

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: P510488

Luminaire Tested: **CST-CA10-310-740-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510488
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-CA10-310-740-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45188 lumens
Efficiency: N/A
Efficacy: 144.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

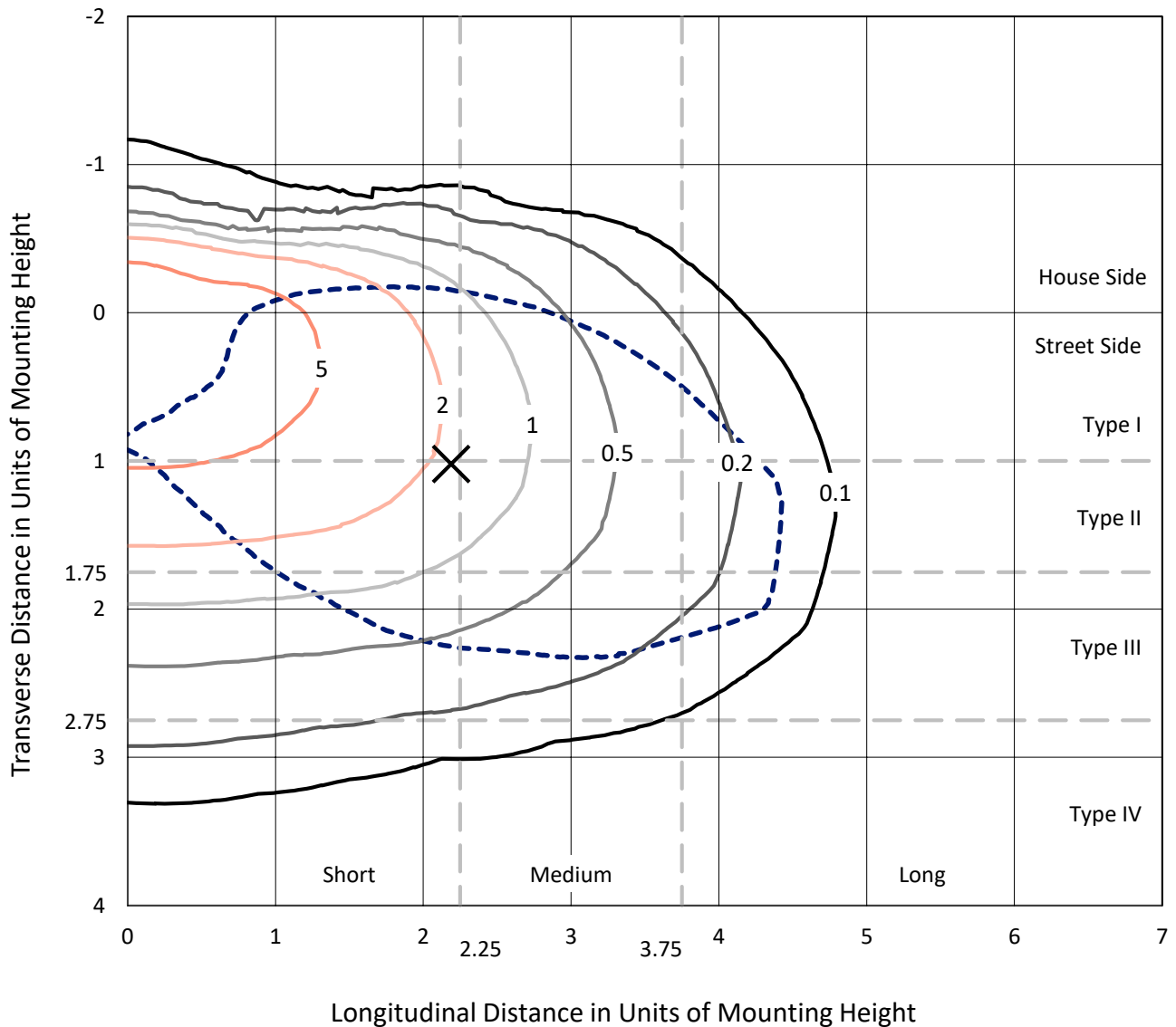
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510488
 CATALOG NUMBER: CST-CA10-310-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

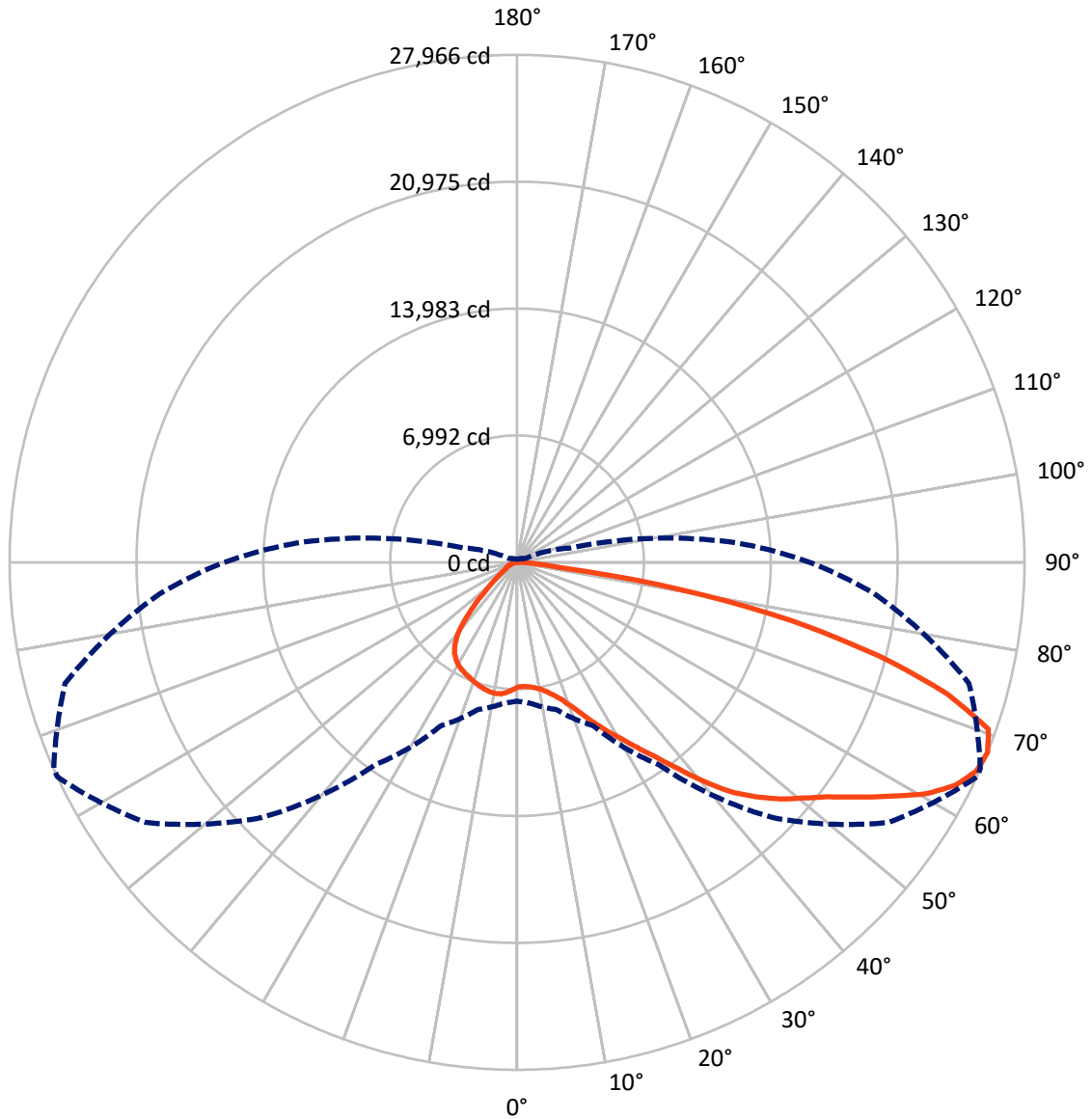
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9 fc
 Type III - Short - N/A

REPORT NUMBER: P510488
CATALOG NUMBER: CST-CA10-310-740-U-T3-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510488
 CATALOG NUMBER: CST-CA10-310-740-U-T3-HSS

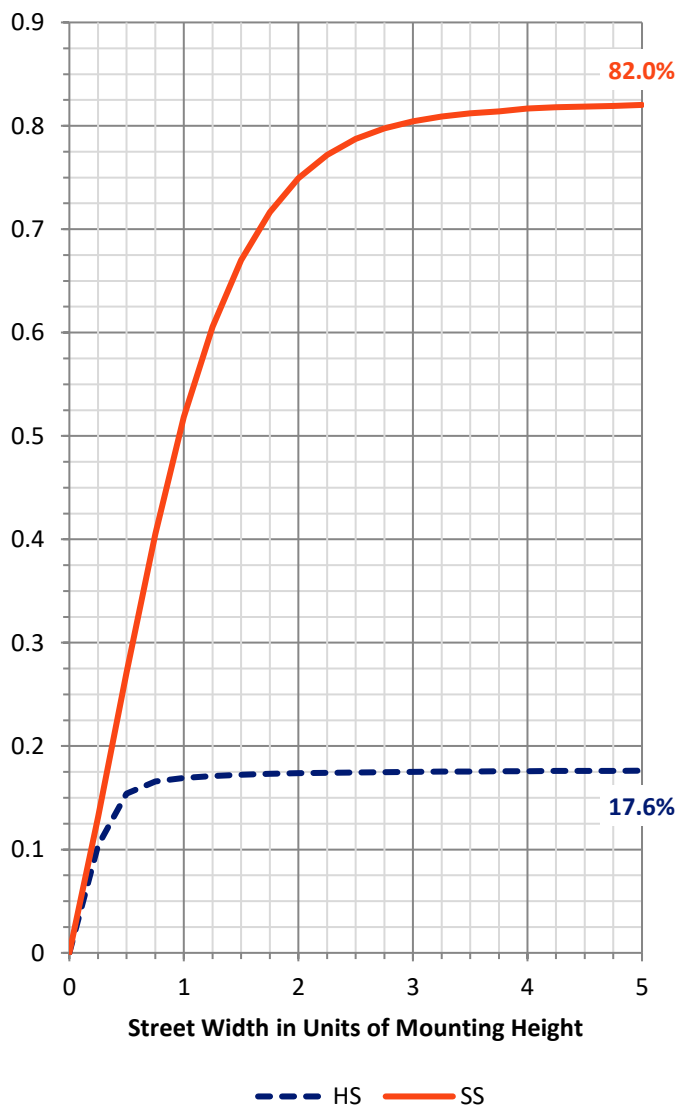
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8076.2	0.0	8076.2
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	37111.8	0.0	37111.8
	% Fixture	82.1	0.0	82.1
Total	Lumens	45188.0	0.0	45188.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	679.3	1.5
10°-20°	2097.4	4.6
20°-30°	3638.5	8.1
30°-40°	5488.6	12.1
40°-50°	7610.3	16.8
50°-60°	9394.0	20.8
60°-70°	10009.1	22.1
70°-80°	5727.4	12.7
80°-90°	543.4	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°	45188.0	100.0
0°-180°	45188.0	100.0

Coefficient of Utilization



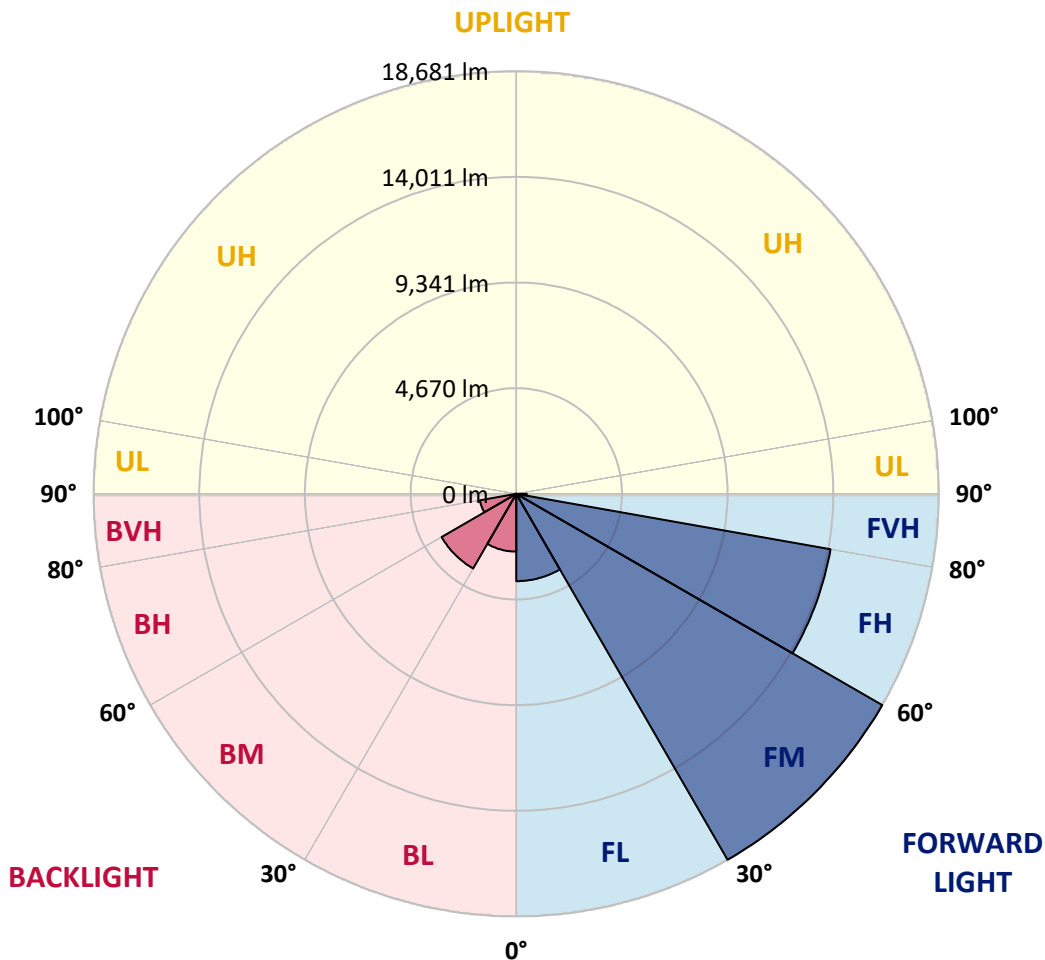
REPORT NUMBER: P510488
 CATALOG NUMBER: CST-CA10-310-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3859.7	8.5			
FM (30°-60°)	18681.4	41.3			
FH (60°-80°)	14106.4	31.2			G5
FVH (80°-90°)	464.3	1.0			G3/500
BL (0°-30°)	2555.5	5.7	B4/5000		
BM (30°-60°)	3811.5	8.4	B3/5000		
BH (60°-80°)	1630.0	3.6	B3/2500		G3/2500
BVH (80°-90°)	79.1	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Short





REPORT NUMBER: P510488

CATALOG NUMBER: CST-CA10-310-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6
2.5°	6800.3	6791.4	6783.5	6797.3	6805.2	6818.1	6836.9	6849.8	6853.7	6865.6	6880.5
5°	6909.2	6908.2	6897.3	6891.4	6874.5	6868.6	6872.6	6888.4	6889.4	6904.2	6950.7
7.5°	7123.0	7121.0	7094.3	7082.4	7046.8	7007.2	6977.5	6980.4	6979.5	6994.3	7056.7
10°	7445.7	7429.8	7392.2	7355.6	7286.3	7212.1	7157.6	7108.1	7108.1	7129.9	7199.2
12.5°	7809.9	7831.7	7780.2	7724.8	7609.0	7475.4	7380.3	7324.9	7319.0	7329.9	7379.4
15°	8262.3	8262.3	8227.7	8148.5	8046.5	7860.4	7664.4	7594.2	7584.3	7607.0	7604.1
17.5°	8772.1	8786.9	8721.6	8682.0	8525.6	8319.7	8074.2	7952.5	7952.5	7937.6	7869.3
20°	9422.4	9341.2	9348.2	9282.8	9168.0	8869.1	8619.6	8442.5	8440.5	8410.8	8218.8
22.5°	10129.2	10084.6	10046.0	9988.6	9830.2	9563.0	9216.5	9041.3	9037.4	8964.1	8679.0
25°	10826.0	10859.7	10817.1	10712.2	10596.4	10305.4	9923.3	9751.0	9750.1	9628.3	9224.4
27.5°	11542.7	11579.3	11565.4	11470.4	11316.0	11088.3	10727.0	10502.3	10488.5	10409.3	9901.5
30°	12334.6	12301.9	12344.5	12303.9	12226.7	11855.5	11528.8	11267.5	11301.2	11277.4	10670.6
32.5°	12910.7	12931.4	13071.0	13075.0	12993.8	12718.6	12319.7	12159.4	12212.8	12181.1	11615.9
35°	13431.3	13465.0	13645.1	13822.3	13881.7	13580.8	13174.9	13165.0	13234.3	13427.4	12918.6
37.5°	13878.7	13902.5	14154.9	14385.5	14577.6	14371.7	14076.7	14428.1	14530.1	14925.0	14262.8
40°	14147.0	14177.7	14504.3	14829.0	15171.5	15098.2	15070.5	15902.0	15998.0	16345.4	15243.7
42.5°	13995.5	14055.9	14600.3	15194.2	15698.1	15844.6	16223.7	17292.7	17402.6	17432.3	16207.9
45°	13725.3	13800.5	14409.3	15370.4	16192.0	16662.2	17383.8	18426.1	18486.5	18402.4	17006.7
47.5°	13434.3	13514.5	14194.5	15318.0	16588.9	17613.4	18420.2	19493.2	19535.7	19277.4	17811.4
50°	13103.7	13177.9	13909.4	15195.2	16887.9	18511.2	19485.3	20415.7	20575.1	20064.3	18437.0
52.5°	12701.8	12781.0	13557.0	15003.2	17150.2	19177.4	20424.6	21458.0	21468.9	21048.2	19141.8
55°	12181.1	12318.7	13114.6	14670.6	17287.8	19749.6	21243.2	22836.9	22907.2	22500.4	19731.7
57.5°	11602.1	11721.8	12582.0	14227.2	17164.1	20184.1	22559.7	24315.7	24306.8	23490.2	20247.4
60°	10836.9	10922.0	11888.1	13647.1	16765.1	20709.7	23930.7	25900.5	25884.7	24460.3	20579.0
62.5°	9855.0	9940.1	10848.8	12737.4	16179.2	21062.1	24861.2	27087.3	27041.8	25166.0	20681.0
65°	8716.6	8869.1	9658.0	11556.5	15142.8	20830.5	25310.5	27786.2	27712.9	25704.5	20437.5
67.5°	7649.6	7779.3	8403.9	9931.2	13613.5	19891.1	24993.8	27966.3	27944.5	25782.7	19749.6
70°	6139.1	6186.6	6758.7	8066.3	11326.9	17879.7	23899.0	27550.6	27560.5	25062.1	18367.7
72.5°	4201.9	4317.7	4572.1	5604.5	8242.5	14219.2	20598.8	24794.8	24796.8	22472.6	16003.0
75°	2259.8	2439.0	2736.0	3247.7	4607.8	9124.5	16542.4	20574.1	20612.7	18736.9	12719.6
77.5°	1120.5	1184.9	1357.1	1737.2	2112.3	4304.9	10638.9	15443.7	15535.7	14382.6	8675.1
80°	512.7	523.6	536.5	533.5	808.7	1888.6	4567.2	9274.9	9302.6	8554.3	3960.4
82.5°	400.9	398.9	404.8	368.2	370.2	728.5	1580.8	2429.1	2590.4	2039.1	1256.1
85°	242.5	241.5	260.3	201.9	248.5	394.0	797.8	969.1	980.9	797.8	650.3
87.5°	92.1	89.1	82.2	72.3	83.1	110.9	276.2	356.3	348.4	247.5	224.7
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: P510488

CATALOG NUMBER: CST-CA10-310-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6	6866.6
2.5°	6893.3	6925.0	6983.4	7028.0	7042.8	7090.3	7135.9	7143.8	7176.4	7189.3	7231.9
5°	6979.5	7032.9	7124.0	7184.4	7211.1	7290.3	7341.7	7367.5	7358.6	7363.5	7411.0
7.5°	7105.2	7155.6	7228.9	7302.1	7315.0	7328.9	7323.9	7320.0	7285.3	7255.6	7300.2
10°	7220.0	7267.5	7313.0	7323.9	7258.6	7222.0	7156.6	7106.2	7038.8	7008.2	7043.8
12.5°	7381.3	7391.2	7346.7	7287.3	7146.7	7016.1	6910.2	6818.1	6735.0	6677.5	6725.1
15°	7551.6	7513.0	7383.3	7210.1	6992.3	6805.2	6632.0	6478.6	6341.0	6307.3	6320.2
17.5°	7777.3	7672.4	7411.0	7120.0	6781.5	6490.5	6267.8	6073.7	5893.6	5818.4	5811.4
20°	8052.5	7883.2	7467.5	7006.2	6532.0	6145.0	5800.5	5510.5	5262.1	5058.1	5063.1
22.5°	8410.8	8165.3	7552.6	6887.4	6255.9	5740.2	5239.3	4746.3	4337.5	4161.3	4117.8
25°	8883.9	8517.7	7673.3	6779.5	5947.0	5225.4	4517.7	3821.8	3389.3	3218.0	3199.2
27.5°	9472.9	8990.8	7857.5	6659.7	5616.4	4614.7	3597.1	2915.1	2518.2	2338.0	2277.7
30°	10142.0	9573.9	8046.5	6535.0	5216.5	3829.7	2742.9	2074.7	1667.9	1506.6	1485.8
32.5°	11008.2	10312.3	8327.6	6339.0	4632.5	3010.1	1913.4	1294.7	1018.6	949.3	929.5
35°	12238.5	11311.1	8675.1	6091.6	3882.2	2102.4	1185.8	758.2	610.7	576.1	569.2
37.5°	13385.8	12291.0	9025.5	5680.8	2947.8	1312.5	678.0	486.0	453.4	454.3	456.3
40°	14295.5	12961.1	9308.6	5140.3	1939.1	745.4	471.2	403.9	404.8	401.9	399.9
42.5°	15105.2	13495.7	9436.3	4341.5	1123.5	498.9	408.8	372.2	363.3	366.2	364.3
45°	15775.3	14041.1	9188.8	3443.7	662.2	447.4	386.0	345.5	335.6	351.4	353.4
47.5°	16480.1	14558.8	8809.7	2594.4	537.5	425.6	365.3	325.7	320.7	340.5	342.5
50°	17073.0	14933.9	8163.3	1955.0	512.7	401.9	346.4	305.9	304.9	322.7	322.7
52.5°	17568.9	15160.6	7396.2	1509.5	495.9	381.1	327.6	287.1	287.1	293.0	294.0
55°	17918.3	15115.1	6938.9	1187.8	478.1	361.3	307.8	269.2	257.4	253.4	255.4
57.5°	17981.7	14994.3	6408.3	926.5	457.3	342.5	290.0	248.5	226.7	223.7	222.7
60°	17941.1	14729.0	5802.5	774.1	433.6	324.7	272.2	226.7	204.9	198.0	200.0
62.5°	17771.8	14258.8	5102.7	679.0	409.8	310.8	252.4	211.8	192.0	183.1	183.1
65°	17261.1	13585.7	4063.3	594.9	380.1	296.0	236.6	205.9	184.1	174.2	172.2
67.5°	16138.6	12189.1	3053.7	521.7	351.4	280.1	234.6	204.9	180.2	166.3	164.3
70°	14633.0	10470.7	2084.6	458.3	319.7	265.3	233.6	205.9	176.2	158.4	156.4
72.5°	12215.8	8254.4	1200.7	398.9	288.0	251.4	229.6	206.9	169.3	147.5	144.5
75°	9178.9	5789.7	704.8	342.5	257.4	230.6	218.8	200.9	158.4	134.6	131.7
77.5°	5520.4	2703.3	530.6	284.1	220.7	202.9	195.0	184.1	144.5	124.7	121.8
80°	2025.2	1026.5	416.7	227.7	175.2	176.2	168.3	161.3	131.7	114.8	112.8
82.5°	882.9	627.6	307.8	173.2	137.6	157.4	138.6	132.6	112.8	102.9	99.0
85°	535.5	374.2	198.0	117.8	95.0	106.9	97.0	102.0	87.1	81.2	78.2
87.5°	177.2	111.9	88.1	57.4	47.5	44.5	43.6	52.5	49.5	45.5	45.5
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)