

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: P510726

Luminaire Tested: **CTN-CA8-230-740-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510726
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-230-740-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32625 lumens
Efficiency: N/A
Efficacy: 142.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 228.4
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

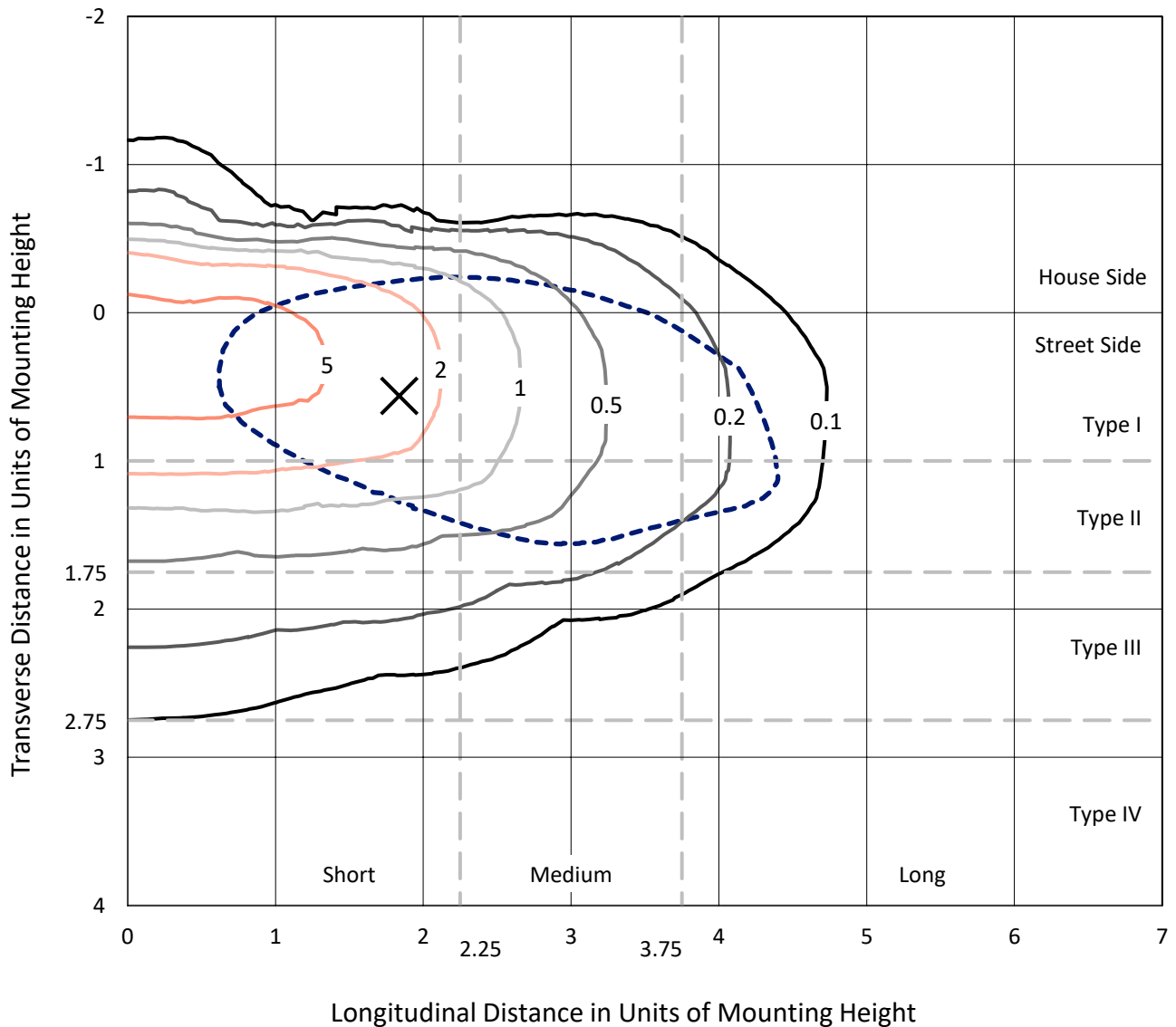




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Iso-Footcandle Lines of Horizontal Illumination

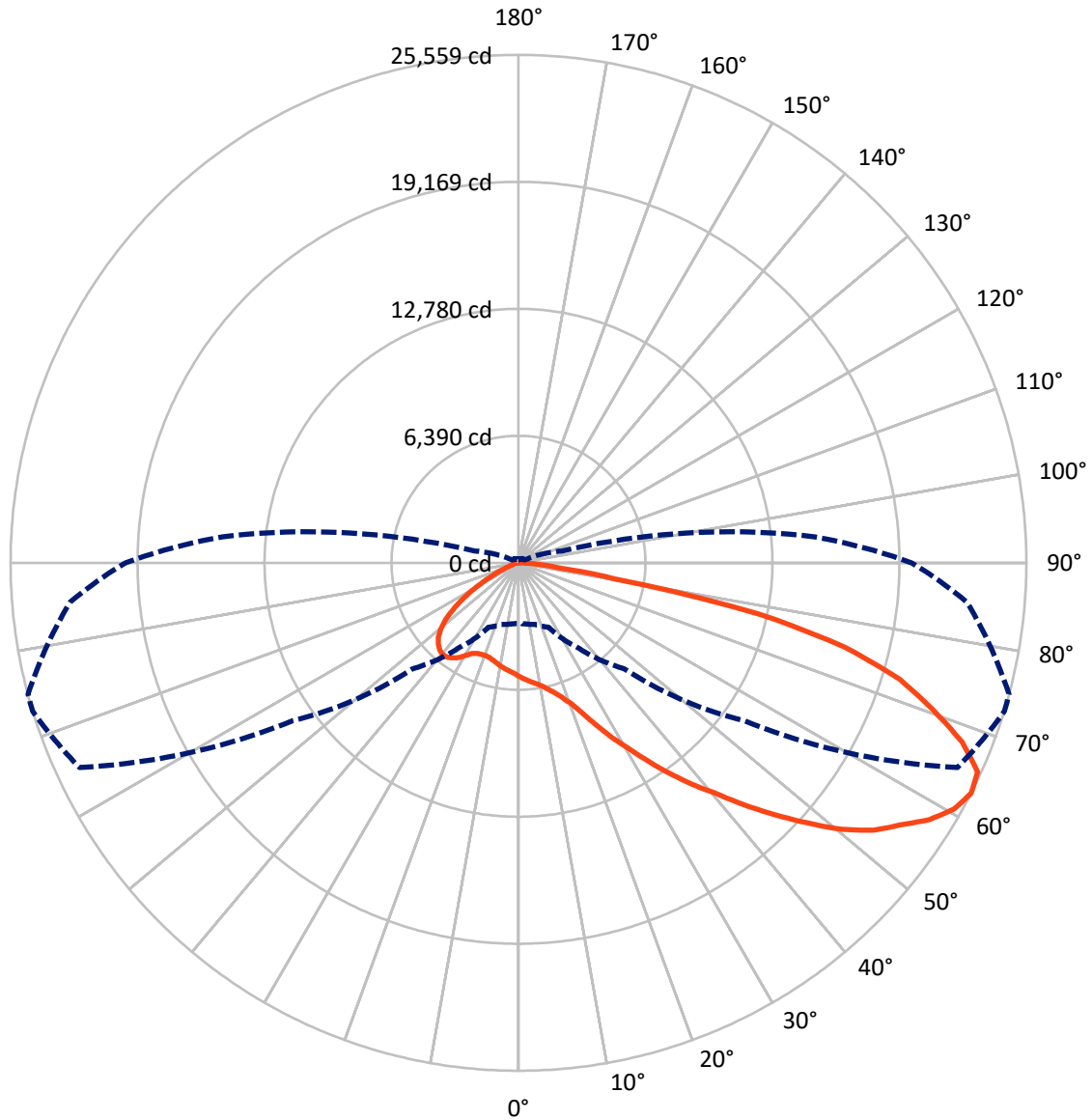
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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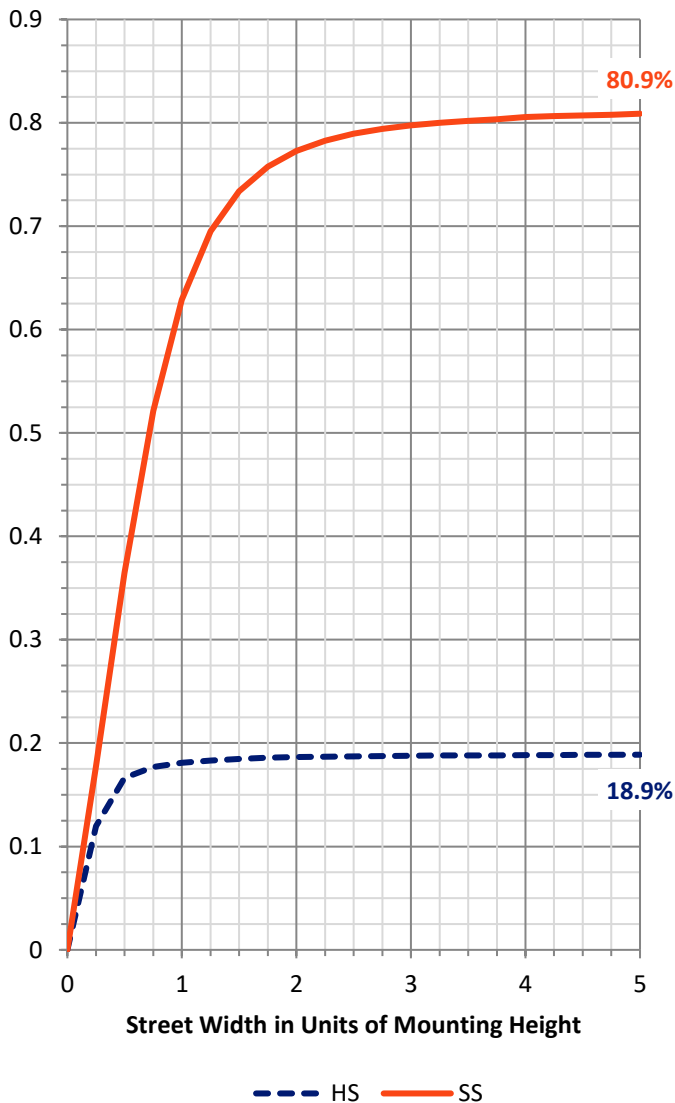
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6241.0	0.0	6241.0
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	26384.0	0.0	26384.0
	% Fixture	80.9	0.0	80.9
Total	Lumens	32625.0	0.0	32625.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	546.5	1.7
10°-20°	1643.7	5.0
20°-30°	2840.0	8.7
30°-40°	4270.7	13.1
40°-50°	5694.6	17.5
50°-60°	6706.5	20.6
60°-70°	6667.4	20.4
70°-80°	3827.9	11.7
80°-90°	427.6	1.3
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°	32625.0	100.0
0°-180°	32625.0	100.0

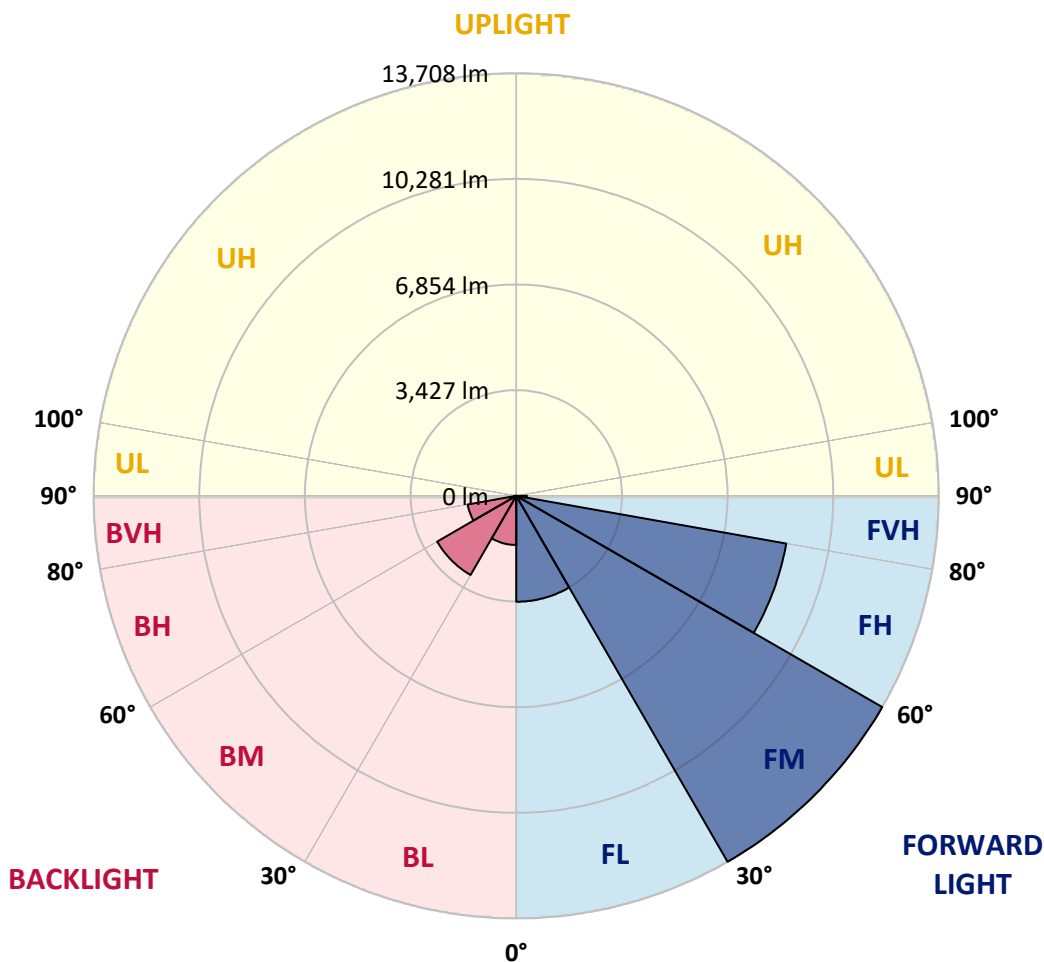


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3435.4	10.5			
FM (30°-60°)	13708.2	42.0			
FH (60°-80°)	8893.1	27.3			G4/12000
FVH (80°-90°)	347.3	1.1			G3/500
BL (0°-30°)	1594.9	4.9	B3/2500		
BM (30°-60°)	2963.5	9.1	B3/5000		
BH (60°-80°)	1602.3	4.9	B3/2500		G3/2500
BVH (80°-90°)	80.3	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7
2.5°	6121.5	6136.9	6118.6	6110.5	6101.8	6044.6	5978.0	5909.9	5855.0	5846.2	5774.4
5°	6551.4	6559.5	6529.4	6495.0	6435.7	6341.2	6221.9	6104.0	5994.1	5964.8	5833.7
7.5°	6881.7	6866.3	6859.0	6829.7	6777.7	6673.7	6492.8	6299.5	6129.6	6088.6	5889.4
10°	7191.5	7184.9	7129.2	7092.6	7009.8	6913.9	6765.3	6519.9	6280.4	6214.5	5937.7
12.5°	7526.9	7512.2	7489.5	7410.4	7343.1	7181.2	7001.8	6778.4	6511.9	6424.0	6020.5
15°	7828.6	7789.0	7776.6	7693.8	7625.7	7502.0	7321.8	7062.6	6777.7	6702.3	6177.9
17.5°	8115.7	8097.4	8069.5	8013.1	7937.0	7841.8	7697.5	7420.0	7125.6	7015.7	6445.2
20°	8359.5	8336.8	8312.7	8328.0	8311.2	8250.4	8159.6	7923.1	7563.5	7457.3	6770.4
22.5°	8529.4	8528.7	8625.4	8681.8	8714.0	8711.8	8689.8	8555.8	8194.0	8086.4	7256.6
25°	8670.8	8681.8	8804.1	9018.6	9210.5	9228.1	9383.3	9319.6	9012.0	8900.0	7988.2
27.5°	8712.5	8734.5	8956.4	9294.0	9585.4	9865.2	10093.0	10209.4	9924.5	9790.5	8774.8
30°	8742.5	8751.3	8968.8	9373.1	9987.5	10430.6	10837.7	11034.7	10789.4	10691.3	9651.4
32.5°	8530.9	8533.8	8867.0	9479.3	10282.6	11050.8	11532.7	11904.0	11839.6	11709.9	10610.0
35°	8239.4	8293.6	8675.9	9376.7	10525.8	11620.6	12276.8	12830.4	12959.3	12866.3	11567.9
37.5°	7879.1	7921.6	8331.0	9224.4	10579.2	12012.4	12855.3	13772.2	14109.0	14093.7	12724.2
40°	7436.1	7488.1	7978.0	8896.3	10552.9	12297.3	13534.2	14815.0	15242.7	15194.4	13871.0
42.5°	6912.4	6988.6	7463.9	8474.5	10360.3	12471.6	14090.0	15876.9	16646.6	16615.1	14886.0
45°	6394.7	6435.7	6869.2	7887.2	10005.8	12527.9	14612.9	17340.1	18086.3	18051.2	16109.0
47.5°	5860.8	5896.7	6349.3	7268.4	9390.6	12414.4	15026.6	18596.7	19553.2	19518.0	17324.0
50°	4618.8	4754.3	5682.1	6724.2	8689.8	12092.9	15417.0	20162.5	21088.1	20938.7	18388.0
52.5°	3951.6	4000.7	4481.9	6175.7	7990.4	11544.4	15677.7	21613.2	22350.7	22135.4	19476.3
55°	3693.9	3726.8	3962.6	5164.4	7333.5	10714.7	15984.5	23067.6	23297.6	23242.6	20363.9
57.5°	3498.3	3534.9	3703.4	4313.4	6641.5	9551.8	15888.6	24090.7	24378.5	24202.7	21306.4
60°	3221.5	3266.2	3489.5	3872.6	5855.0	8371.2	15044.2	24509.6	25164.3	24966.5	22023.3
62.5°	3047.2	3076.5	3204.7	3576.0	5203.2	7540.8	13842.5	24374.8	25559.0	25551.7	22645.1
65°	2810.7	2853.9	2990.8	3291.8	4623.2	6897.1	12708.8	23709.1	25389.1	25395.7	22773.2
67.5°	2563.1	2580.7	2724.3	2965.9	3939.9	6307.5	11242.0	22570.4	24065.8	24216.6	21886.4
70°	2254.1	2245.3	2400.6	2577.1	3220.0	5355.5	9048.7	20544.7	22110.5	22172.7	20092.9
72.5°	1773.7	1781.8	1825.0	1947.3	2444.5	4214.6	6566.1	17357.6	20066.5	20177.1	17800.7
75°	1192.2	1205.4	1406.8	1526.2	1758.3	3028.9	4128.9	11716.5	16963.7	17275.6	14568.9
77.5°	909.6	917.6	976.2	1106.5	1272.1	2158.9	2238.0	6384.4	12350.0	13090.4	11397.2
80°	644.4	647.4	589.5	524.3	677.4	1464.7	1321.9	2719.1	4921.2	5815.4	6694.2
82.5°	288.5	284.1	334.7	278.3	390.3	566.8	623.9	1319.7	2043.9	2197.0	2391.8
85°	134.0	150.1	172.1	144.3	232.1	219.0	243.1	562.4	957.9	1057.5	1051.6
87.5°	33.0	35.9	45.4	57.9	84.2	74.7	73.2	165.5	213.8	213.1	327.4
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°	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7	5721.7
2.5°	5725.3	5687.3	5597.2	5510.0	5427.3	5372.4	5310.8	5246.4	5207.6	5189.3	5228.8
5°	5753.9	5681.4	5509.3	5336.5	5190.0	5064.8	4976.9	4902.2	4861.9	4865.6	4867.8
7.5°	5778.1	5676.3	5435.3	5191.5	4963.0	4807.7	4692.8	4612.2	4566.1	4530.9	4557.3
10°	5799.3	5655.0	5348.9	5023.8	4775.5	4545.6	4389.6	4292.2	4207.2	4159.6	4197.0
12.5°	5822.0	5647.0	5252.3	4873.6	4552.2	4295.1	4081.3	3984.6	3901.1	3865.2	3887.9
15°	5920.9	5677.7	5162.2	4697.2	4331.7	3999.2	3768.6	3649.9	3584.0	3540.8	3550.3
17.5°	6090.8	5759.0	5104.3	4512.6	4085.7	3734.1	3435.4	3296.9	3187.8	3157.1	3149.0
20°	6332.4	5913.6	5104.3	4356.6	3806.6	3439.7	3095.6	2861.9	2692.0	2628.3	2677.4
22.5°	6738.2	6176.5	5154.9	4215.3	3566.4	3134.4	2724.3	2367.6	2138.4	2045.4	2099.6
25°	7305.7	6582.9	5236.9	4091.5	3347.5	2782.8	2253.4	1843.3	1590.6	1480.0	1478.6
27.5°	8046.8	7204.6	5402.4	3990.5	3085.3	2328.1	1762.0	1367.3	1130.0	1063.3	1072.9
30°	8868.5	7878.4	5715.1	3844.0	2766.7	1819.1	1283.0	1004.8	837.8	749.9	751.4
32.5°	9660.9	8576.3	6086.4	3748.8	2353.0	1371.7	914.7	716.9	613.0	561.0	569.0
35°	10510.4	9178.3	6362.5	3589.1	1867.4	991.6	646.6	537.5	494.3	467.2	468.7
37.5°	11428.0	9840.3	6589.5	3375.3	1411.9	681.1	477.5	460.6	442.3	407.9	405.0
40°	12386.6	10607.0	6725.0	3029.6	981.3	471.6	405.7	424.8	414.5	369.8	366.2
42.5°	13199.5	11198.8	6758.7	2571.9	634.9	382.3	367.6	396.9	399.1	353.7	347.9
45°	13980.2	11726.0	6692.7	1969.2	440.1	359.6	344.2	384.5	387.4	346.4	336.9
47.5°	14853.8	12447.4	6573.4	1313.8	364.0	339.8	336.1	364.0	374.2	340.5	328.8
50°	15915.0	13034.0	6219.7	807.0	343.5	327.4	327.4	344.2	358.1	328.8	323.0
52.5°	17003.2	13545.1	5696.1	553.6	331.0	314.2	323.7	331.0	336.1	309.8	314.9
55°	17783.1	13998.5	4915.4	445.3	323.7	305.4	328.1	313.4	306.1	283.4	278.3
57.5°	18648.7	14537.5	4117.2	394.7	314.2	310.5	313.4	285.6	265.1	241.7	236.5
60°	19252.9	14827.5	3140.2	371.3	303.2	305.4	289.3	251.9	214.6	197.7	194.1
62.5°	19780.2	14993.0	2301.7	341.3	292.9	292.2	262.2	215.3	176.5	158.2	155.3
65°	19700.4	14734.4	1491.8	317.1	284.9	275.4	235.1	184.5	147.2	133.3	131.8
67.5°	18822.3	13590.6	939.6	292.2	271.0	254.1	210.9	164.8	135.5	119.4	117.9
70°	16979.0	12010.9	574.9	260.0	240.9	224.8	186.7	154.5	128.2	109.1	105.5
72.5°	14431.3	10287.0	406.4	229.2	210.2	191.1	158.2	147.2	122.3	98.1	95.2
75°	11856.4	7577.4	340.5	199.9	179.4	153.8	134.7	136.9	115.0	89.3	87.1
77.5°	8349.3	4724.3	317.1	163.3	141.3	122.3	116.4	125.2	105.5	82.0	79.8
80°	4872.9	2653.2	262.2	128.9	106.2	94.5	97.4	106.2	92.3	74.0	71.0
82.5°	1967.0	1050.2	184.5	100.3	77.6	75.4	79.8	86.4	76.2	62.2	60.8
85°	702.3	328.1	104.7	65.9	49.8	52.0	51.3	61.5	54.9	45.4	44.7
87.5°	184.5	65.2	46.9	26.4	21.2	21.2	19.8	28.6	26.4	20.5	22.7
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)