

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: P510816

Luminaire Tested: **CTN-CA8-480-722-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510816
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-CA8-480-722-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52715 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

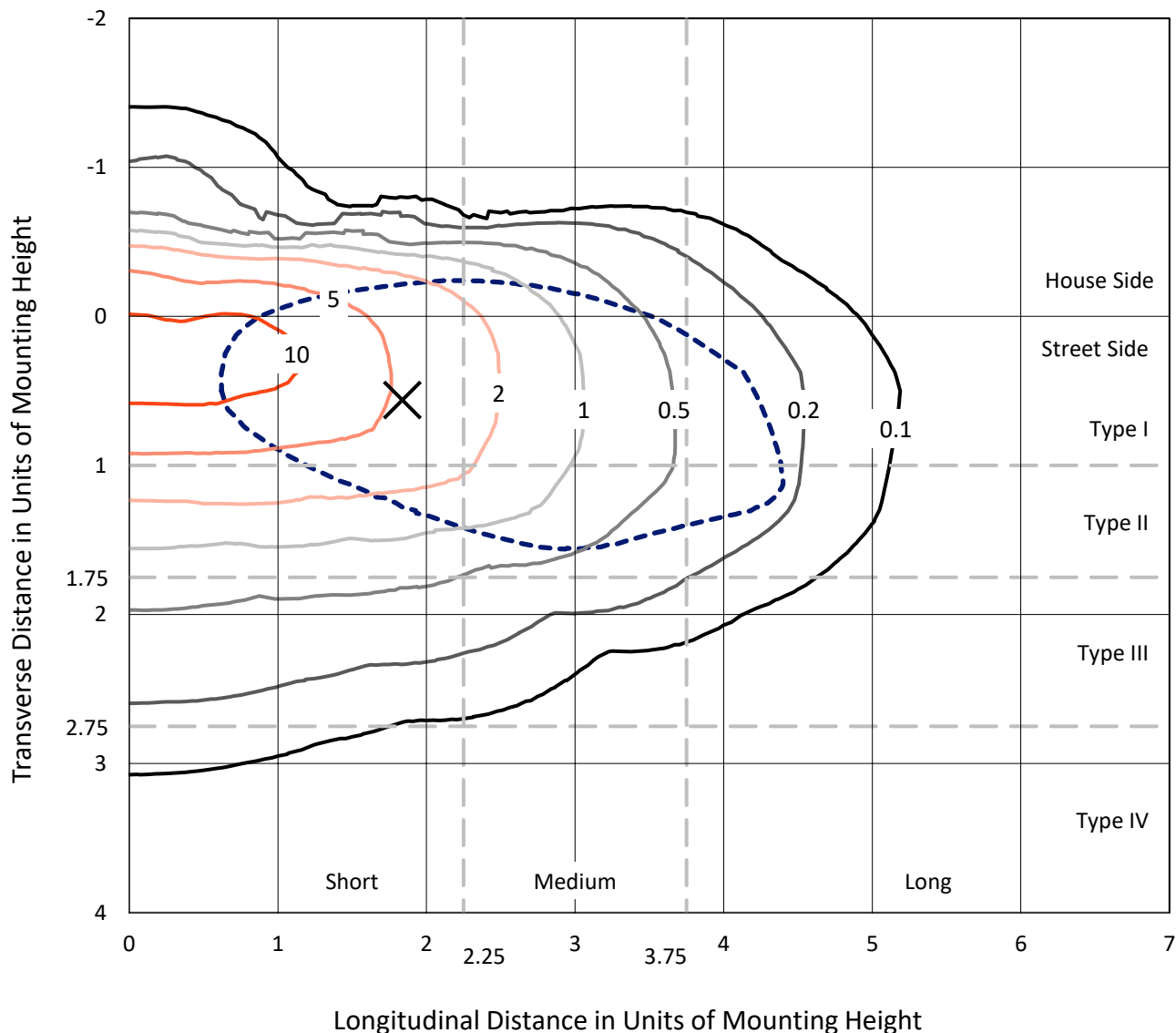
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

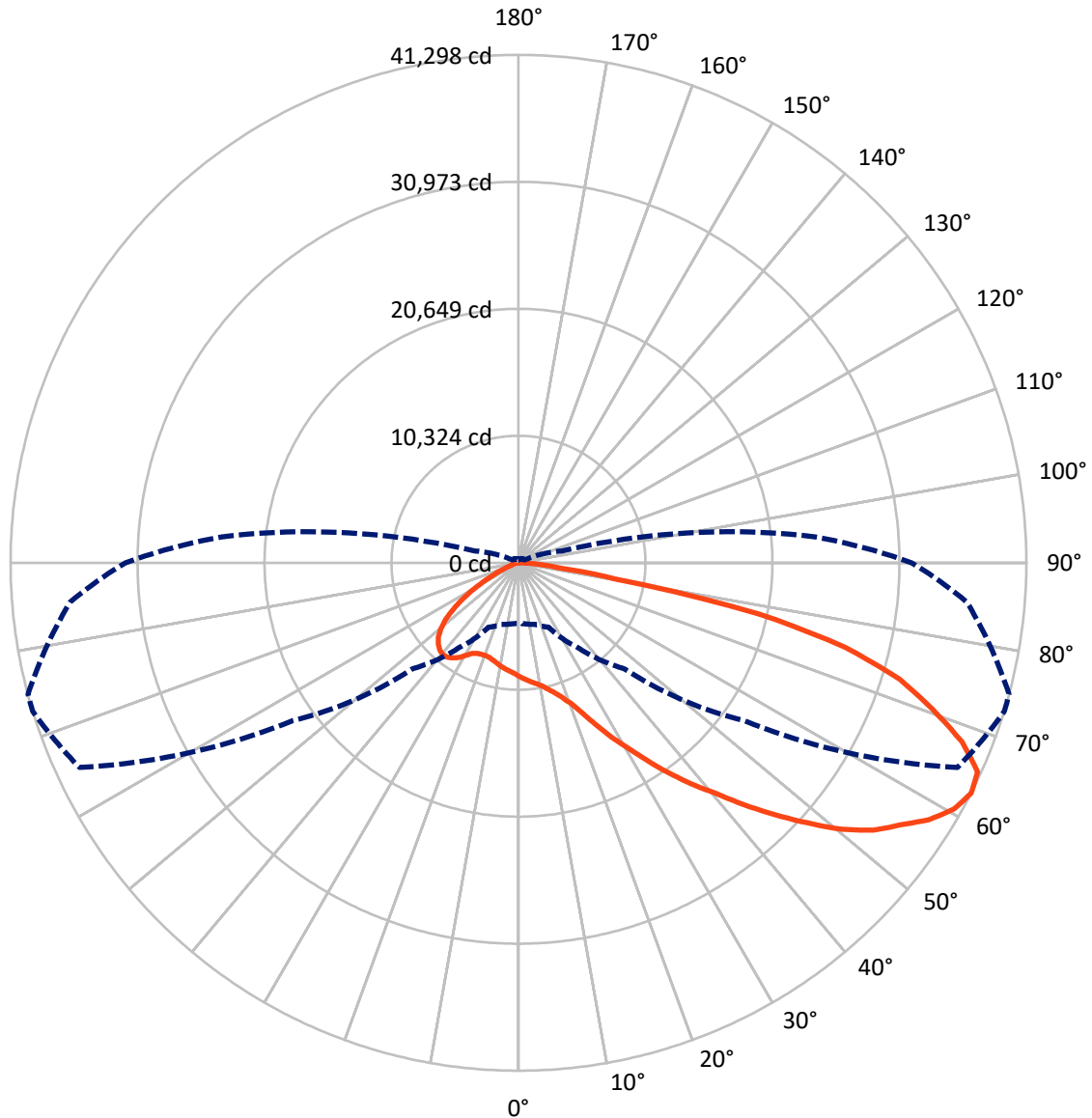
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.8 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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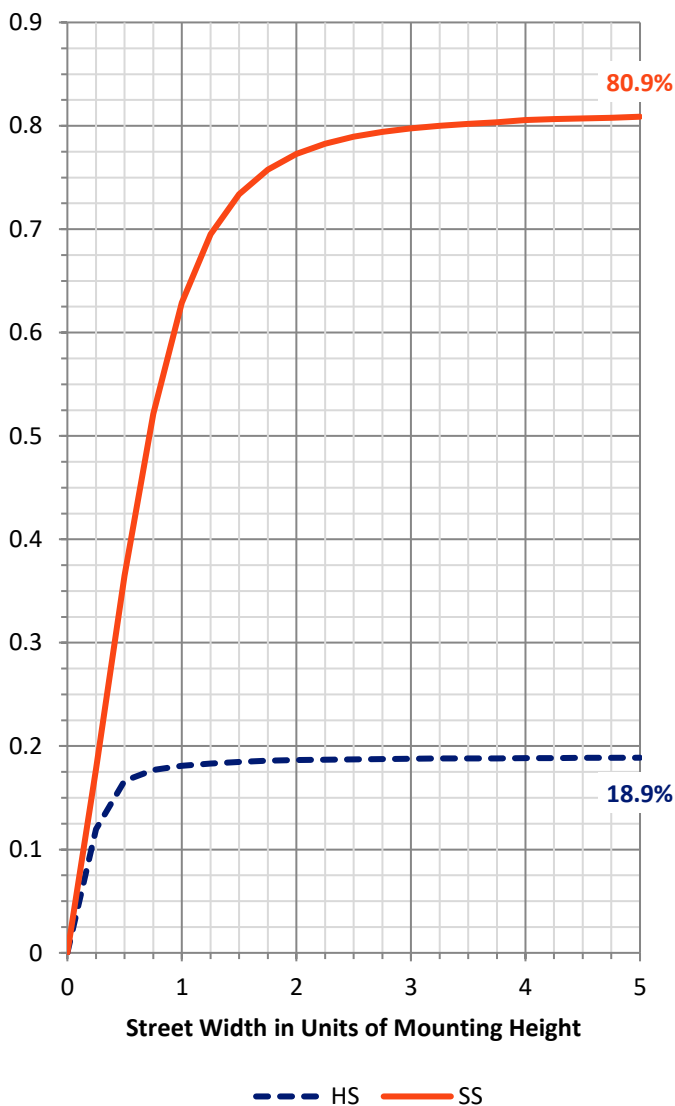
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10084.1	0.0	10084.1
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	42630.9	0.0	42630.9
	% Fixture	80.9	0.0	80.9
Total	Lumens	52715.0	0.0	52715.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	883.0	1.7
10°-20°	2655.9	5.0
20°-30°	4588.9	8.7
30°-40°	6900.5	13.1
40°-50°	9201.2	17.5
50°-60°	10836.2	20.6
60°-70°	10773.1	20.4
70°-80°	6185.1	11.7
80°-90°	690.9	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°	52715.0	100.0
0°-180°	52715.0	100.0

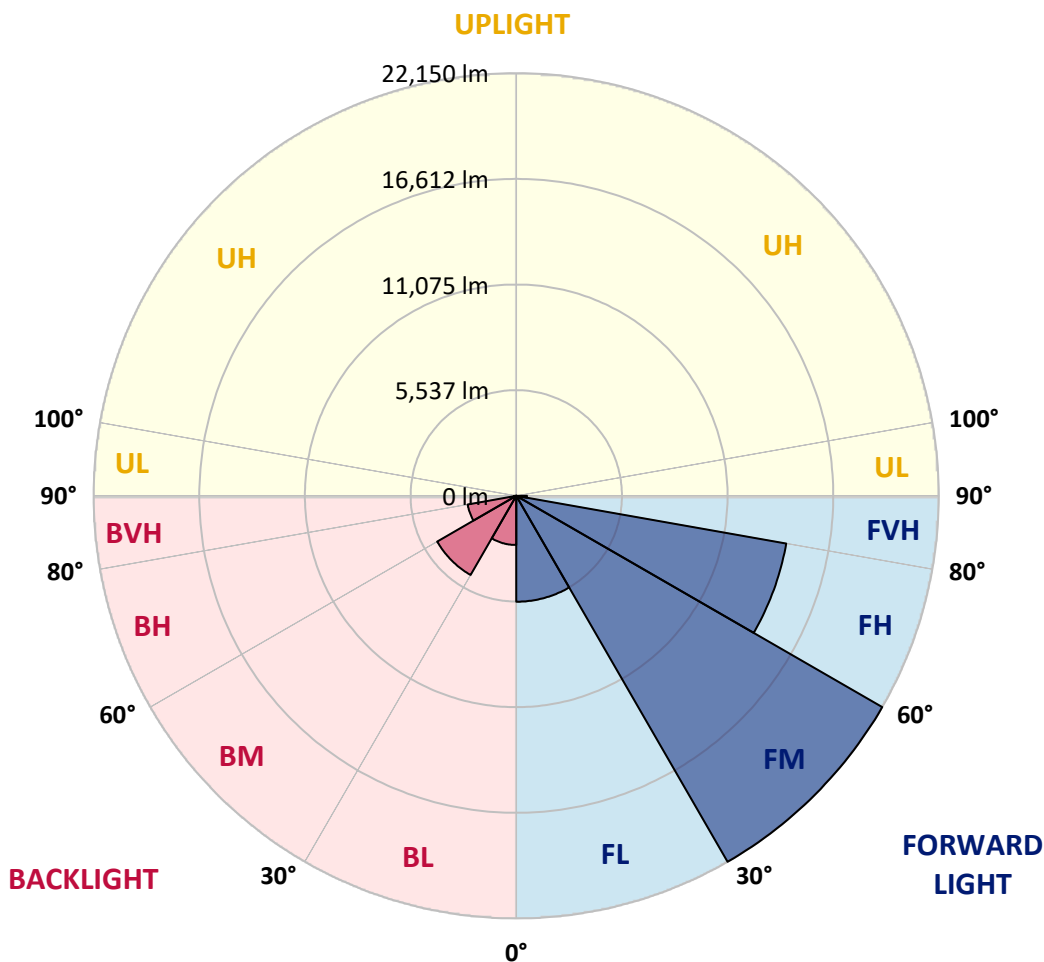


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5550.8	10.5			
FM (30°-60°)	22149.6	42.0			
FH (60°-80°)	14369.3	27.3			G5
FVH (80°-90°)	561.2	1.1			G4/750
BL (0°-30°)	2577.0	4.9	B4/5000		
BM (30°-60°)	4788.4	9.1	B3/5000		
BH (60°-80°)	2589.0	4.9	B4/5000		G4/5000
BVH (80°-90°)	129.8	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0
2.5°	9891.1	9915.9	9886.4	9873.3	9859.1	9766.8	9659.2	9549.1	9460.4	9446.2	9330.2
5°	10585.7	10598.7	10550.2	10494.6	10398.7	10246.1	10053.2	9862.7	9685.2	9637.9	9426.1
7.5°	11119.3	11094.5	11082.7	11035.3	10951.3	10783.3	10491.0	10178.6	9904.1	9837.8	9516.0
10°	11619.9	11609.2	11519.3	11460.1	11326.4	11171.4	10931.2	10534.8	10147.9	10041.4	9594.1
12.5°	12161.8	12138.1	12101.5	11973.7	11864.8	11603.3	11313.4	10952.5	10521.8	10379.8	9727.8
15°	12649.3	12585.4	12565.3	12431.6	12321.6	12121.6	11830.5	11411.6	10951.3	10829.4	9982.2
17.5°	13113.2	13083.6	13038.6	12947.5	12824.4	12670.6	12437.5	11989.1	11513.4	11335.9	10414.1
20°	13507.2	13470.5	13431.5	13456.3	13429.1	13330.9	13184.2	12802.0	12221.0	12049.4	10939.5
22.5°	13781.7	13780.5	13936.7	14027.9	14079.9	14076.4	14040.9	13824.3	13239.8	13065.8	11725.2
25°	14010.1	14027.9	14225.5	14572.2	14882.2	14910.6	15161.4	15058.5	14561.5	14380.5	12907.3
27.5°	14077.5	14113.0	14471.6	15017.1	15488.0	15940.0	16308.0	16496.2	16035.9	15819.3	14178.1
30°	14126.1	14140.3	14491.7	15144.9	16137.6	16853.5	17511.4	17829.7	17433.3	17274.8	15594.5
32.5°	13784.1	13788.8	14327.2	15316.4	16614.5	17855.8	18634.4	19234.3	19130.2	18920.7	17143.4
35°	13313.1	13400.7	14018.4	15150.8	17007.4	18776.4	19836.6	20731.2	20939.4	20789.1	18691.2
37.5°	12731.0	12799.6	13461.1	14904.7	17093.7	19409.4	20771.4	22252.9	22797.2	22772.3	20559.6
40°	12015.1	12099.1	12890.7	14374.6	17051.1	19869.7	21868.3	23937.9	24628.9	24550.8	22412.6
42.5°	11169.0	11292.1	12060.0	13693.0	16739.9	20151.4	22766.4	25653.6	26897.3	26846.4	24052.6
45°	10332.5	10398.7	11099.2	12744.0	16167.2	20242.5	23611.3	28017.8	29223.6	29166.8	26028.7
47.5°	9469.8	9527.8	10259.1	11744.1	15173.3	20059.1	24279.8	30048.4	31593.7	31536.9	27991.8
50°	7463.0	7681.9	9181.1	10864.9	14040.9	19539.6	24910.5	32578.2	34073.9	33832.5	29711.1
52.5°	6385.0	6464.3	7241.7	9978.6	12910.8	18653.3	25331.8	34922.3	36113.9	35766.0	31469.5
55°	5968.5	6021.7	6402.8	8344.5	11849.4	17312.7	25827.6	37272.3	37643.9	37555.1	32903.6
57.5°	5652.6	5711.7	5983.9	6969.6	10731.2	15433.6	25672.6	38925.4	39390.4	39106.4	34426.5
60°	5205.3	5277.5	5638.4	6257.2	9460.4	13526.1	24308.2	39602.2	40660.1	40340.6	35584.9
62.5°	4923.7	4971.0	5178.1	5778.0	8407.2	12184.3	22366.5	39384.5	41297.9	41286.0	36589.6
65°	4541.5	4611.3	4832.5	5318.9	7470.1	11144.2	20534.7	38308.9	41023.3	41034.0	36796.6
67.5°	4141.5	4169.9	4401.8	4792.3	6366.1	10191.6	18164.6	36468.9	38885.1	39128.9	35363.7
70°	3642.2	3628.0	3878.8	4164.0	5202.9	8653.4	14620.7	33195.9	35725.8	35826.3	32465.8
72.5°	2865.9	2878.9	2948.7	3146.4	3949.8	6809.8	10609.3	28046.2	32423.2	32601.9	28762.1
75°	1926.4	1947.7	2273.1	2466.0	2841.1	4894.1	6671.4	18931.4	27409.6	27913.7	23540.3
77.5°	1469.6	1482.7	1577.3	1787.9	2055.4	3488.3	3616.1	10315.9	19954.9	21151.2	18415.5
80°	1041.3	1046.0	952.5	847.2	1094.5	2366.6	2135.8	4393.5	7951.7	9396.5	10816.4
82.5°	466.2	459.1	540.8	449.6	630.7	915.9	1008.2	2132.3	3302.6	3549.9	3864.6
85°	216.5	242.6	278.1	233.1	375.1	353.8	392.9	908.8	1547.7	1708.7	1699.2
87.5°	53.2	58.0	73.4	93.5	136.1	120.7	118.3	267.4	345.5	344.3	528.9
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°	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0	9245.0
2.5°	9250.9	9189.4	9043.9	8903.0	8769.3	8680.6	8581.2	8477.1	8414.3	8384.8	8448.7
5°	9297.1	9179.9	8901.9	8622.6	8385.9	8183.6	8041.6	7920.9	7855.8	7861.7	7865.3
7.5°	9336.1	9171.6	8782.3	8388.3	8019.1	7768.3	7582.5	7452.3	7377.8	7321.0	7363.6
10°	9370.4	9137.3	8642.7	8117.3	7716.2	7344.7	7092.6	6935.2	6798.0	6721.1	6781.4
12.5°	9407.1	9124.3	8486.5	7874.8	7355.3	6940.0	6594.5	6438.3	6303.4	6245.4	6282.1
15°	9566.9	9174.0	8341.0	7589.6	6999.1	6461.9	6089.2	5897.5	5791.0	5721.2	5736.6
17.5°	9841.4	9305.4	8247.5	7291.4	6601.6	6033.6	5550.8	5327.2	5150.8	5101.1	5088.1
20°	10231.9	9555.0	8247.5	7039.4	6150.7	5557.9	5001.7	4624.3	4349.8	4246.8	4326.1
22.5°	10887.4	9979.8	8329.1	6811.0	5762.6	5064.5	4401.8	3825.6	3455.2	3304.9	3392.5
25°	11804.5	10636.6	8461.7	6611.0	5408.8	4496.5	3641.0	2978.3	2570.1	2391.4	2389.1
27.5°	13001.9	11641.2	8729.1	6447.7	4985.2	3761.7	2847.0	2209.2	1825.8	1718.1	1733.5
30°	14329.6	12729.8	9234.4	6211.1	4470.5	2939.3	2073.1	1623.5	1353.7	1211.7	1214.1
32.5°	15609.9	13857.5	9834.3	6057.2	3801.9	2216.3	1477.9	1158.4	990.4	906.4	919.4
35°	16982.5	14830.1	10280.4	5799.3	3017.4	1602.2	1044.8	868.5	798.7	754.9	757.3
37.5°	18465.2	15899.8	10647.2	5453.8	2281.4	1100.5	771.5	744.3	714.7	659.1	654.4
40°	20014.1	17138.7	10866.1	4895.3	1585.6	762.0	655.5	686.3	669.7	597.6	591.6
42.5°	21327.5	18094.8	10920.5	4155.7	1025.9	617.7	594.0	641.3	644.9	571.5	562.1
45°	22588.9	18946.8	10814.0	3181.9	711.2	581.0	556.1	621.2	626.0	559.7	544.3
47.5°	24000.6	20112.3	10621.2	2122.8	588.1	549.0	543.1	588.1	604.7	550.2	531.3
50°	25715.2	21060.1	10049.6	1304.0	555.0	528.9	528.9	556.1	578.6	531.3	521.8
52.5°	27473.5	21886.1	9203.6	894.6	534.8	507.6	523.0	534.8	543.1	500.5	508.8
55°	28733.7	22618.5	7942.2	719.4	523.0	493.4	530.1	506.4	494.6	457.9	449.6
57.5°	30132.4	23489.4	6652.4	637.8	507.6	501.7	506.4	461.5	428.3	390.5	382.2
60°	31108.6	23958.0	5073.9	599.9	489.9	493.4	467.4	407.1	346.7	319.5	313.6
62.5°	31960.5	24225.4	3719.1	551.4	473.3	472.1	423.6	347.9	285.2	255.6	250.9
65°	31831.6	23807.7	2410.4	512.4	460.3	444.9	379.8	298.2	237.8	215.4	213.0
67.5°	30412.8	21959.4	1518.2	472.1	437.8	410.6	340.8	266.2	218.9	192.9	190.5
70°	27434.5	19407.1	928.9	420.1	389.3	363.3	301.7	249.7	207.1	176.3	170.4
72.5°	23317.8	16621.6	656.7	370.4	339.6	308.8	255.6	237.8	197.6	158.6	153.8
75°	19157.4	12243.5	550.2	323.0	289.9	248.5	217.7	221.3	185.8	144.4	140.8
77.5°	13490.6	7633.4	512.4	263.9	228.4	197.6	188.1	202.3	170.4	132.5	129.0
80°	7873.6	4287.0	423.6	208.3	171.6	152.6	157.4	171.6	149.1	119.5	114.8
82.5°	3178.3	1696.8	298.2	162.1	125.4	121.9	129.0	139.6	123.1	100.6	98.2
85°	1134.8	530.1	169.2	106.5	80.5	84.0	82.8	99.4	88.7	73.4	72.2
87.5°	298.2	105.3	75.7	42.6	34.3	34.3	31.9	46.1	42.6	33.1	36.7
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)