

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: P721833

Luminaire Tested: **CST-CA8-400-722-U-T4**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721833
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-722-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48843 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

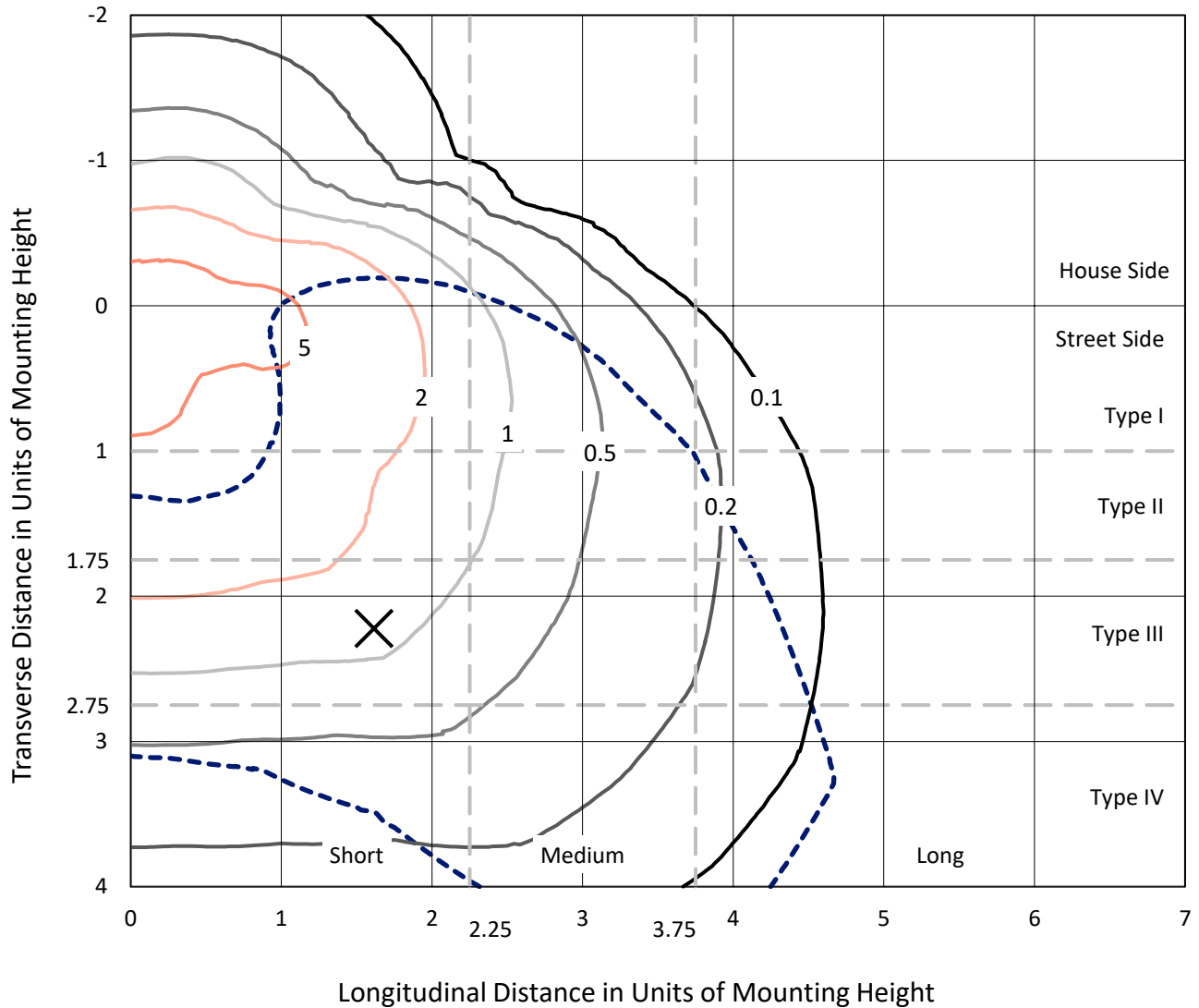
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

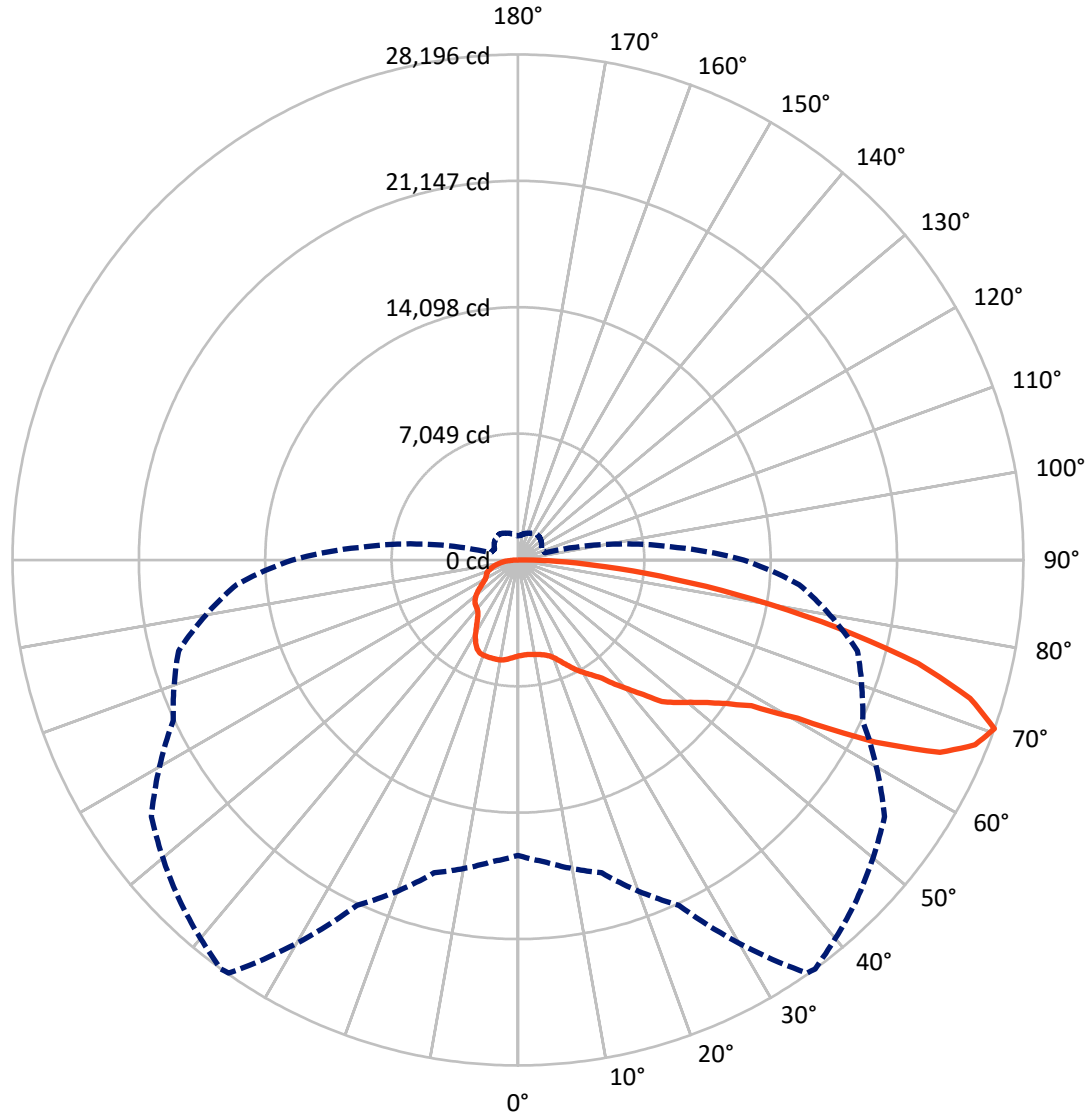
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.2 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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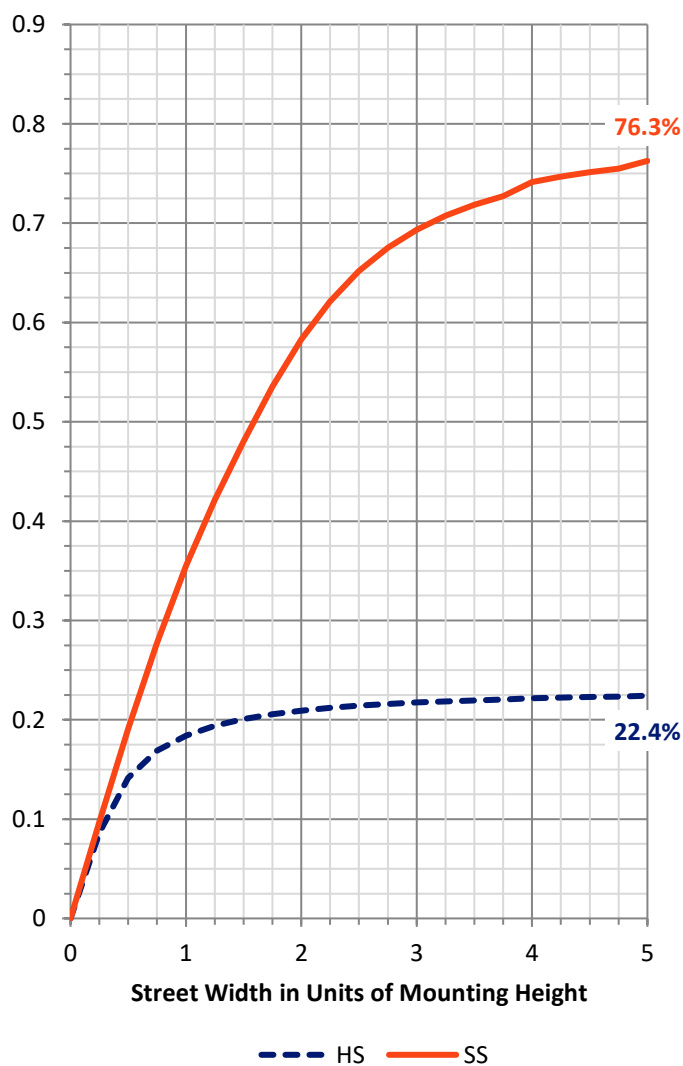
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11128.6	0.0	11128.6
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	37714.4	0.0	37714.4
	% Fixture	77.2	0.0	77.2
Total	Lumens	48843.0	0.0	48843.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.3	1.1
10°-20°	1602.3	3.3
20°-30°	2890.2	5.9
30°-40°	4476.4	9.2
40°-50°	6799.7	13.9
50°-60°	9424.8	19.3
60°-70°	12255.5	25.1
70°-80°	9050.5	18.5
80°-90°	1825.3	3.7
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°	48843.0	100.0
0°-180°	48843.0	100.0

Coefficient of Utilization



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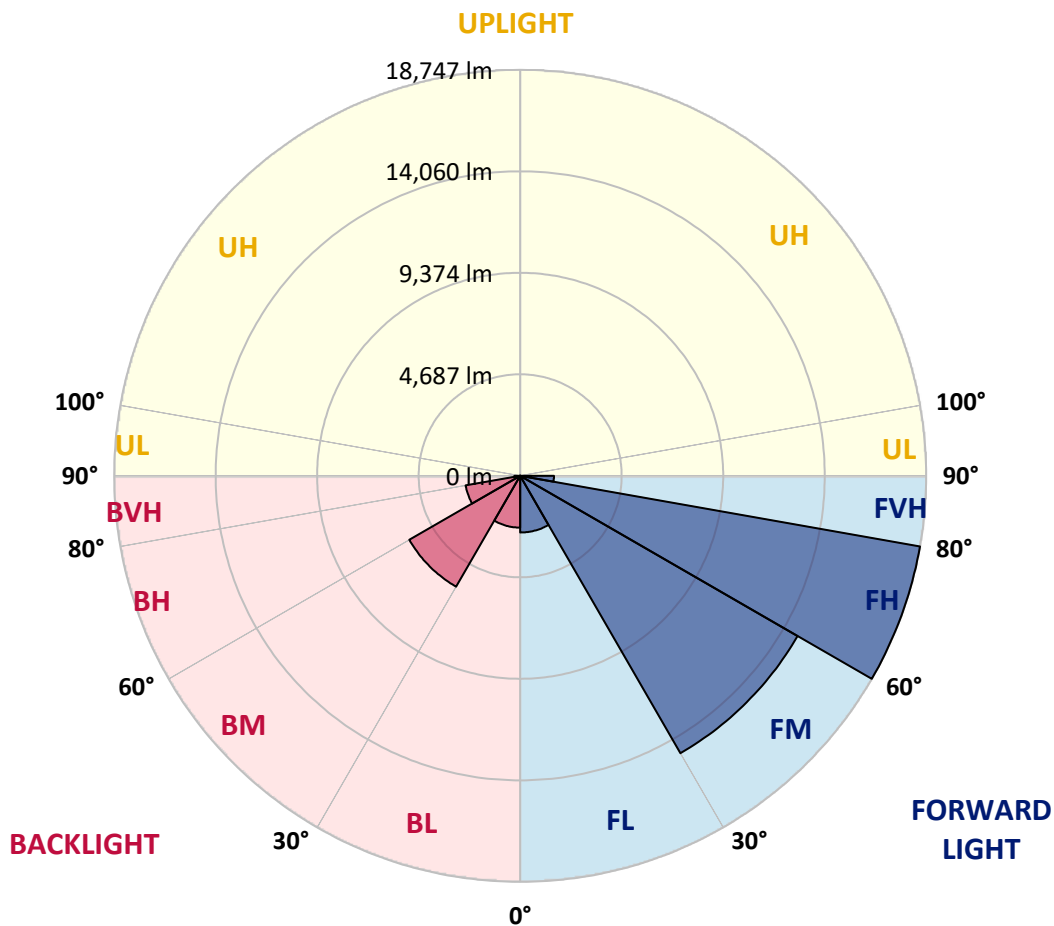
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2618.5	5.4			
FM (30°-60°)	14789.5	30.3			
FH (60°-80°)	18747.0	38.4			G5
FVH (80°-90°)	1559.4	3.2			G5
BL (0°-30°)	2392.3	4.9	B3/2500		
BM (30°-60°)	5911.4	12.1	B4/8500		
BH (60°-80°)	2559.0	5.2	B4/5000		G4/5000
BVH (80°-90°)	265.9	0.5			G3/500
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°	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8
2.5°	5317.4	5310.3	5306.3	5314.4	5317.4	5318.4	5320.4	5318.4	5313.4	5331.6	5353.8
5°	5318.4	5314.4	5306.3	5299.2	5299.2	5299.2	5300.2	5323.5	5333.6	5331.6	5358.9
7.5°	5326.5	5323.5	5308.3	5303.2	5315.4	5319.4	5339.7	5332.6	5343.7	5361.9	5385.2
10°	5327.5	5323.5	5310.3	5321.4	5355.8	5361.9	5371.0	5391.2	5395.3	5417.5	5440.8
12.5°	5337.6	5337.6	5342.7	5367.0	5403.4	5410.4	5444.8	5461.0	5485.3	5496.4	5524.7
15°	5391.2	5390.2	5402.4	5429.7	5488.3	5492.4	5534.8	5583.4	5601.6	5628.9	5674.4
17.5°	5518.7	5524.7	5525.7	5546.0	5615.7	5617.8	5687.5	5733.0	5774.5	5823.1	5927.2
20°	5821.0	5809.9	5797.8	5797.8	5825.1	5839.2	5892.8	5965.6	6050.6	6136.6	6258.9
22.5°	6201.3	6223.5	6179.0	6155.8	6168.9	6152.7	6193.2	6251.8	6350.9	6479.4	6634.1
25°	6655.4	6657.4	6654.3	6560.3	6531.0	6541.1	6574.4	6629.1	6760.5	6862.7	7087.2
27.5°	7098.3	7089.2	7056.8	6957.7	6929.4	6943.6	6942.6	7093.2	7227.7	7358.2	7622.2
30°	7500.8	7525.1	7467.4	7300.6	7303.6	7301.6	7348.1	7542.3	7788.0	8030.7	8301.7
32.5°	8210.7	8136.9	8059.0	7729.3	7668.7	7661.6	7688.9	7978.1	8342.2	8751.8	9077.4
35°	8879.2	8861.0	8784.1	8449.4	8098.5	8092.4	8055.0	8406.9	8918.6	9677.1	10083.6
37.5°	9562.8	9536.5	9460.7	9175.5	8826.6	8793.2	8478.7	8864.0	9555.8	10759.2	11338.7
40°	10377.9	10361.8	10244.4	9879.4	9521.4	9470.8	9144.2	9344.4	10359.7	12200.3	12608.9
42.5°	11092.9	11089.9	10955.4	10616.6	10312.2	10261.6	9983.5	10191.9	11477.2	13612.1	13852.8
45°	11617.8	11697.7	11703.7	11510.6	11300.2	11255.7	11181.9	11469.1	12769.7	14893.4	14858.0
47.5°	12060.7	12129.5	12057.7	11958.6	11886.8	11889.8	12004.1	12574.5	14045.9	16009.9	15734.8
50°	12801.0	12758.5	12385.4	12326.7	12417.7	12471.3	12803.0	13767.8	15507.2	17057.6	16521.6
52.5°	13868.9	13706.1	12973.9	12854.6	13199.5	13219.7	13747.6	14834.7	16967.6	17956.6	17241.6
55°	15330.3	15195.8	14368.5	13817.4	13991.3	14127.8	14871.1	15927.9	18159.9	18802.0	17795.8
57.5°	17490.4	17500.5	16826.0	15798.5	15206.9	15352.5	15933.0	16990.8	19144.9	19510.0	18141.7
60°	19221.7	19542.3	19341.1	18871.8	18022.3	17923.2	17481.3	18098.2	19986.3	20111.7	18472.4
62.5°	20422.1	20567.8	21259.5	21358.6	22329.5	22370.9	20254.3	19395.7	20910.6	20506.1	18542.1
65°	20361.5	20451.5	21544.7	22875.6	25743.6	25872.0	24633.2	21358.6	21543.7	20682.0	18338.9
67.5°	18943.6	19079.1	20468.7	22956.5	27562.9	27514.4	26728.6	24091.1	21752.0	20399.9	17370.0
70°	16481.1	16898.8	18065.8	21250.4	28131.3	28196.0	26747.8	24963.9	21215.0	19602.0	15755.0
72.5°	13583.8	13715.2	14817.5	18381.3	26469.7	26374.6	25651.6	23812.0	20244.2	18158.9	12928.4
75°	10330.4	10330.4	11665.3	14648.6	22730.9	23064.7	23345.8	21566.9	17934.4	14800.3	8803.3
77.5°	6857.6	7103.4	8178.4	11008.0	17993.0	18239.8	19210.6	18383.4	14684.0	10853.2	4020.9
80°	3637.6	3668.0	4820.9	7314.7	12869.8	13335.0	14669.9	14178.4	10562.0	5084.8	1016.4
82.5°	1272.2	1388.5	2119.7	4239.4	8479.7	8770.0	9731.7	8425.1	3730.7	1125.6	562.3
85°	632.1	654.3	933.4	2018.6	4774.3	4914.9	5685.5	3281.7	600.7	491.5	382.3
87.5°	304.4	311.5	358.0	722.1	2075.2	2171.3	2298.7	1067.9	222.5	187.1	165.9
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°	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8	5349.8
2.5°	5358.9	5368.0	5385.2	5390.2	5378.1	5400.3	5421.6	5440.8	5439.8	5446.8	5472.1
5°	5371.0	5390.2	5408.4	5440.8	5472.1	5490.3	5507.5	5523.7	5528.8	5543.9	5559.1
7.5°	5408.4	5427.6	5469.1	5525.7	5527.8	5573.3	5602.6	5607.6	5611.7	5611.7	5647.1
10°	5466.1	5501.5	5568.2	5607.6	5643.0	5627.9	5658.2	5639.0	5624.8	5630.9	5655.2
12.5°	5565.2	5596.5	5692.6	5736.1	5703.7	5697.7	5667.3	5623.8	5574.3	5569.2	5591.5
15°	5720.9	5779.6	5865.5	5907.0	5826.1	5754.3	5652.1	5563.1	5467.1	5431.7	5445.8
17.5°	5971.7	6042.5	6136.6	6108.2	5960.6	5819.0	5650.1	5462.0	5275.9	5146.5	5179.9
20°	6338.8	6391.4	6468.3	6354.0	6138.6	5905.0	5627.9	5330.6	5016.0	4780.4	4753.1
22.5°	6724.1	6804.0	6757.5	6546.1	6264.0	5938.3	5581.4	5139.4	4653.0	4357.7	4313.2
25°	7188.3	7214.6	7053.8	6735.2	6299.4	5885.8	5430.7	4860.3	4281.8	4003.7	3990.6
27.5°	7680.8	7621.1	7321.8	6822.2	6259.9	5730.0	5128.3	4419.4	3946.1	3700.3	3661.9
30°	8237.0	8098.5	7543.3	6831.3	6111.3	5426.6	4746.0	4074.5	3673.0	3426.3	3386.8
32.5°	8953.0	8626.4	7748.6	6737.3	5797.8	4981.7	4286.9	3780.2	3427.3	3179.5	3144.1
35°	9868.2	9317.1	7966.0	6567.4	5411.5	4536.7	3906.6	3530.4	3228.1	2929.7	2882.2
37.5°	10923.0	10280.9	8225.9	6353.0	4987.7	4145.3	3649.8	3371.7	3080.4	2742.6	2686.0
40°	12148.7	11245.6	8626.4	6097.1	4607.5	3863.2	3525.4	3317.1	2998.5	2646.6	2581.8
42.5°	13210.6	12266.0	9102.7	5822.0	4248.5	3628.5	3469.8	3280.6	2946.9	2574.8	2500.9
45°	14192.6	13108.4	9567.9	5488.3	3870.2	3467.7	3403.0	3189.6	2855.9	2485.8	2408.9
47.5°	14990.5	13789.0	9972.4	5181.9	3567.9	3320.1	3257.4	3016.7	2703.2	2378.6	2321.9
50°	15603.3	14300.8	10193.9	4938.2	3248.3	3152.2	3069.3	2821.5	2520.2	2240.0	2191.5
52.5°	16230.3	14813.5	10303.1	4950.3	2951.0	2902.4	2817.5	2605.1	2374.5	2159.1	2106.5
55°	16595.4	15023.8	10187.8	4656.0	2677.9	2621.3	2547.5	2437.2	2299.7	2108.6	2059.0
57.5°	16808.8	15154.3	9836.9	3797.4	2349.2	2295.6	2307.8	2298.7	2185.4	1984.2	1938.7
60°	16962.5	14871.1	9117.9	2791.2	2069.1	2028.7	2128.8	2096.4	1998.3	1841.6	1803.1
62.5°	16838.1	14332.1	7823.4	2098.4	1840.6	1926.5	2014.5	1954.8	1821.3	1678.8	1634.3
65°	16079.6	13274.3	5946.4	1685.8	1766.7	1885.1	1955.8	1859.8	1724.3	1555.4	1535.1
67.5°	14699.2	11356.9	3507.2	1545.3	1711.1	1836.5	1895.2	1767.7	1648.4	1486.6	1462.3
70°	12592.7	8502.0	1566.5	1439.1	1614.0	1738.4	1776.9	1656.5	1527.1	1375.4	1351.1
72.5°	9372.7	5126.3	1055.8	1328.8	1470.4	1580.7	1623.1	1495.7	1403.7	1334.9	1327.8
75°	5205.1	1779.9	973.9	1203.4	1313.7	1412.8	1465.4	1375.4	1302.6	1208.5	1170.1
77.5°	1657.5	756.5	925.3	1076.0	1215.6	1297.5	1289.4	1153.9	1130.6	1016.4	1006.2
80°	661.4	659.4	855.6	880.8	1037.6	1106.4	1088.2	917.2	947.6	880.8	854.5
82.5°	518.8	603.7	685.7	672.5	807.0	887.9	862.6	673.5	761.5	699.8	640.2
85°	394.4	528.9	439.9	437.9	563.3	659.4	675.5	517.8	518.8	472.3	420.7
87.5°	203.3	195.2	168.9	167.9	188.1	268.0	328.7	294.3	232.6	175.0	167.9
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)