

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: P510840

Luminaire Tested: **CST-CA8-480-730-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510840
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-480-730-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 61749 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

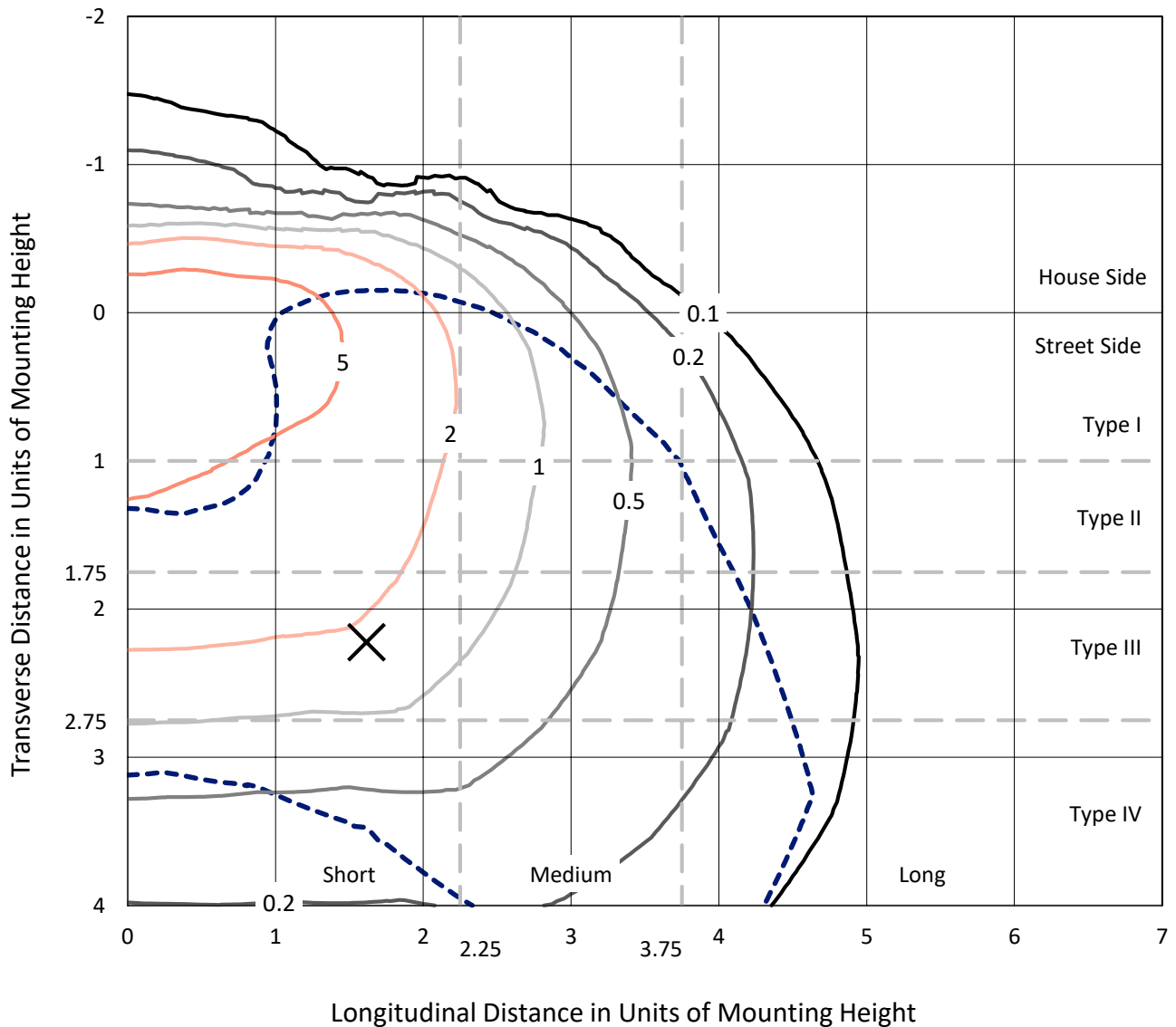
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

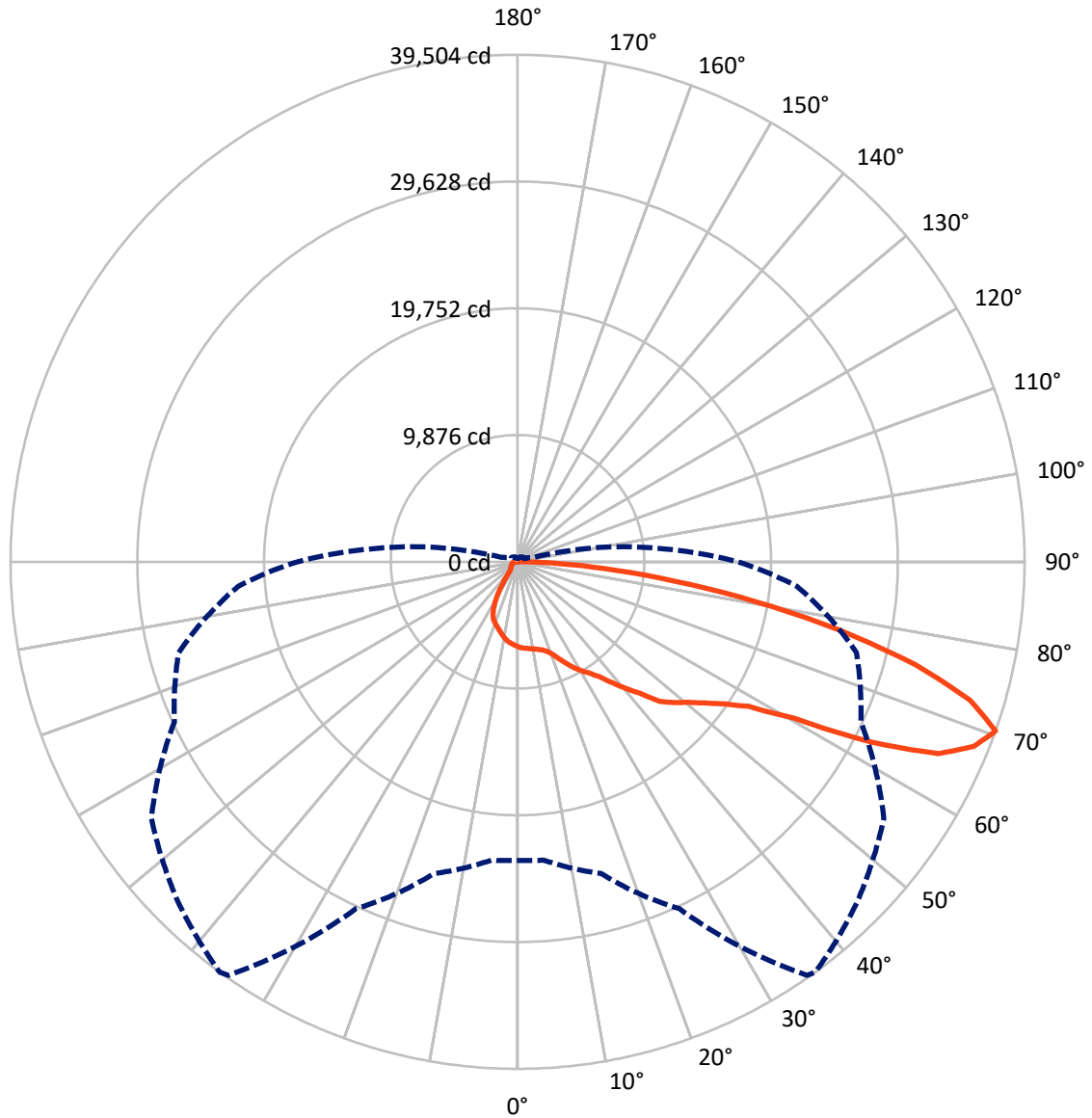
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.4 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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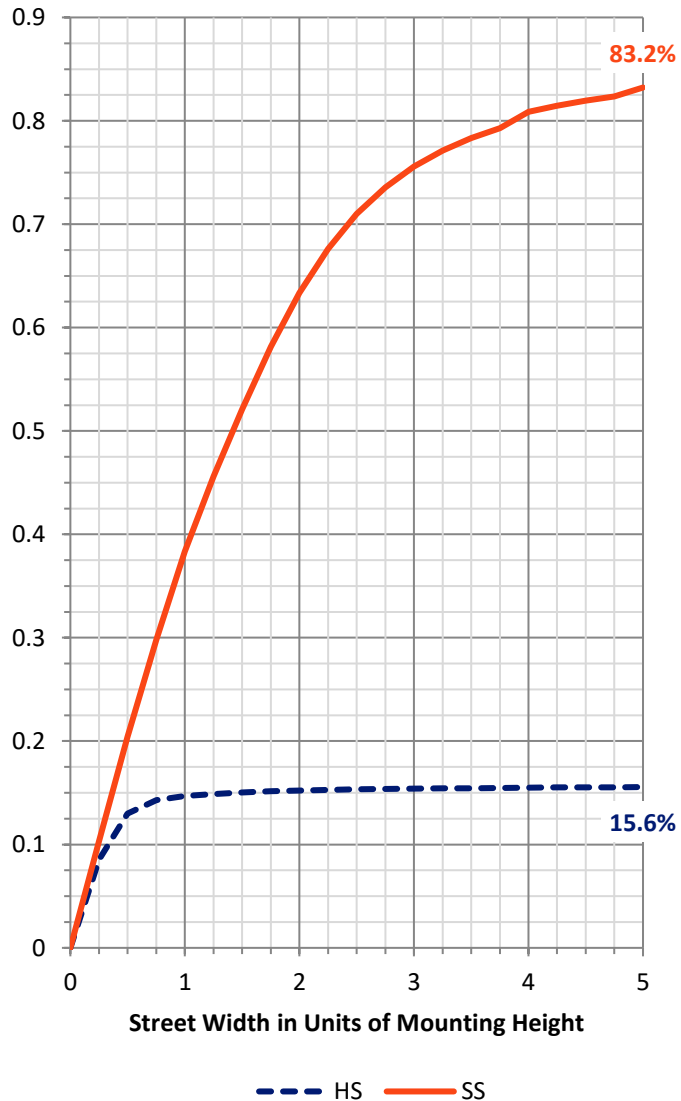
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9744.4	0.0	9744.4
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	52004.5	0.0	52004.5
	% Fixture	84.2	0.0	84.2
Total	Lumens	61749.0	0.0	61749.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	627.5	1.0
10°-20°	1866.0	3.0
20°-30°	3355.6	5.4
30°-40°	5310.2	8.6
40°-50°	8298.8	13.4
50°-60°	11917.0	19.3
60°-70°	16164.3	26.2
70°-80°	11963.3	19.4
80°-90°	2246.3	3.6
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°	61749.0	100.0
0°-180°	61749.0	100.0

Coefficient of Utilization



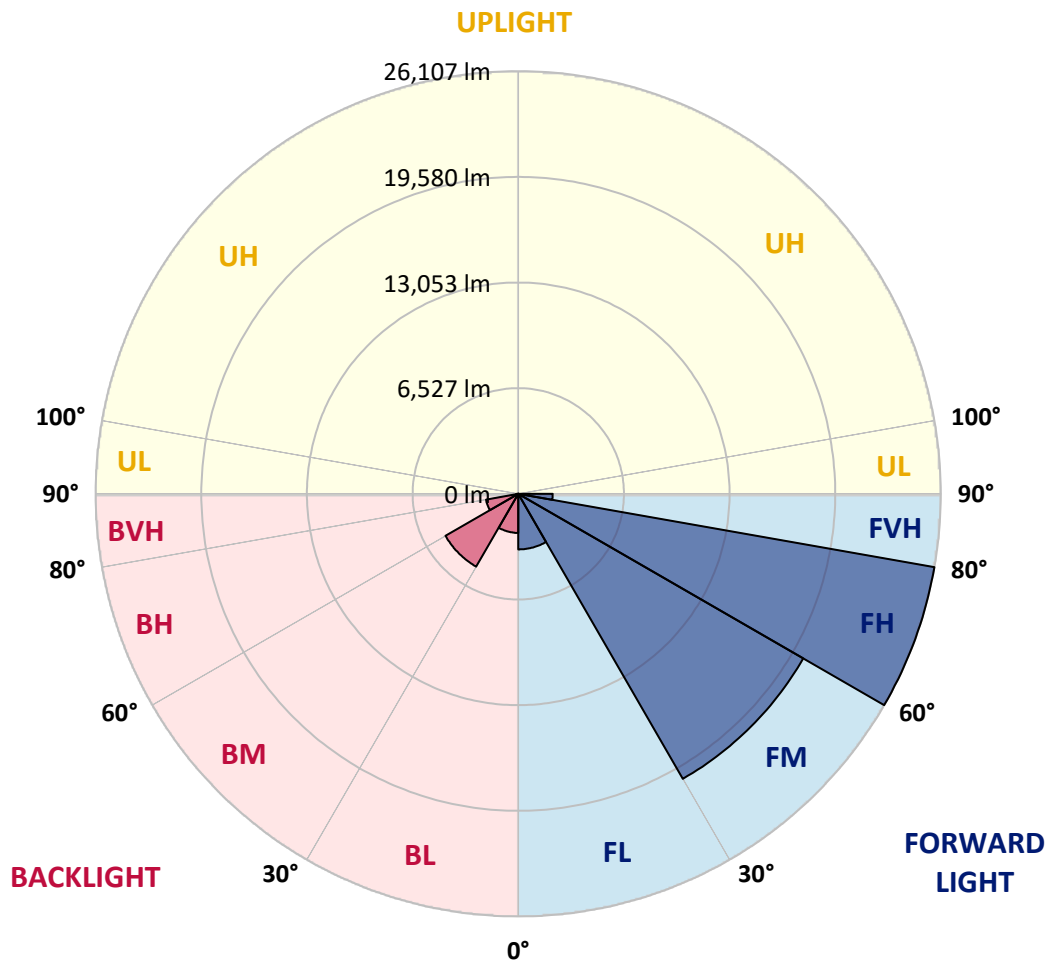
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3434.5	5.6			
FM (30°-60°)	20333.4	32.9			
FH (60°-80°)	26106.9	42.3			G5
FVH (80°-90°)	2129.8	3.4			G5
BL (0°-30°)	2414.6	3.9	B3/2500		
BM (30°-60°)	5192.6	8.4	B4/8500		
BH (60°-80°)	2020.7	3.3	B3/2500		G3/2500
BVH (80°-90°)	116.5	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1
2.5°	6750.1	6735.8	6724.4	6728.7	6720.2	6725.9	6713.0	6697.4	6660.3	6644.6	6637.5
5°	6810.0	6805.7	6794.3	6785.7	6770.1	6764.4	6750.1	6762.9	6743.0	6691.7	6661.7
7.5°	6845.6	6844.2	6831.4	6812.8	6821.4	6828.5	6842.8	6822.8	6797.1	6772.9	6711.6
10°	6861.3	6861.3	6845.6	6855.6	6899.8	6904.1	6911.2	6924.0	6899.8	6864.1	6802.8
12.5°	6901.2	6898.4	6904.1	6936.9	6982.5	6992.4	7028.1	7028.1	7030.9	7009.6	6938.3
15°	7001.0	7001.0	7013.8	7043.8	7122.2	7127.9	7180.6	7227.7	7233.4	7202.0	7147.8
17.5°	7231.9	7226.2	7219.1	7237.6	7321.8	7324.6	7415.8	7475.7	7491.4	7525.6	7517.1
20°	7671.0	7665.3	7663.9	7665.3	7659.6	7651.1	7740.9	7805.0	7884.9	7944.7	7974.7
22.5°	8299.7	8286.9	8286.9	8217.0	8162.8	8171.4	8185.7	8221.3	8326.8	8432.3	8544.9
25°	8976.9	8968.3	8975.4	8797.2	8724.5	8753.0	8734.5	8790.1	8928.4	9019.6	9139.4
27.5°	9530.0	9542.8	9502.9	9364.6	9317.6	9338.9	9296.2	9455.8	9608.4	9768.0	9949.1
30°	10218.5	10150.1	10051.7	9883.5	9866.4	9869.3	9866.4	10123.0	10439.5	10667.6	10918.5
32.5°	11118.1	11129.5	10908.5	10512.2	10366.8	10346.8	10403.9	10780.2	11207.9	11714.0	12044.7
35°	12027.6	12046.1	11885.0	11471.6	11056.8	10994.0	10909.9	11398.9	12016.2	13031.2	13530.1
37.5°	12992.7	13058.3	12867.2	12498.0	12006.2	11947.8	11550.0	12030.4	12942.8	14590.8	15245.1
40°	14284.3	14214.4	13983.5	13514.5	13056.8	12962.8	12500.9	12753.2	14134.6	16543.8	17018.5
42.5°	15236.6	15216.6	15021.3	14558.0	14097.5	14022.0	13649.9	13923.6	15635.7	18523.9	18736.3
45°	15992.1	16114.7	16110.4	15819.6	15560.2	15517.4	15297.9	15701.3	17450.5	20392.9	20288.8
47.5°	16663.6	16739.1	16617.9	16491.1	16369.9	16384.1	16546.7	17376.3	19305.1	22025.1	21564.7
50°	17762.7	17665.7	17122.6	17025.7	17196.7	17203.8	17698.5	18975.8	21348.0	23436.5	22645.3
52.5°	19228.2	19122.7	18006.4	17841.1	18245.9	18275.9	19098.4	20569.6	23455.0	24785.1	23720.2
55°	21409.3	21164.1	19968.0	19226.7	19412.1	19533.2	20529.7	22102.1	25104.4	25974.0	24534.2
57.5°	24088.0	24266.2	23653.2	21978.1	21206.9	21252.5	22167.7	23569.0	26559.9	27014.7	25010.3
60°	26919.1	26876.4	27133.0	26427.3	24950.4	24705.2	24239.1	25065.9	27687.5	27891.4	25500.7
62.5°	28470.2	28719.7	29575.0	29716.1	31049.0	30919.3	27741.7	26922.0	28990.5	28441.7	25634.7
65°	28461.6	28570.0	30162.3	31912.9	36077.0	36040.0	34563.1	29606.4	29961.3	28735.3	25366.7
67.5°	26622.6	26790.8	28652.6	32072.6	38400.7	38356.5	37335.8	33379.9	30266.4	28381.8	24116.5
70°	23269.7	23326.7	25142.9	29824.5	39334.5	39504.1	37431.3	34828.2	29508.0	27331.1	21837.0
72.5°	19196.8	19078.5	20854.7	25469.3	36956.6	36855.4	35849.0	33099.0	28230.7	25291.1	17809.7
75°	14134.6	14463.9	16057.7	20449.9	31642.1	32012.7	32458.9	30453.2	25073.0	20843.3	12315.6
77.5°	9333.2	9752.4	11363.3	15333.5	25050.2	25626.2	26782.3	25901.3	20397.1	14951.4	5864.8
80°	4822.7	5139.2	6589.0	10174.3	17958.0	18789.1	20908.9	19617.3	14461.0	6760.1	1313.0
82.5°	1824.7	1783.4	2952.4	5823.5	11514.4	12269.9	13811.0	11763.9	5146.3	1187.5	610.1
85°	801.2	848.2	1223.1	2655.8	6583.3	6681.7	7823.6	4586.1	754.1	567.4	414.8
87.5°	346.4	397.7	513.2	764.1	2221.0	2564.6	3173.3	1456.9	228.1	196.7	208.1
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°	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1
2.5°	6624.7	6616.1	6601.8	6566.2	6507.8	6500.6	6494.9	6489.2	6477.8	6483.5	6516.3
5°	6638.9	6623.2	6571.9	6520.6	6469.3	6423.6	6368.0	6346.7	6318.2	6299.6	6333.8
7.5°	6687.4	6654.6	6579.0	6509.2	6369.5	6302.5	6231.2	6147.1	6087.2	6048.7	6082.9
10°	6768.6	6727.3	6633.2	6489.2	6325.3	6141.4	6015.9	5876.2	5762.2	5730.8	5762.2
12.5°	6901.2	6839.9	6730.1	6534.8	6244.0	6003.1	5765.0	5581.1	5397.2	5344.5	5360.2
15°	7116.5	7068.0	6899.8	6630.4	6245.4	5877.6	5524.1	5227.6	4986.7	4902.6	4896.9
17.5°	7461.5	7410.1	7216.3	6820.0	6296.8	5779.3	5287.5	4835.6	4470.6	4285.3	4255.3
20°	7956.1	7884.9	7591.2	7099.4	6408.0	5736.5	5067.9	4460.6	3893.2	3545.4	3492.7
22.5°	8506.4	8430.9	7997.5	7314.6	6487.8	5652.4	4858.4	4045.8	3298.8	2874.0	2814.1
25°	9190.7	9025.3	8386.7	7518.5	6469.3	5475.6	4517.6	3482.7	2673.0	2305.2	2265.2
27.5°	9866.4	9656.9	8783.0	7625.4	6388.0	5194.8	4018.7	2824.1	2092.7	1831.9	1799.1
30°	10704.6	10299.8	9135.1	7675.3	6182.7	4774.3	3350.1	2146.9	1566.7	1387.1	1355.7
32.5°	11701.1	11088.1	9465.8	7619.7	5840.6	4132.7	2604.5	1572.4	1164.7	1052.1	1050.6
35°	13015.5	12054.7	9829.3	7437.2	5316.0	3441.3	1826.2	1074.9	908.1	869.6	876.7
37.5°	14552.3	13363.3	10198.6	7137.9	4722.9	2633.0	1217.4	828.3	798.3	799.7	801.2
40°	16173.2	14808.9	10696.1	6717.3	4003.0	1906.0	876.7	744.2	742.7	757.0	761.3
42.5°	17721.3	16213.1	11309.1	6157.1	3248.9	1260.2	759.8	709.9	691.4	697.1	701.4
45°	19159.7	17417.7	11830.9	5611.1	2440.6	899.5	745.6	670.0	641.5	638.7	641.5
47.5°	20318.7	18382.8	12148.8	4969.6	1739.2	747.0	715.6	633.0	593.0	584.5	580.2
50°	21201.2	19099.9	12264.2	4242.5	1176.1	712.8	675.7	590.2	541.7	543.1	543.1
52.5°	22062.2	19751.4	12130.2	3509.8	865.3	682.9	648.6	556.0	504.7	531.7	538.9
55°	22682.3	20025.1	11739.6	2717.1	721.3	645.8	618.7	516.1	480.4	524.6	538.9
57.5°	23044.4	20240.3	11022.6	1961.6	661.5	610.1	580.2	479.0	446.2	457.6	464.7
60°	23269.7	19939.5	10074.5	1341.5	630.1	581.6	541.7	454.8	410.6	383.5	379.2
62.5°	23145.6	19186.8	8825.7	922.3	597.3	550.3	508.9	431.9	373.5	337.9	335.0
65°	22134.9	17794.0	6775.8	747.0	577.4	536.0	489.0	410.6	347.8	313.6	309.3
67.5°	20260.3	15290.7	3957.4	664.3	568.8	521.8	473.3	390.6	333.6	296.5	290.8
70°	17179.6	11501.5	1325.8	593.0	567.4	520.3	460.5	376.4	317.9	279.4	273.7
72.5°	12394.0	6939.7	645.8	521.8	530.3	499.0	450.5	364.9	307.9	259.5	249.5
75°	7043.8	2259.5	583.1	450.5	493.2	476.1	444.8	366.4	312.2	235.2	223.8
77.5°	2004.4	660.0	563.1	383.5	466.2	491.8	416.3	330.7	319.3	218.1	203.9
80°	677.1	587.3	543.1	297.9	376.4	406.3	360.7	290.8	322.2	198.2	183.9
82.5°	543.1	590.2	456.2	238.1	286.5	307.9	286.5	260.9	260.9	176.8	165.4
85°	434.8	547.4	289.4	189.6	213.8	236.6	202.4	195.3	182.5	148.3	144.0
87.5°	252.3	171.1	119.7	96.9	89.8	91.2	78.4	94.1	115.5	101.2	99.8
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)