8	7671.5	6758.5	6319.5	6298.7
27.5°	12123.4	12029.2	11556.8	10768.2	9880.7	9044.3	8094.5	6975.6	6228.5	5840.6	5780.0
30°	13001.3	12782.7	11906.3	10782.6	9646.1	8565.4	7491.1	6431.2	5797.5	5408.0	5345.8
32.5°	14131.5	13615.9	12230.4	10634.1	9151.2	7863.1	6766.4	5966.7	5409.6	5018.6	4962.7
35°	15576.1	14706.1	12573.6	10366.0	8541.5	7160.7	6166.3	5572.5	5095.2	4624.3	4549.3
37.5°	17241.0	16227.3	12983.8	10027.6	7872.6	6543.0	5760.8	5321.9	4862.1	4329.0	4239.6
40°	19175.6	17750.2	13615.9	9623.7	7272.5	6097.6	5564.5	5235.7	4732.8	4177.4	4075.2
42.5°	20851.6	19360.8	14367.7	9189.5	6705.8	5727.3	5476.7	5178.2	4651.4	4064.0	3947.5
45°	22401.6	20690.4	15102.0	8662.8	6108.8	5473.5	5371.3	5034.5	4507.8	3923.5	3802.2
47.5°	23661.0	21764.7	15740.5	8179.1	5631.5	5240.4	5141.5	4761.6	4266.7	3754.3	3665.0
50°	24628.3	22572.4	16090.1	7794.4	5127.1	4975.5	4844.6	4453.5	3977.8	3535.7	3459.0
52.5°	25618.0	23381.7	16262.5	7813.6	4657.8	4581.2	4447.1	4111.9	3748.0	3408.0	3325.0
55°	26194.2	23713.7	16080.5	7349.1	4226.8	4137.4	4020.9	3846.9	3629.8	3328.2	3249.9
57.5°	26531.0	23919.6	15526.6	5993.9	3708.1	3623.5	3642.6	3628.2	3449.5	3131.8	3060.0
60°	26773.7	23472.7	14391.7	4405.6	3265.9	3202.1	3360.1	3309.0	3154.2	2906.7	2846.1
62.5°	26577.3	22621.9	12348.5	3312.2	2905.2	3040.8	3179.7	3085.5	2874.8	2649.8	2579.5
65°	25380.2	20952.2	9385.9	2660.9	2788.6	2975.4	3087.1	2935.5	2721.6	2455.0	2423.1
67.5°	23201.3	17925.7	5535.7	2439.0	2700.8	2898.8	2991.3	2790.2	2601.9	2346.5	2308.2
70°	19876.3	13419.6	2472.6	2271.4	2547.6	2743.9	2804.6	2614.6	2410.3	2170.9	2132.6
72.5°	14793.9	8091.3	1666.5	2097.5	2320.9	2494.9	2562.0	2360.8	2215.6	2107.0	2095.9
75°	8215.8	2809.4	1537.2	1899.5	2073.5	2229.9	2312.9	2170.9	2056.0	1907.5	1846.8
77.5°	2616.2	1194.0	1460.6	1698.4	1918.7	2048.0	2035.2	1821.3	1784.6	1604.2	1588.3
80°	1043.9	1040.7	1350.4	1390.3	1637.7	1746.3	1717.6	1447.8	1495.7	1390.3	1348.8
82.5°	818.9	953.0	1082.2	1061.5	1273.8	1401.5	1361.6	1063.1	1202.0	1104.6	1010.4
85°	622.5	834.8	694.4	691.2	889.1	1040.7	1066.3	817.3	818.9	745.4	664.0
87.5°	320.8	308.1	266.6	265.0	296.9	423.0	518.8	464.5	367.1	276.1	265.0
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)