

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: P510826

Luminaire Tested: **CST-CA8-480-727-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510826
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: STREETWORKS
Catalog Number: CST-CA8-480-727-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54772 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

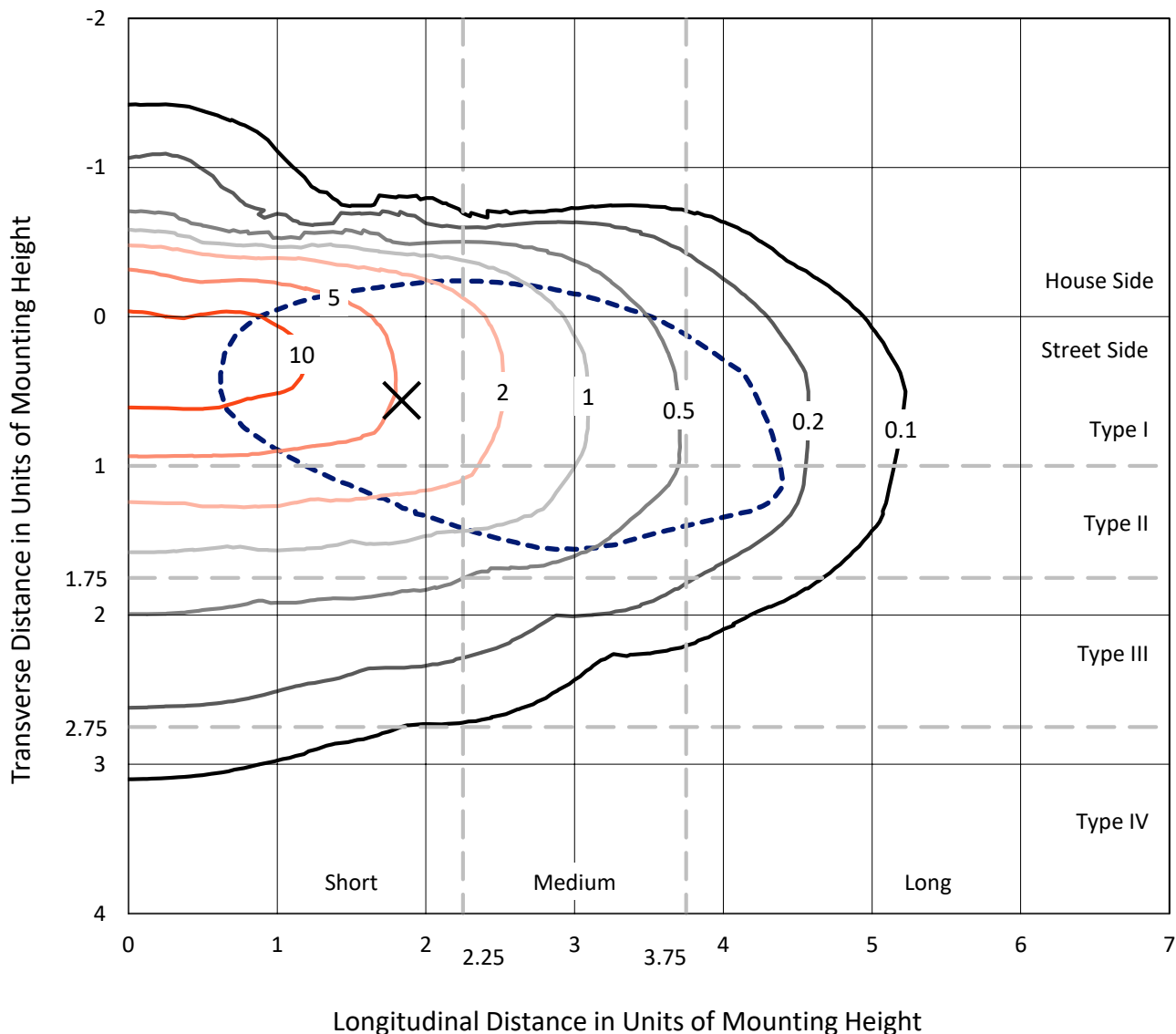
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510826
 CATALOG NUMBER: CST-CA8-480-727-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

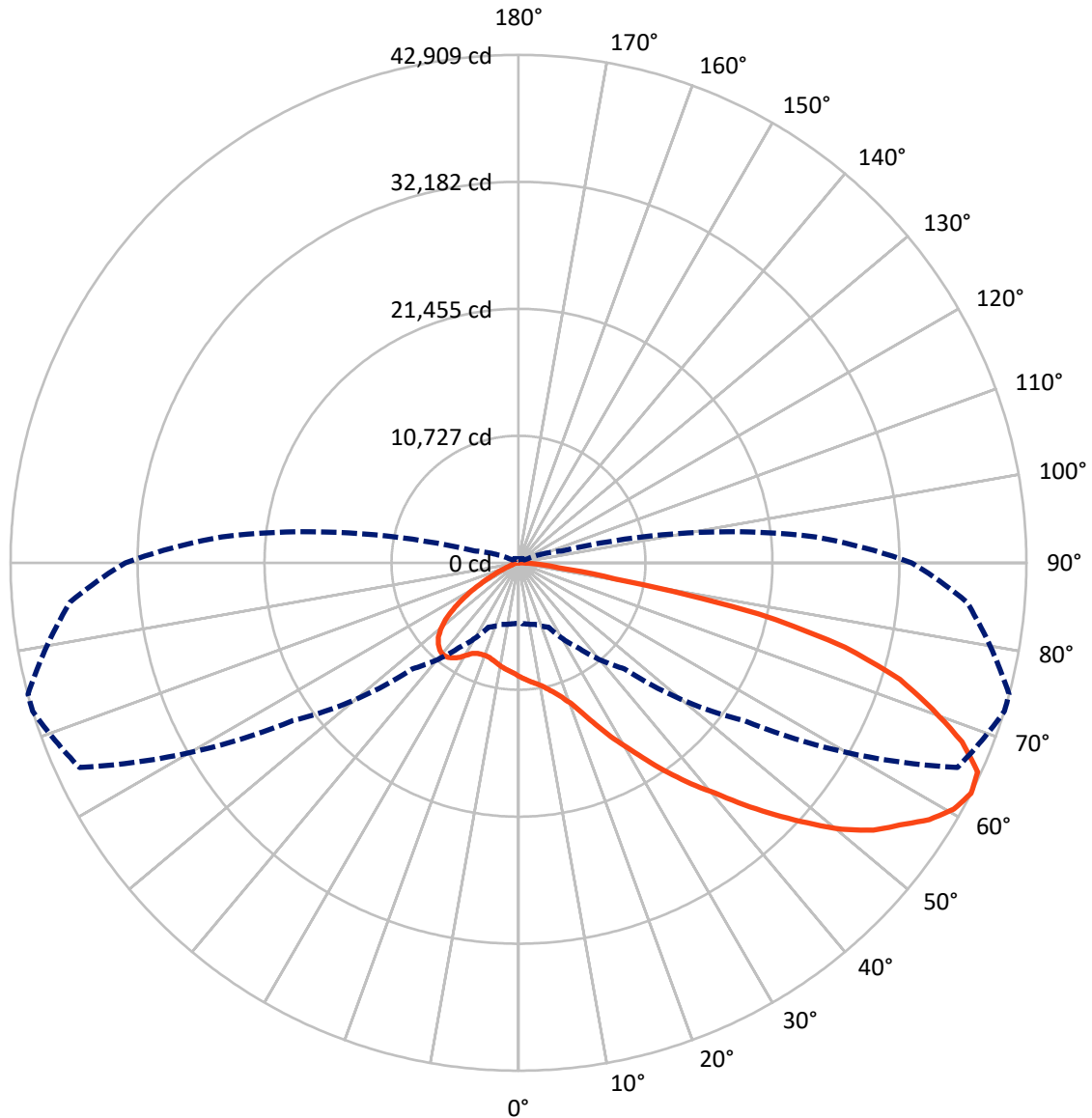
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.3 fc
 Type II - Short - N/A

REPORT NUMBER: P510826
CATALOG NUMBER: CST-CA8-480-727-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510826
 CATALOG NUMBER: CST-CA8-480-727-U-T2-HSS

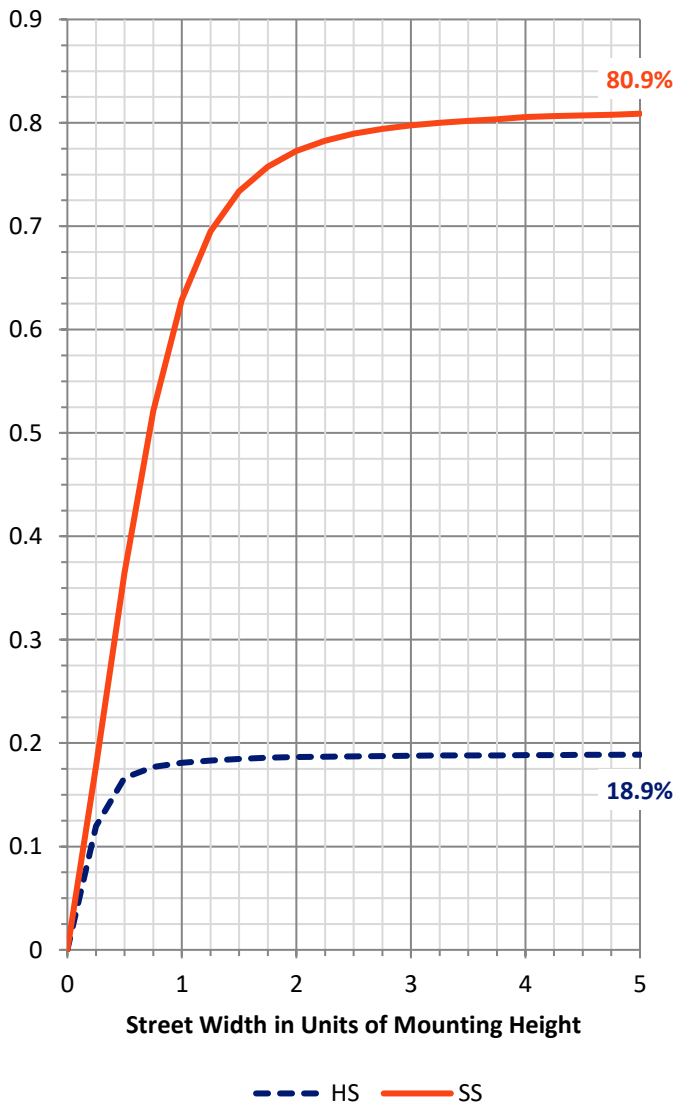
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10477.6	0.0	10477.6
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	44294.4	0.0	44294.4
	% Fixture	80.9	0.0	80.9
Total	Lumens	54772.0	0.0	54772.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	917.5	1.7
10°-20°	2759.6	5.0
20°-30°	4767.9	8.7
30°-40°	7169.8	13.1
40°-50°	9560.2	17.5
50°-60°	11259.1	20.6
60°-70°	11193.5	20.4
70°-80°	6426.5	11.7
80°-90°	717.9	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°	54772.0	100.0
0°-180°	54772.0	100.0

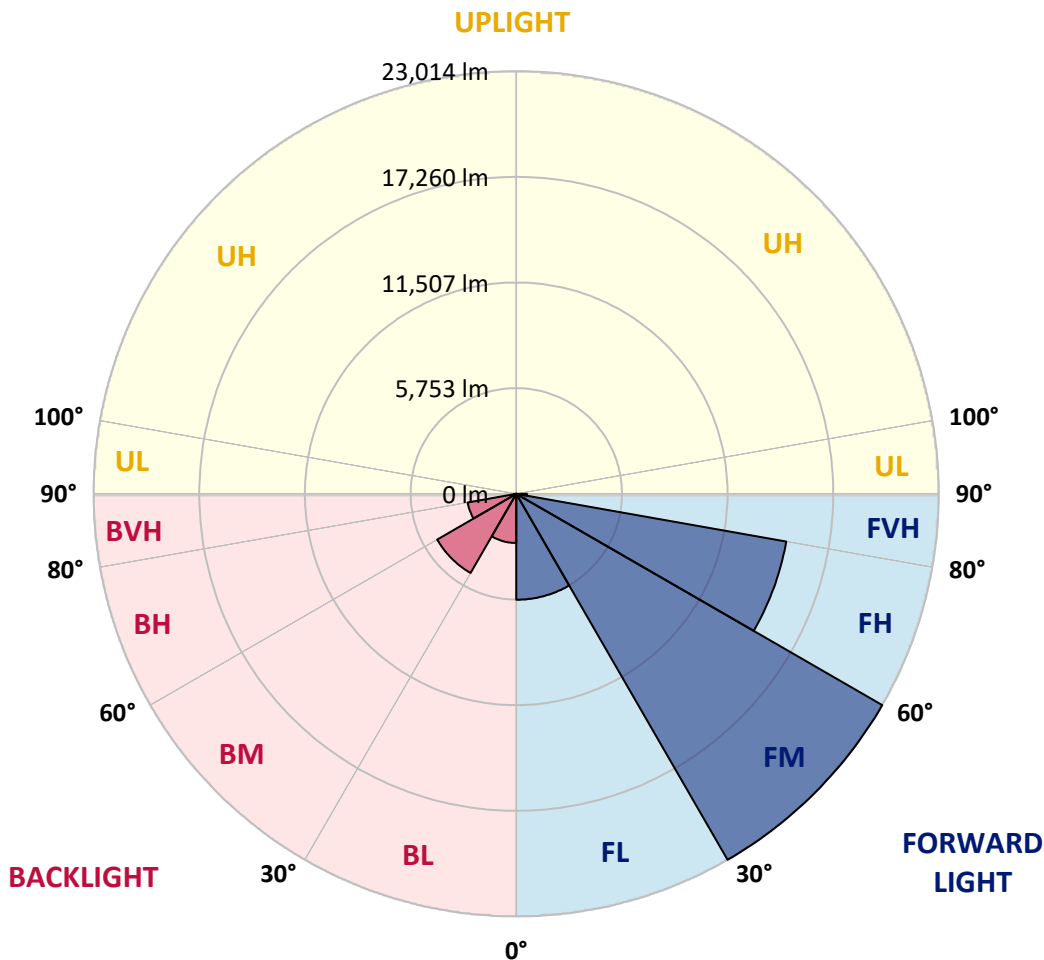


REPORT NUMBER: P510826
 CATALOG NUMBER: CST-CA8-480-727-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5767.4	10.5			
FM (30°-60°)	23013.9	42.0			
FH (60°-80°)	14930.0	27.3			G5
FVH (80°-90°)	583.1	1.1			G4/750
BL (0°-30°)	2677.5	4.9	B4/5000		
BM (30°-60°)	4975.3	9.1	B3/5000		
BH (60°-80°)	2690.0	4.9	B4/5000		G4/5000
BVH (80°-90°)	134.8	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





REPORT NUMBER: P510826

CATALOG NUMBER: CST-CA8-480-727-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8
2.5°	10277.0	10302.9	10272.1	10258.6	10243.9	10148.0	10036.1	9921.7	9829.5	9814.8	9694.3
5°	10998.7	11012.3	10961.9	10904.1	10804.5	10645.9	10445.5	10247.5	10063.1	10013.9	9793.9
7.5°	11553.2	11527.4	11515.1	11465.9	11378.6	11204.1	10900.4	10575.8	10290.6	10221.7	9887.3
10°	12073.3	12062.2	11968.8	11907.3	11768.4	11607.3	11357.7	10945.9	10543.8	10433.2	9968.5
12.5°	12636.4	12611.8	12573.7	12440.9	12327.8	12056.1	11754.9	11379.9	10932.3	10784.8	10107.4
15°	13142.9	13076.5	13055.6	12916.7	12802.4	12594.6	12292.1	11856.9	11378.6	11252.0	10371.7
17.5°	13624.9	13594.1	13547.4	13452.7	13324.9	13165.0	12922.8	12456.9	11962.6	11778.2	10820.5
20°	14034.3	13996.2	13955.6	13981.4	13953.1	13851.1	13698.6	13301.5	12697.9	12519.6	11366.3
22.5°	14319.5	14318.3	14480.6	14575.2	14629.3	14625.6	14588.8	14363.8	13756.4	13575.7	12182.7
25°	14556.8	14575.2	14780.6	15140.8	15462.9	15492.4	15753.1	15646.1	15129.7	14941.6	13410.9
27.5°	14626.9	14663.8	15036.3	15603.1	16092.4	16562.0	16944.4	17139.9	16661.6	16436.6	14731.4
30°	14677.3	14692.0	15057.2	15735.8	16767.4	17511.2	18194.8	18525.5	18113.6	17948.9	16203.0
32.5°	14322.0	14326.9	14886.3	15914.1	17262.8	18552.5	19361.5	19984.9	19876.7	19659.0	17812.4
35°	13832.6	13923.6	14565.4	15742.0	17671.0	19509.1	20610.6	21540.1	21756.5	21600.4	19420.5
37.5°	13227.7	13299.1	13986.3	15486.3	17760.8	20166.8	21581.9	23121.2	23686.8	23660.9	21361.8
40°	12483.9	12571.2	13393.7	14935.5	17716.5	20645.1	22721.6	24872.0	25590.0	25508.8	23287.2
42.5°	11604.9	11732.7	12530.6	14227.3	17393.2	20937.7	23654.8	26654.7	27946.8	27894.0	24991.2
45°	10735.6	10804.5	11532.3	13241.3	16798.1	21032.4	24532.6	29111.1	30363.9	30304.9	27044.4
47.5°	9839.4	9899.6	10659.4	12202.4	15765.4	20841.8	25227.3	31220.9	32826.6	32767.5	29084.1
50°	7754.2	7981.6	9539.4	11288.9	14588.8	20302.1	25882.6	33849.5	35403.5	35152.7	30870.5
52.5°	6634.2	6716.5	7524.3	10368.0	13414.6	19381.2	26320.3	36285.0	37523.1	37161.6	32697.5
55°	6201.4	6256.7	6652.6	8670.1	12311.8	17988.2	26835.4	38726.7	39112.8	39020.6	34187.6
57.5°	5873.1	5934.6	6217.4	7241.5	11150.0	16035.8	26674.3	40444.3	40927.5	40632.4	35769.9
60°	5408.4	5483.4	5858.4	6501.4	9829.5	14053.9	25256.8	41147.5	42246.7	41914.7	36973.5
62.5°	5115.8	5165.0	5380.1	6003.4	8735.3	12659.7	23239.2	40921.3	42909.3	42897.0	38017.3
65°	4718.7	4791.2	5021.1	5526.4	7761.6	11579.0	21336.0	39803.7	42624.1	42635.2	38232.5
67.5°	4303.1	4332.6	4573.6	4979.3	6614.5	10589.3	18873.4	37891.9	40402.5	40655.7	36743.6
70°	3784.3	3769.5	4030.2	4326.5	5405.9	8991.0	15191.2	34491.2	37119.8	37224.3	33732.7
72.5°	2977.7	2991.3	3063.8	3269.1	4103.9	7075.5	11023.3	29140.6	33688.4	33874.0	29884.5
75°	2001.6	2023.7	2361.8	2562.2	2951.9	5085.0	6931.7	19670.1	28479.2	29002.9	24458.9
77.5°	1527.0	1540.5	1638.9	1857.7	2135.6	3624.4	3757.2	10718.4	20733.6	21976.6	19134.1
80°	1081.9	1086.8	989.7	880.3	1137.2	2458.9	2219.2	4565.0	8262.0	9763.1	11238.5
82.5°	484.4	477.0	561.9	467.2	655.3	951.6	1047.5	2215.5	3431.4	3688.4	4015.4
85°	225.0	252.0	288.9	242.2	389.7	367.6	408.2	944.2	1608.1	1775.3	1765.5
87.5°	55.3	60.2	76.2	97.1	141.4	125.4	122.9	277.9	359.0	357.8	549.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510826
 CATALOG NUMBER: CST-CA8-480-727-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8	9605.8
2.5°	9611.9	9548.0	9396.8	9250.4	9111.5	9019.3	8916.0	8807.8	8742.7	8711.9	8778.3
5°	9659.9	9538.1	9249.2	8959.1	8713.2	8502.9	8355.4	8230.0	8162.4	8168.5	8172.2
7.5°	9700.4	9529.5	9125.0	8715.6	8332.0	8071.4	7878.4	7743.1	7665.7	7606.7	7650.9
10°	9736.1	9493.9	8980.0	8434.1	8017.3	7631.3	7369.4	7205.9	7063.2	6983.3	7046.0
12.5°	9774.2	9480.4	8817.7	8182.0	7642.3	7210.8	6851.8	6689.5	6549.3	6489.1	6527.2
15°	9940.2	9532.0	8666.5	7885.7	7272.2	6714.1	6326.8	6127.6	6017.0	5944.4	5960.4
17.5°	10225.4	9668.5	8569.3	7575.9	6859.2	6269.0	5767.4	5535.0	5351.8	5300.2	5286.7
20°	10631.1	9927.9	8569.3	7314.1	6390.7	5774.8	5196.9	4804.7	4519.5	4412.5	4494.9
22.5°	11312.3	10369.3	8654.2	7076.8	5987.5	5262.1	4573.6	3974.8	3590.0	3433.9	3524.9
25°	12265.1	11051.6	8791.9	6869.0	5619.9	4671.9	3783.0	3094.5	2670.4	2484.7	2482.3
27.5°	13509.3	12095.4	9069.7	6699.3	5179.7	3908.4	2958.1	2295.4	1897.1	1785.2	1801.2
30°	14888.7	13226.5	9594.7	6453.4	4644.9	3054.0	2154.0	1686.8	1406.5	1259.0	1261.4
32.5°	16219.0	14398.2	10218.0	6293.6	3950.3	2302.8	1535.6	1203.6	1029.1	941.8	955.3
35°	17645.2	15408.8	10681.5	6025.6	3135.1	1664.7	1085.6	902.4	829.9	784.4	786.9
37.5°	19185.7	16520.2	11062.7	5666.6	2370.4	1143.4	801.6	773.3	742.6	684.8	679.9
40°	20795.1	17807.5	11290.1	5086.3	1647.5	791.8	681.1	713.1	695.9	620.9	614.7
42.5°	22159.8	18800.9	11346.7	4317.9	1065.9	641.8	617.2	666.4	670.1	593.8	584.0
45°	23470.4	19686.1	11236.0	3306.0	738.9	603.7	577.8	645.5	650.4	581.5	565.6
47.5°	24937.1	20897.1	11035.6	2205.6	611.0	570.5	564.3	611.0	628.3	571.7	552.0
50°	26718.6	21881.9	10441.8	1354.9	576.6	549.6	549.6	577.8	601.2	552.0	542.2
52.5°	28545.6	22740.1	9562.7	929.5	555.7	527.4	543.4	555.7	564.3	520.1	528.7
55°	29854.9	23501.1	8252.1	747.5	543.4	512.7	550.8	526.2	513.9	475.8	467.2
57.5°	31308.2	24406.0	6912.0	662.7	527.4	521.3	526.2	479.5	445.1	405.7	397.1
60°	32322.5	24892.9	5271.9	623.3	509.0	512.7	485.6	422.9	360.2	332.0	325.8
62.5°	33207.7	25170.7	3864.2	572.9	491.8	490.6	440.1	361.5	296.3	265.6	260.6
65°	33073.7	24736.7	2504.4	532.4	478.3	462.3	394.7	309.8	247.1	223.8	221.3
67.5°	31599.6	22816.3	1577.4	490.6	454.9	426.6	354.1	276.6	227.4	200.4	197.9
70°	28505.0	20164.4	965.1	436.5	404.5	377.4	313.5	259.4	215.2	183.2	177.0
72.5°	24227.7	17270.2	682.3	384.8	352.9	320.9	265.6	247.1	205.3	164.7	159.8
75°	19904.9	12721.2	571.7	335.6	301.2	258.2	226.2	229.9	193.0	150.0	146.3
77.5°	14017.1	7931.2	532.4	274.2	237.3	205.3	195.5	210.2	177.0	137.7	134.0
80°	8180.8	4454.3	440.1	216.4	178.3	158.6	163.5	178.3	154.9	124.2	119.3
82.5°	3302.3	1763.0	309.8	168.4	130.3	126.6	134.0	145.1	127.9	104.5	102.0
85°	1179.1	550.8	175.8	110.7	83.6	87.3	86.1	103.3	92.2	76.2	75.0
87.5°	309.8	109.4	78.7	44.3	35.7	35.7	33.2	47.9	44.3	34.4	38.1
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)