

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: STREETWORKS

Report Number: P510458

Luminaire Tested: **CST-CA10-310-722-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510458
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-310-722-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36828 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

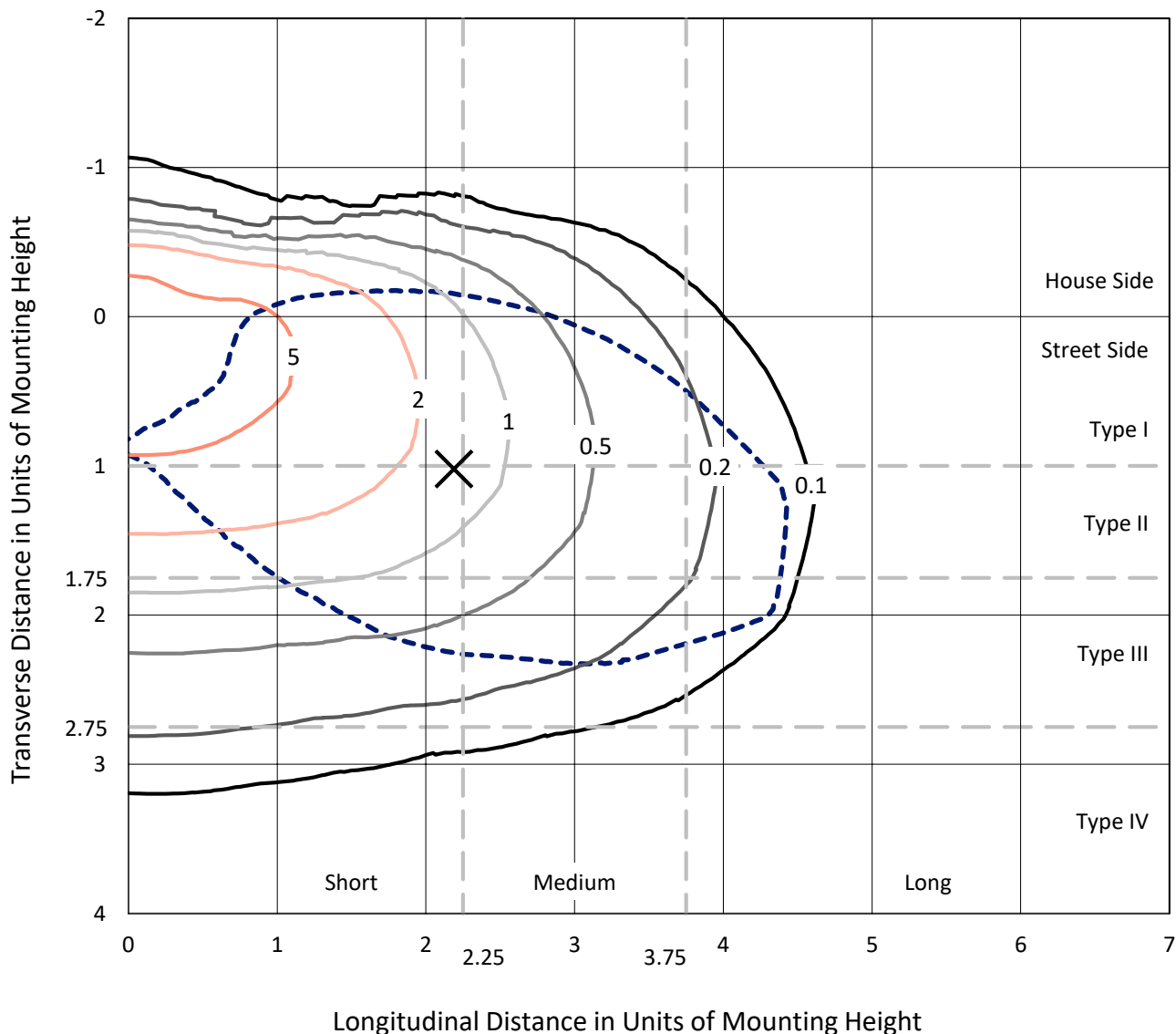
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

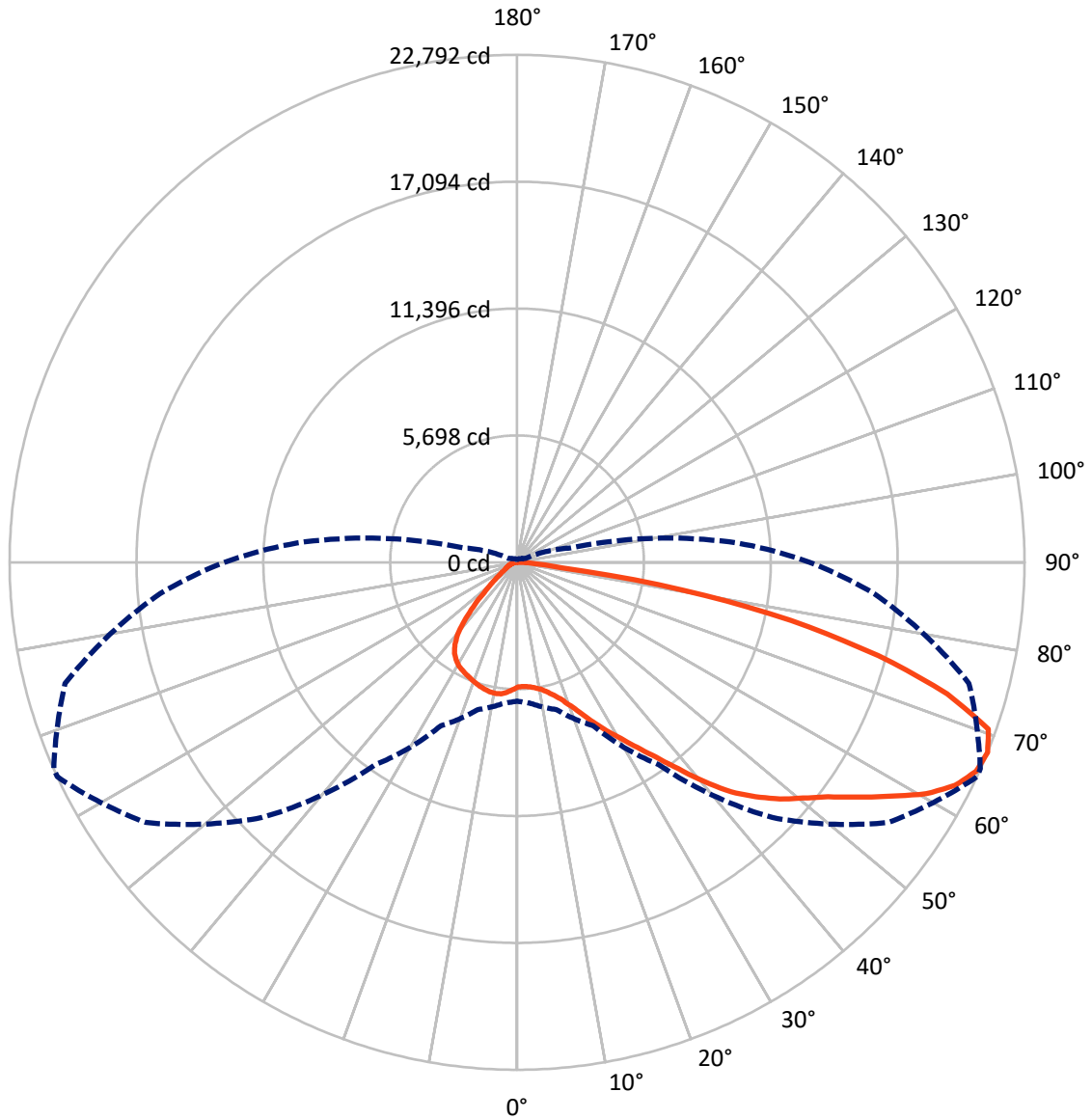
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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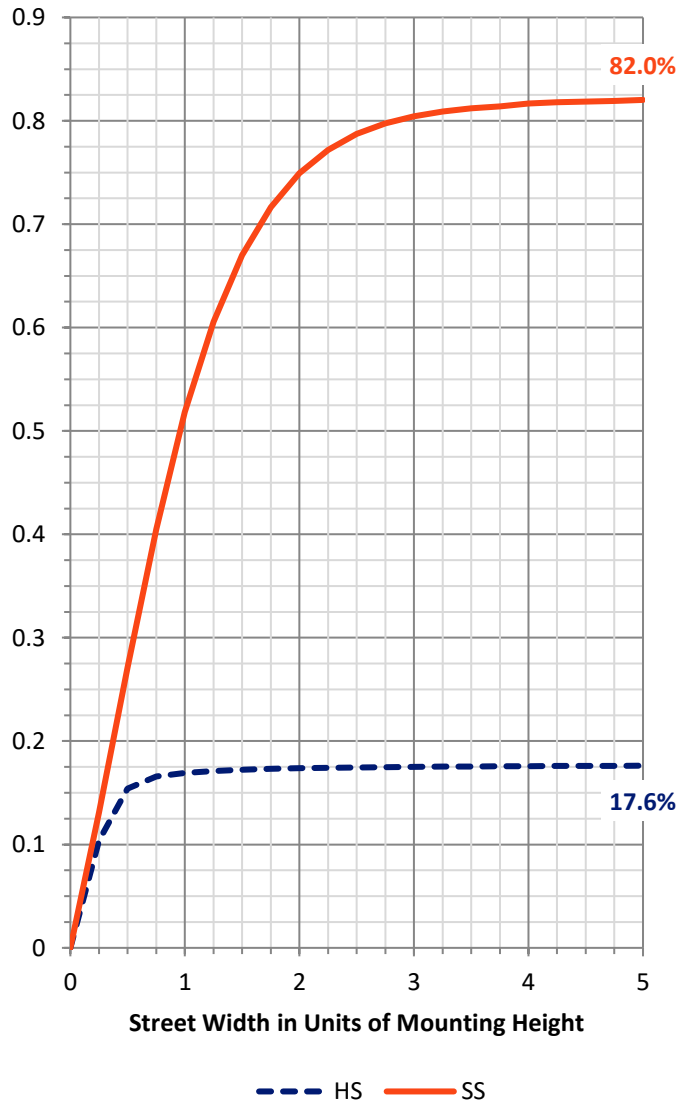
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6582.1	0.0	6582.1
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	30245.9	0.0	30245.9
	% Fixture	82.1	0.0	82.1
Total	Lumens	36828.0	0.0	36828.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	553.7	1.5
10°-20°	1709.3	4.6
20°-30°	2965.4	8.1
30°-40°	4473.2	12.1
40°-50°	6202.4	16.8
50°-60°	7656.0	20.8
60°-70°	8157.4	22.1
70°-80°	4667.8	12.7
80°-90°	442.9	1.2
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°	36828.0	100.0
0°-180°	36828.0	100.0

Coefficient of Utilization

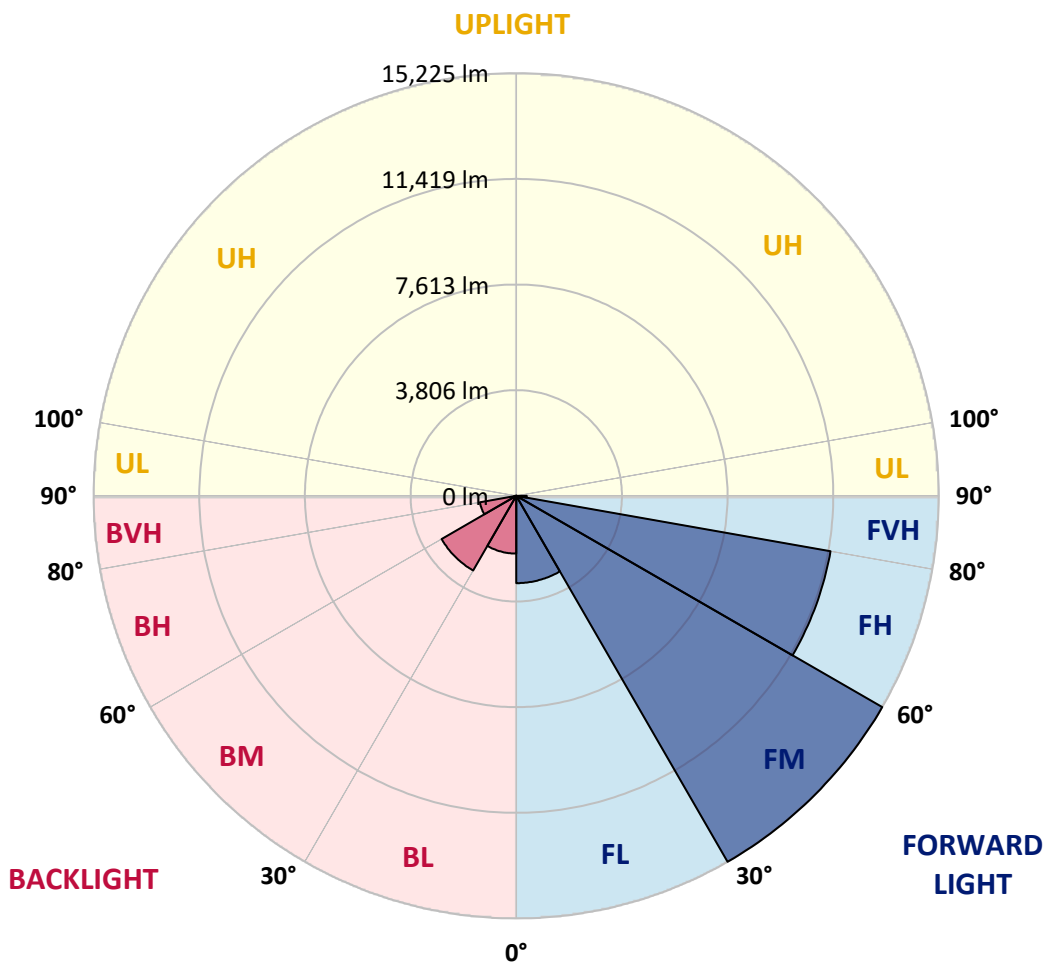


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3145.6	8.5			
FM (30°-60°)	15225.2	41.3			
FH (60°-80°)	11496.7	31.2			G4/12000
FVH (80°-90°)	378.4	1.0			G3/500
BL (0°-30°)	2082.7	5.7	B3/2500		
BM (30°-60°)	3106.4	8.4	B3/5000		
BH (60°-80°)	1328.5	3.6	B3/2500		G3/2500
BVH (80°-90°)	64.5	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3
2.5°	5542.2	5534.9	5528.5	5539.8	5546.2	5556.7	5572.1	5582.5	5585.8	5595.4	5607.5
5°	5630.9	5630.1	5621.3	5616.4	5602.7	5597.9	5601.1	5614.0	5614.8	5626.9	5664.8
7.5°	5805.2	5803.6	5781.8	5772.1	5743.1	5710.8	5686.6	5689.0	5688.2	5700.3	5751.1
10°	6068.2	6055.3	6024.6	5994.8	5938.3	5877.8	5833.4	5793.1	5793.1	5810.8	5867.3
12.5°	6365.1	6382.8	6340.9	6295.7	6201.3	6092.4	6014.9	5969.8	5964.9	5973.8	6014.1
15°	6733.7	6733.7	6705.5	6641.0	6557.9	6406.2	6246.5	6189.2	6181.1	6199.7	6197.3
17.5°	7149.2	7161.3	7108.1	7075.8	6948.3	6780.5	6580.5	6481.2	6481.2	6469.1	6413.5
20°	7679.2	7613.1	7618.7	7565.5	7471.9	7228.3	7025.0	6880.6	6878.9	6854.7	6698.2
22.5°	8255.2	8218.9	8187.5	8140.7	8011.6	7793.8	7511.4	7368.6	7365.4	7305.7	7073.4
25°	8823.2	8850.6	8815.9	8730.4	8636.0	8398.8	8087.4	7947.1	7946.2	7847.0	7517.9
27.5°	9407.2	9437.1	9425.8	9348.3	9222.5	9036.9	8742.5	8559.4	8548.1	8483.5	8069.7
30°	10052.6	10026.0	10060.7	10027.6	9964.7	9662.2	9395.9	9183.0	9210.4	9191.0	8696.5
32.5°	10522.1	10539.1	10652.8	10656.0	10589.9	10365.6	10040.5	9909.8	9953.4	9927.6	9466.9
35°	10946.5	10973.9	11120.7	11265.1	11313.5	11068.3	10737.5	10729.4	10785.9	10943.2	10528.6
37.5°	11311.1	11330.5	11536.2	11724.1	11880.6	11712.8	11472.4	11758.8	11841.9	12163.8	11624.1
40°	11529.7	11554.7	11820.9	12085.6	12364.7	12305.0	12282.4	12960.0	13038.3	13321.5	12423.6
42.5°	11406.3	11455.5	11899.2	12383.2	12793.9	12913.3	13222.2	14093.5	14183.0	14207.2	13209.3
45°	11186.1	11247.4	11743.5	12526.8	13196.4	13579.6	14167.7	15017.2	15066.4	14997.8	13860.4
47.5°	10948.9	11014.2	11568.4	12484.1	13519.9	14354.9	15012.4	15886.8	15921.5	15711.0	14516.2
50°	10679.4	10739.9	11336.1	12384.0	13763.5	15086.6	15880.4	16638.7	16768.6	16352.3	15026.1
52.5°	10351.9	10416.4	11048.9	12227.5	13977.3	15629.5	16646.0	17488.2	17497.1	17154.2	15600.5
55°	9927.6	10039.7	10688.3	11956.5	14089.5	16095.8	17313.1	18612.0	18669.2	18337.7	16081.3
57.5°	9455.6	9553.2	10254.3	11595.1	13988.6	16449.9	18386.1	19817.2	19810.0	19144.4	16501.6
60°	8832.0	8901.4	9688.8	11122.3	13663.5	16878.3	19503.4	21108.8	21095.9	19935.0	16771.8
62.5°	8031.8	8101.1	8841.7	10380.9	13185.9	17165.5	20261.7	22076.0	22038.9	20510.2	16854.9
65°	7104.0	7228.3	7871.2	9418.5	12341.3	16976.7	20628.0	22645.6	22585.9	20949.0	16656.5
67.5°	6234.4	6340.1	6849.1	8093.9	11094.9	16211.1	20369.8	22792.4	22774.7	21012.8	16095.8
70°	5003.3	5042.0	5508.3	6574.0	9231.4	14571.9	19477.6	22453.6	22461.7	20425.5	14969.6
72.5°	3424.5	3518.9	3726.3	4567.7	6717.6	11588.6	16788.0	20207.7	20209.3	18315.1	13042.3
75°	1841.8	1987.8	2229.8	2646.9	3755.3	7436.4	13482.0	16767.8	16799.3	15270.5	10366.4
77.5°	913.2	965.7	1106.0	1415.8	1721.6	3508.4	8670.7	12586.5	12661.6	11721.7	7070.1
80°	417.9	426.8	437.2	434.8	659.1	1539.2	3722.2	7559.0	7581.6	6971.7	3227.7
82.5°	326.7	325.1	330.0	300.1	301.7	593.7	1288.3	1979.7	2111.2	1661.9	1023.7
85°	197.6	196.8	212.2	164.6	202.5	321.1	650.2	789.8	799.5	650.2	530.0
87.5°	75.0	72.6	67.0	58.9	67.8	90.4	225.1	290.4	284.0	201.7	183.1
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°	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3	5596.3
2.5°	5618.0	5643.9	5691.4	5727.8	5739.9	5778.6	5815.7	5822.1	5848.8	5859.2	5893.9
5°	5688.2	5731.8	5806.0	5855.2	5877.0	5941.5	5983.5	6004.5	5997.2	6001.2	6040.0
7.5°	5790.7	5831.8	5891.5	5951.2	5961.7	5973.0	5969.0	5965.7	5937.5	5913.3	5949.6
10°	5884.3	5923.0	5960.1	5969.0	5915.7	5885.9	5832.6	5791.5	5736.6	5711.6	5740.7
12.5°	6015.8	6023.8	5987.5	5939.1	5824.6	5718.1	5631.8	5556.7	5489.0	5442.2	5480.9
15°	6154.5	6123.0	6017.4	5876.2	5698.7	5546.2	5405.1	5280.0	5167.9	5140.5	5150.9
17.5°	6338.4	6252.9	6040.0	5802.8	5526.9	5289.7	5108.2	4950.1	4803.2	4741.9	4736.3
20°	6562.7	6424.8	6085.9	5710.0	5323.6	5008.2	4727.4	4491.0	4288.6	4122.4	4126.4
22.5°	6854.7	6654.7	6155.3	5613.2	5098.5	4678.2	4270.0	3868.2	3535.1	3391.5	3356.0
25°	7240.4	6941.9	6253.7	5525.3	4846.8	4258.7	3681.9	3114.8	2762.2	2622.7	2607.3
27.5°	7720.4	7327.5	6403.8	5427.6	4577.4	3761.0	2931.6	2375.8	2052.3	1905.5	1856.3
30°	8265.7	7802.6	6557.9	5326.0	4251.4	3121.2	2235.4	1690.9	1359.3	1227.8	1210.9
32.5°	8971.6	8404.5	6787.0	5166.3	3775.5	2453.3	1559.4	1055.2	830.1	773.6	757.5
35°	9974.4	9218.5	7070.1	4964.6	3164.0	1713.5	966.5	618.0	497.7	469.5	463.9
37.5°	10909.3	10017.1	7355.7	4629.8	2402.4	1069.7	552.6	396.1	369.5	370.3	371.9
40°	11650.7	10563.3	7586.4	4189.3	1580.4	607.5	384.0	329.1	330.0	327.5	325.9
42.5°	12310.6	10998.9	7690.5	3538.3	915.6	406.6	333.2	303.3	296.1	298.5	296.9
45°	12856.8	11443.4	7488.8	2806.6	539.7	364.6	314.6	281.5	273.5	286.4	288.0
47.5°	13431.2	11865.3	7179.9	2114.4	438.1	346.9	297.7	265.4	261.4	277.5	279.1
50°	13914.4	12171.1	6653.1	1593.3	417.9	327.5	282.4	249.3	248.5	263.0	263.0
52.5°	14318.6	12355.8	6027.9	1230.3	404.2	310.6	267.0	234.0	234.0	238.8	239.6
55°	14603.3	12318.7	5655.1	968.1	389.6	294.5	250.9	219.4	209.7	206.5	208.1
57.5°	14655.0	12220.3	5222.7	755.1	372.7	279.1	236.4	202.5	184.7	182.3	181.5
60°	14621.9	12004.1	4729.0	630.9	353.3	264.6	221.8	184.7	167.0	161.3	163.0
62.5°	14483.9	11620.9	4158.7	553.4	334.0	253.3	205.7	172.6	156.5	149.2	149.2
65°	14067.7	11072.3	3311.6	484.8	309.8	241.2	192.8	167.8	150.1	142.0	140.4
67.5°	13152.9	9934.0	2488.7	425.1	286.4	228.3	191.2	167.0	146.8	135.5	133.9
70°	11925.8	8533.5	1699.0	373.5	260.6	216.2	190.4	167.8	143.6	129.1	127.5
72.5°	9955.8	6727.3	978.6	325.1	234.8	204.9	187.2	168.6	138.0	120.2	117.8
75°	7480.8	4718.5	574.4	279.1	209.7	188.0	178.3	163.8	129.1	109.7	107.3
77.5°	4499.1	2203.2	432.4	231.5	179.9	165.4	158.9	150.1	117.8	101.6	99.2
80°	1650.6	836.6	339.6	185.5	142.8	143.6	137.1	131.5	107.3	93.6	92.0
82.5°	719.6	511.5	250.9	141.2	112.1	128.3	112.9	108.1	92.0	83.9	80.7
85°	436.4	304.9	161.3	96.0	77.4	87.1	79.1	83.1	71.0	66.2	63.7
87.5°	144.4	91.2	71.8	46.8	38.7	36.3	35.5	42.8	40.3	37.1	37.1
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)