

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: P510736

Luminaire Tested: **CST-CA8-230-750-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510736
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-CA8-230-750-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33223 lumens
Efficiency: N/A
Efficacy: 145.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

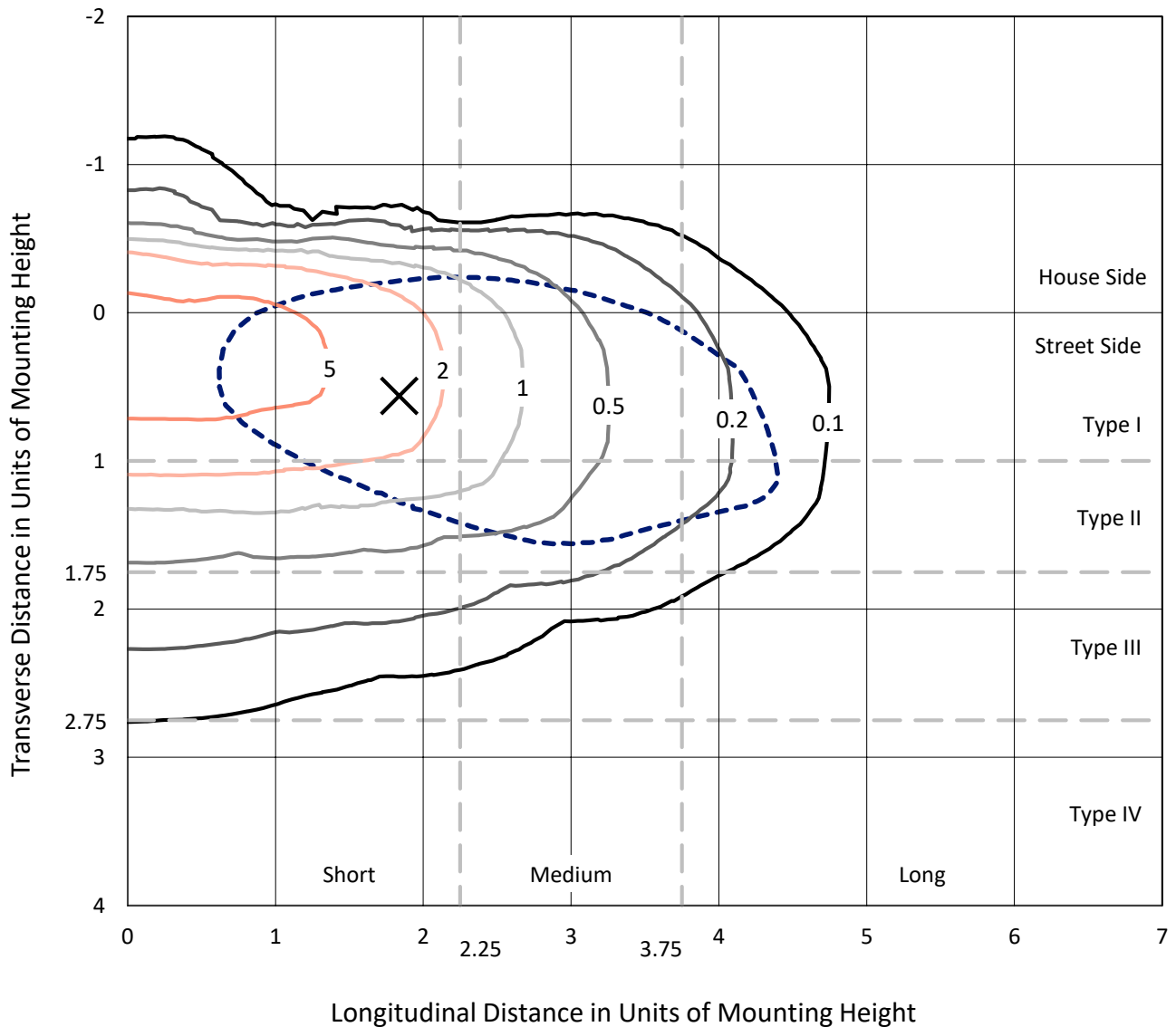
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

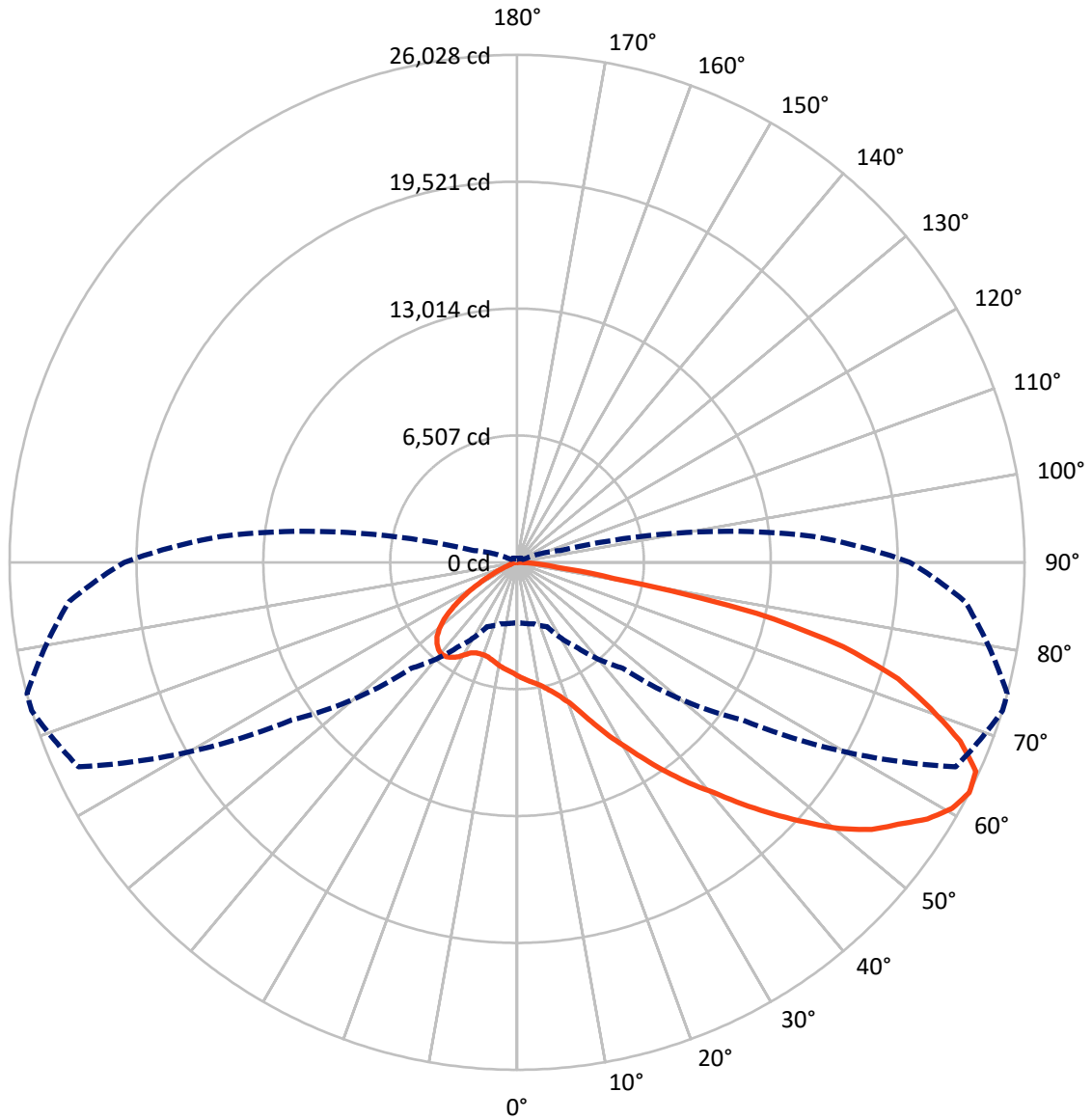
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.1 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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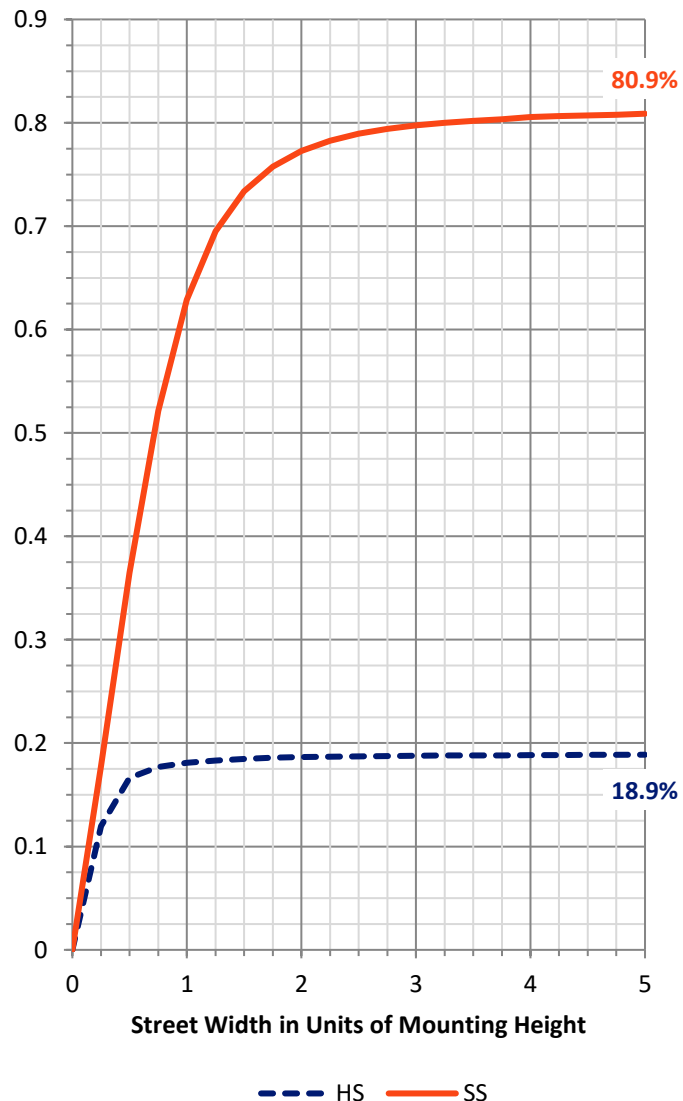
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6355.4	0.0	6355.4
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	26867.6	0.0	26867.6
	% Fixture	80.9	0.0	80.9
Total	Lumens	33223.0	0.0	33223.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	556.5	1.7
10°-20°	1673.9	5.0
20°-30°	2892.1	8.7
30°-40°	4349.0	13.1
40°-50°	5798.9	17.5
50°-60°	6829.4	20.6
60°-70°	6789.6	20.4
70°-80°	3898.1	11.7
80°-90°	435.5	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°	33223.0	100.0
0°-180°	33223.0	100.0

Coefficient of Utilization

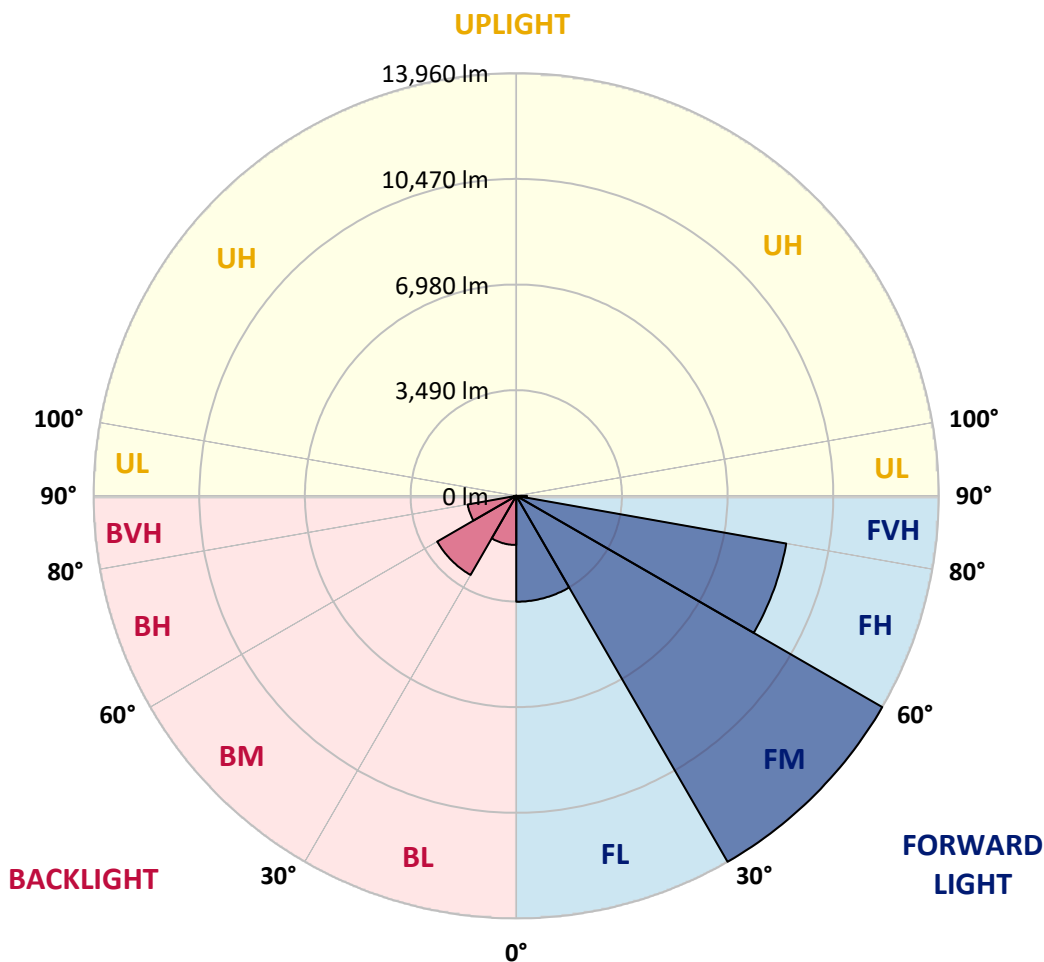


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3498.3	10.5			
FM (30°-60°)	13959.5	42.0			
FH (60°-80°)	9056.1	27.3			G4/12000
FVH (80°-90°)	353.7	1.1			G3/500
BL (0°-30°)	1624.1	4.9	B3/2500		
BM (30°-60°)	3017.8	9.1	B3/5000		
BH (60°-80°)	1631.7	4.9	B3/2500		G3/2500
BVH (80°-90°)	81.8	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6
2.5°	6233.7	6249.4	6230.8	6222.6	6213.6	6155.4	6087.6	6018.2	5962.3	5953.3	5880.3
5°	6671.5	6679.7	6649.1	6614.1	6553.7	6457.5	6335.9	6215.8	6104.0	6074.1	5940.7
7.5°	7007.8	6992.2	6984.7	6954.9	6901.9	6796.0	6611.8	6415.0	6241.9	6200.2	5997.3
10°	7323.3	7316.6	7259.9	7222.6	7138.3	7040.6	6889.3	6639.4	6395.6	6328.4	6046.6
12.5°	7664.8	7649.9	7626.8	7546.3	7477.7	7312.8	7130.1	6902.7	6631.2	6541.7	6130.8
15°	7972.1	7931.8	7919.1	7834.9	7765.5	7639.5	7456.0	7192.0	6901.9	6825.1	6291.2
17.5°	8264.4	8245.8	8217.4	8160.0	8082.5	7985.5	7838.6	7556.0	7256.2	7144.3	6563.4
20°	8512.8	8489.6	8465.0	8480.7	8463.5	8401.6	8309.2	8068.3	7702.1	7594.0	6894.5
22.5°	8685.8	8685.0	8783.5	8840.9	8873.7	8871.5	8849.1	8712.6	8344.2	8234.6	7389.7
25°	8829.7	8840.9	8965.4	9183.9	9379.3	9397.2	9555.3	9490.4	9177.2	9063.1	8134.7
27.5°	8872.2	8894.6	9120.5	9464.3	9761.1	10046.0	10277.9	10396.5	10106.4	9970.0	8935.6
30°	8902.8	8911.7	9133.2	9544.9	10170.6	10621.7	11036.4	11237.0	10987.2	10887.2	9828.3
32.5°	8687.3	8690.2	9029.6	9653.0	10471.1	11253.4	11744.1	12122.2	12056.6	11924.6	10804.5
35°	8390.5	8445.6	8834.9	9548.6	10718.7	11833.6	12501.8	13065.6	13196.8	13102.1	11779.9
37.5°	8023.5	8066.8	8483.7	9393.5	10773.1	12232.6	13090.9	14024.6	14367.7	14352.0	12957.4
40°	7572.4	7625.3	8124.2	9059.4	10746.3	12522.7	13782.2	15086.6	15522.1	15472.9	14125.3
42.5°	7039.1	7116.7	7600.7	8629.8	10550.1	12700.2	14348.3	16167.9	16951.7	16919.6	15158.9
45°	6511.9	6553.7	6995.2	8031.7	10189.2	12757.6	14880.7	17657.9	18417.8	18382.0	16404.3
47.5°	5968.3	6004.8	6465.7	7401.6	9562.8	12642.0	15302.1	18937.6	19911.6	19875.8	17641.5
50°	4703.5	4841.4	5786.3	6847.5	8849.1	12314.6	15699.6	20532.0	21474.7	21322.5	18725.1
52.5°	4024.1	4074.0	4564.0	6288.9	8136.9	11756.0	15965.1	22009.4	22760.3	22541.1	19833.3
55°	3761.6	3795.1	4035.3	5259.0	7468.0	10911.1	16277.5	23490.4	23724.6	23668.7	20737.1
57.5°	3562.5	3599.7	3771.3	4392.5	6763.2	9726.8	16179.8	24532.2	24825.3	24646.3	21696.9
60°	3280.6	3326.1	3553.5	3943.5	5962.3	8524.7	15320.0	24958.8	25625.5	25424.2	22427.0
62.5°	3103.1	3132.9	3263.4	3641.5	5298.6	7679.0	14096.2	24821.6	26027.5	26020.0	23060.1
65°	2862.2	2906.2	3045.6	3352.2	4707.9	7023.5	12941.8	24143.7	25854.5	25861.2	23190.6
67.5°	2610.1	2628.0	2774.2	3020.3	4012.1	6423.2	11448.0	22984.1	24506.9	24660.5	22287.5
70°	2295.4	2286.5	2444.6	2624.3	3279.1	5453.7	9214.5	20921.3	22515.7	22579.1	20461.2
72.5°	1806.2	1814.4	1858.4	1983.0	2489.3	4291.8	6686.4	17675.8	20434.3	20546.9	18127.0
75°	1214.1	1227.5	1432.6	1554.1	1790.5	3084.4	4204.5	11931.3	17274.6	17592.3	14836.0
77.5°	926.2	934.4	994.1	1126.8	1295.4	2198.5	2279.0	6501.5	12576.4	13330.3	11606.1
80°	656.3	659.2	600.3	534.0	689.8	1491.5	1346.1	2769.0	5011.5	5922.0	6816.9
82.5°	293.8	289.4	340.8	283.4	397.5	577.2	635.4	1343.8	2081.4	2237.3	2435.6
85°	136.5	152.9	175.3	146.9	236.4	223.0	247.6	572.7	975.4	1076.9	1070.9
87.5°	33.6	36.5	46.2	58.9	85.8	76.1	74.6	168.5	217.8	217.0	333.4
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°	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6	5826.6
2.5°	5830.3	5791.5	5699.8	5611.0	5526.8	5470.8	5408.2	5342.6	5303.0	5284.4	5324.7
5°	5859.4	5785.5	5610.3	5434.3	5285.1	5157.6	5068.1	4992.1	4951.0	4954.8	4957.0
7.5°	5884.0	5780.3	5535.0	5286.6	5054.0	4895.9	4778.8	4696.7	4649.8	4614.0	4640.8
10°	5905.6	5758.7	5447.0	5115.9	4863.0	4628.9	4470.0	4370.9	4284.3	4235.9	4273.9
12.5°	5928.7	5750.5	5348.5	4963.0	4635.6	4373.8	4156.1	4057.6	3972.6	3936.1	3959.2
15°	6029.4	5781.8	5256.8	4783.3	4411.1	4072.5	3837.6	3716.8	3649.7	3605.7	3615.4
17.5°	6202.4	5864.6	5197.9	4595.3	4160.5	3802.6	3498.3	3357.4	3246.3	3214.9	3206.7
20°	6448.5	6021.9	5197.9	4436.5	3876.4	3502.8	3152.3	2914.4	2741.4	2676.5	2726.5
22.5°	6861.7	6289.7	5249.3	4292.5	3631.8	3191.8	2774.2	2411.0	2177.6	2082.9	2138.1
25°	7439.6	6703.6	5332.9	4166.5	3408.8	2833.9	2294.7	1877.1	1619.8	1507.2	1505.7
27.5°	8194.3	7336.7	5501.4	4063.6	3141.9	2370.7	1794.3	1392.3	1150.7	1082.8	1092.5
30°	9031.1	8022.8	5819.8	3914.5	2817.4	1852.4	1306.6	1023.2	853.1	763.6	765.1
32.5°	9838.0	8733.5	6197.9	3817.5	2396.1	1396.8	931.4	730.1	624.2	571.2	579.4
35°	10703.0	9346.5	6479.1	3654.9	1901.7	1009.7	658.5	547.4	503.4	475.8	477.3
37.5°	11637.5	10020.7	6710.3	3437.2	1437.8	693.5	486.2	469.1	450.4	415.4	412.4
40°	12613.6	10801.5	6848.2	3085.2	999.3	480.3	413.1	432.5	422.1	376.6	372.9
42.5°	13441.4	11404.0	6882.5	2619.1	646.6	389.3	374.4	404.2	406.4	360.2	354.2
45°	14236.4	11941.0	6815.4	2005.3	448.2	366.2	350.5	391.5	394.5	352.7	343.0
47.5°	15126.1	12675.5	6693.9	1337.9	370.6	346.0	342.3	370.6	381.1	346.8	334.8
50°	16206.7	13272.9	6333.7	821.8	349.8	333.4	333.4	350.5	364.7	334.8	328.9
52.5°	17314.9	13793.4	5800.5	563.8	337.1	319.9	329.6	337.1	342.3	315.5	320.7
55°	18109.1	14255.0	5005.5	453.4	329.6	311.0	334.1	319.2	311.7	288.6	283.4
57.5°	18990.6	14803.9	4192.6	402.0	319.9	316.2	319.2	290.8	270.0	246.1	240.9
60°	19605.8	15099.2	3197.8	378.1	308.7	311.0	294.6	256.5	218.5	201.4	197.6
62.5°	20142.8	15267.8	2343.9	347.5	298.3	297.6	267.0	219.3	179.7	161.1	158.1
65°	20061.5	15004.5	1519.1	322.9	290.1	280.4	239.4	187.9	149.9	135.7	134.2
67.5°	19167.3	13839.7	956.8	297.6	275.9	258.8	214.8	167.8	138.0	121.6	120.1
70°	17290.3	12231.1	585.4	264.7	245.4	228.9	190.2	157.4	130.5	111.1	107.4
72.5°	14695.8	10475.6	413.9	233.4	214.0	194.6	161.1	149.9	124.5	99.9	96.9
75°	12073.7	7716.3	346.8	203.6	182.7	156.6	137.2	139.5	117.1	91.0	88.7
77.5°	8502.3	4810.8	322.9	166.3	143.9	124.5	118.6	127.5	107.4	83.5	81.3
80°	4962.2	2701.9	267.0	131.3	108.1	96.2	99.2	108.1	94.0	75.3	72.3
82.5°	2003.1	1069.4	187.9	102.2	79.0	76.8	81.3	88.0	77.6	63.4	61.9
85°	715.2	334.1	106.6	67.1	50.7	52.9	52.2	62.6	55.9	46.2	45.5
87.5°	187.9	66.4	47.7	26.8	21.6	21.6	20.1	29.1	26.8	20.9	23.1
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)