

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: LUMARK

Report Number: P884631

Luminaire Tested: **NAV-SB5C-740-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884631
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-740-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40495 lumens
Efficiency: N/A
Efficacy: 162.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

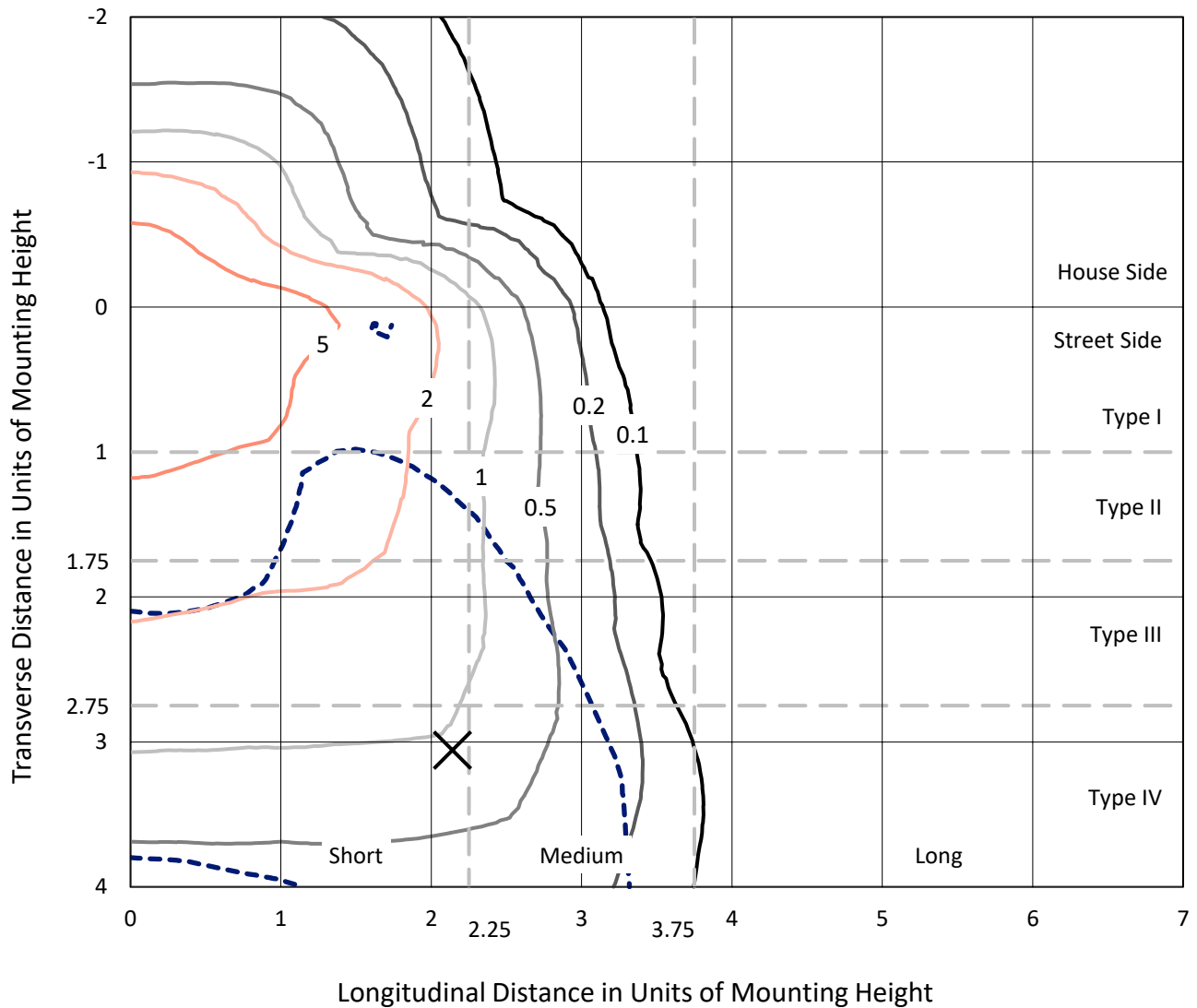
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

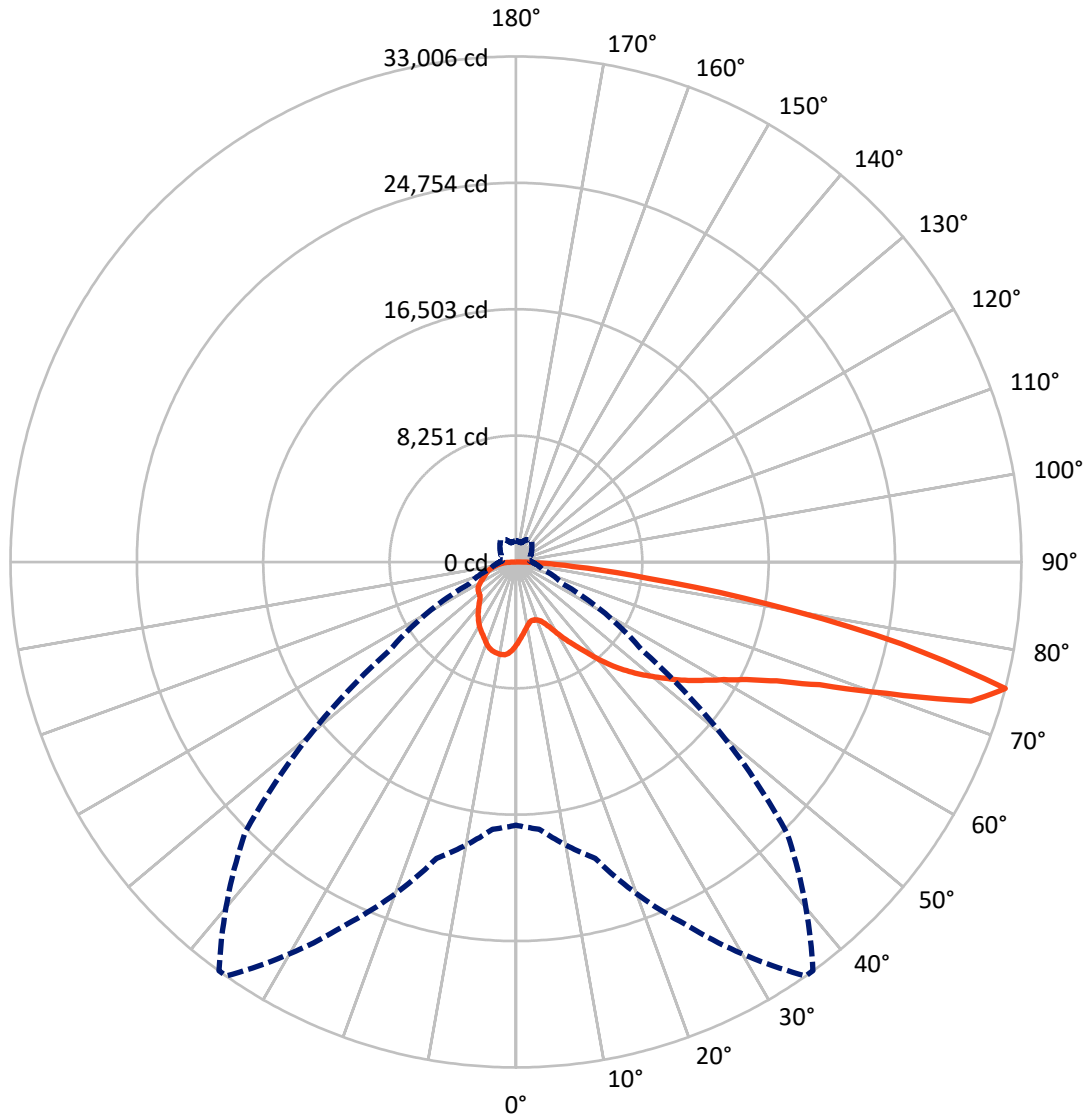
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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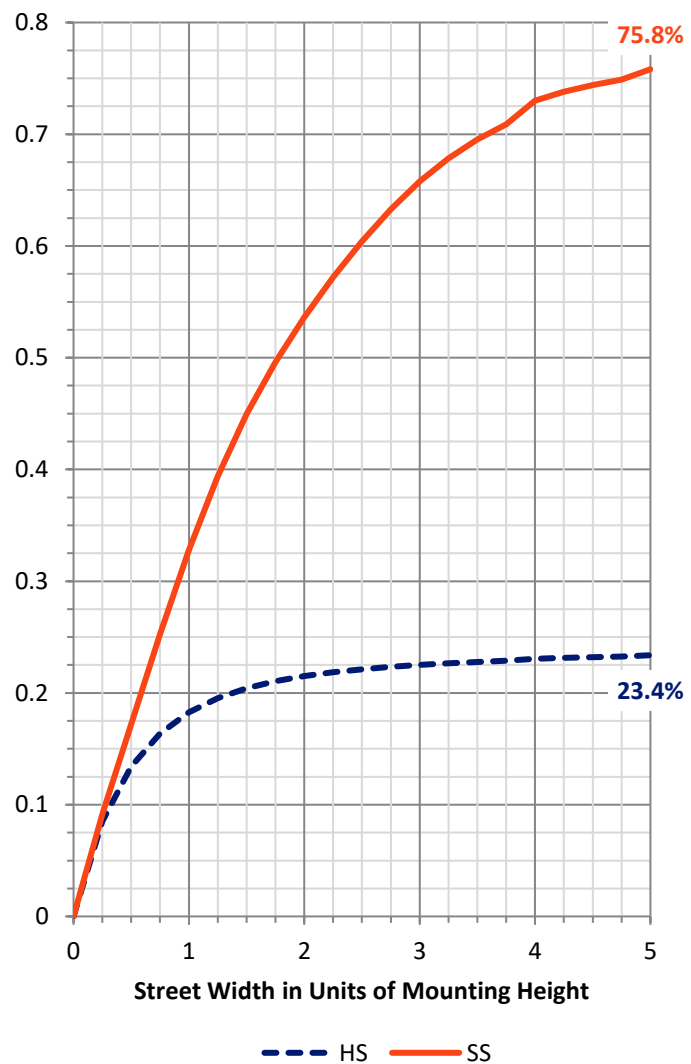
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9636.8	0.0	9636.8
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	30858.2	0.0	30858.2
	% Fixture	76.2	0.0	76.2
Total	Lumens	40495.0	0.0	40495.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	510.9	1.3
10°-20°	1473.7	3.6
20°-30°	2474.7	6.1
30°-40°	3846.1	9.5
40°-50°	5708.6	14.1
50°-60°	7881.1	19.5
60°-70°	9561.5	23.6
70°-80°	7901.9	19.5
80°-90°	1136.5	2.8
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°	40495.0	100.0
0°-180°	40495.0	100.0

Coefficient of Utilization



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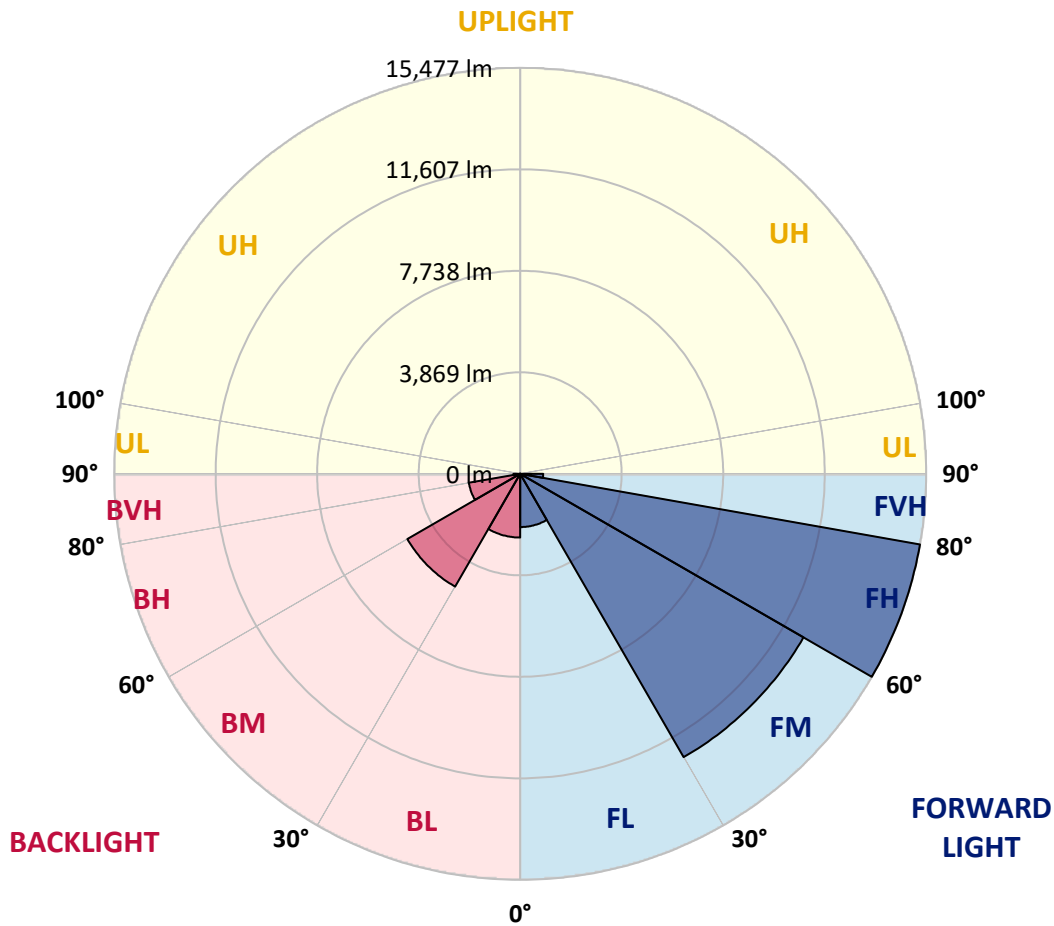
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2030.7	5.0			
FM (30°-60°)	12470.3	30.8			
FH (60°-80°)	15476.6	38.2			G5
FVH (80°-90°)	880.6	2.2			G5
BL (0°-30°)	2428.6	6.0	B3/2500		
BM (30°-60°)	4965.5	12.3	B3/5000		
BH (60°-80°)	1986.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	255.9	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2
2.5°	4975.9	5006.6	5019.7	5013.1	5046.0	5041.6	5087.6	5144.5	5223.3	5299.9	5411.6
5°	4592.8	4625.7	4654.1	4680.4	4743.9	4763.6	4835.8	4945.3	5089.8	5236.4	5420.3
7.5°	4236.0	4264.4	4308.2	4356.4	4463.7	4483.4	4603.8	4774.5	4975.9	5190.5	5444.4
10°	3944.8	3973.3	4019.3	4074.0	4207.5	4231.6	4384.8	4612.5	4875.2	5146.7	5470.7
12.5°	3820.1	3828.8	3855.1	3909.8	4025.8	4041.2	4209.7	4470.2	4776.7	5113.8	5510.1
15°	3813.5	3831.0	3833.2	3861.6	3958.0	3964.5	4120.0	4378.3	4715.4	5107.3	5569.2
17.5°	3879.2	3892.3	3872.6	3890.1	3971.1	3982.0	4104.6	4334.5	4695.7	5135.7	5669.9
20°	4054.3	4065.2	4006.1	3982.0	4041.2	4049.9	4170.3	4363.0	4715.4	5194.8	5807.8
22.5°	4426.4	4433.0	4288.5	4190.0	4194.4	4198.8	4303.9	4479.0	4792.0	5302.1	5982.9
25°	5006.6	5002.2	4772.3	4581.9	4472.4	4448.3	4518.4	4667.2	4921.2	5444.4	6208.4
27.5°	5685.2	5652.4	5422.5	5137.9	4899.3	4864.3	4848.9	4912.4	5105.1	5632.7	6484.2
30°	6451.4	6420.8	6173.4	5801.2	5470.7	5413.7	5269.3	5236.4	5378.7	5888.8	6867.3
32.5°	7292.0	7272.3	6976.8	6525.8	6083.6	6017.9	5775.0	5687.4	5799.0	6276.3	7401.5
35°	7996.9	7979.4	7734.2	7270.1	6729.4	6648.4	6401.0	6302.5	6359.5	6773.2	8099.8
37.5°	8634.0	8625.2	8415.1	8049.5	7491.2	7392.7	7114.7	7081.9	7070.9	7427.8	8947.0
40°	9225.0	9203.1	8984.2	8791.6	8377.8	8288.1	8042.9	8014.4	7931.3	8233.4	9905.9
42.5°	9879.6	9822.7	9505.3	9415.5	9303.8	9229.4	9082.7	9087.1	8903.2	9141.9	10921.6
45°	10413.7	10380.9	10054.7	10002.2	10122.6	10091.9	10218.9	10251.7	9894.9	10094.1	11976.8
47.5°	10987.3	10956.7	10680.8	10643.6	10969.8	10978.5	11427.3	11438.3	10862.5	11083.6	13034.1
50°	11694.4	11650.6	11377.0	11422.9	11788.5	11821.4	12642.3	12567.9	11753.5	12088.4	14082.7
52.5°	12160.7	12186.9	12127.8	12202.3	12701.4	12732.0	13837.6	13647.1	12635.7	13080.1	15111.6
55°	12504.4	12556.9	12740.8	12911.6	13664.6	13695.3	14965.0	14673.8	13366.9	13999.6	16079.2
57.5°	12946.6	12872.1	13215.8	13548.6	14579.7	14660.7	16061.7	15663.3	14014.9	14792.0	16742.6
60°	13581.4	13528.9	13796.0	14288.5	15604.2	15733.4	17222.0	16554.3	14489.9	15420.3	16871.7
62.5°	14868.6	14737.3	14778.9	15214.5	16895.8	17066.5	18531.1	17331.4	14726.4	15665.5	16179.9
65°	16792.9	16567.4	16357.3	16659.4	18715.0	18883.5	20008.7	17942.2	14638.8	15190.4	14343.3
67.5°	19216.3	18993.0	18734.7	19019.3	21394.5	21528.0	21832.3	18285.9	13949.2	13360.3	11096.8
70°	21215.0	21131.8	21440.4	22611.6	25674.2	25678.6	24170.3	18001.3	12060.0	9472.4	6420.8
72.5°	20950.1	20899.7	22526.3	26147.1	31068.3	30952.3	26383.5	15847.2	8123.9	4273.2	2405.9
75°	17186.9	17513.1	20032.8	26083.6	33005.7	32990.4	25028.4	10074.4	3360.3	1771.0	1243.4
77.5°	9216.3	9732.9	13005.7	19257.9	25766.2	26153.7	17596.3	3524.5	1442.6	1134.0	860.3
80°	3005.7	3456.7	5183.9	9805.2	16742.6	16670.3	7541.6	1383.5	987.3	803.4	595.4
82.5°	1276.3	1328.8	2316.1	4630.0	8592.4	8458.8	2401.5	794.7	694.0	549.5	367.8
85°	499.1	558.2	1022.3	2141.0	3721.5	3640.5	866.9	394.0	444.4	359.0	218.9
87.5°	164.2	199.2	365.6	733.4	1158.1	1116.5	212.3	135.7	192.6	164.2	78.8
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°	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2	5396.2
2.5°	5442.2	5477.2	5518.8	5580.1	5632.7	5676.4	5722.4	5750.9	5761.8	5794.7	5792.5
5°	5481.6	5558.2	5661.1	5761.8	5860.3	5919.4	5972.0	5998.2	6022.3	6039.8	6044.2
7.5°	5547.3	5645.8	5807.8	5939.1	6022.3	6070.5	6105.5	6096.8	6105.5	6109.9	6116.5
10°	5604.2	5742.1	5934.8	6059.5	6123.0	6125.2	6116.5	6085.8	6070.5	6072.7	6077.1
12.5°	5672.1	5825.3	6033.3	6138.4	6155.9	6107.7	6070.5	6017.9	5998.2	5989.5	5985.1
15°	5764.0	5939.1	6140.5	6179.9	6136.2	6074.9	6011.4	5926.0	5882.2	5847.2	5858.1
17.5°	5875.7	6068.3	6223.7	6195.3	6101.1	6000.4	5897.5	5768.4	5678.6	5641.4	5643.6
20°	6031.1	6204.0	6287.2	6162.4	6020.1	5866.9	5691.8	5534.1	5451.0	5413.7	5409.4
22.5°	6219.3	6385.7	6348.5	6105.5	5904.1	5658.9	5440.0	5324.0	5282.4	5256.1	5260.5
25°	6444.8	6587.1	6392.3	6022.3	5713.7	5383.1	5214.5	5177.3	5157.6	5137.9	5137.9
27.5°	6738.2	6814.8	6425.1	5899.7	5415.9	5089.8	5028.5	5035.0	5028.5	4995.6	5002.2
30°	7125.7	7110.3	6455.8	5700.5	5074.4	4824.9	4829.2	4857.7	4862.1	4840.2	4851.1
32.5°	7635.7	7480.3	6471.1	5442.2	4748.2	4592.8	4597.2	4627.8	4649.7	4612.5	4630.0
35°	8253.1	7911.6	6447.0	5118.2	4496.5	4371.7	4338.9	4347.6	4354.2	4319.2	4343.3
37.5°	8973.3	8395.4	6339.8	4759.2	4288.5	4155.0	4084.9	4025.8	3990.8	3958.0	3979.9
40°	9763.6	8922.9	6142.7	4408.9	4056.5	3925.1	3820.1	3708.4	3590.2	3546.4	3566.1
42.5°	10591.1	9465.8	5904.1	4074.0	3789.4	3682.1	3570.5	3408.5	3231.2	3141.4	3152.4
45°	11449.2	10021.9	5669.9	3743.4	3515.8	3469.8	3340.6	3145.8	2953.2	2839.3	2830.6
47.5°	12289.8	10547.3	5326.2	3410.7	3259.6	3310.0	3209.3	3029.8	2815.2	2635.7	2616.0
50°	13093.3	11039.8	4763.6	3073.6	3051.7	3261.8	3165.5	2907.2	2662.0	2432.1	2412.4
52.5°	13890.1	11438.3	4043.3	2767.1	2940.0	3248.7	3108.6	2824.0	2524.1	2283.3	2257.0
55°	14566.5	11644.0	3349.4	2504.4	2778.0	3137.0	3040.7	2725.5	2329.2	2073.1	2051.2
57.5°	14951.8	11477.7	2771.5	2246.1	2554.7	2953.2	2924.7	2515.3	2097.2	1900.2	1873.9
60°	14785.5	10803.4	2298.6	2020.6	2342.4	2753.9	2723.3	2307.4	1919.9	1733.8	1707.5
62.5°	13868.2	9518.4	1924.3	1823.6	2149.7	2550.3	2521.9	2147.5	1784.1	1604.6	1576.2
65°	12020.6	7743.0	1633.1	1659.4	1954.9	2305.2	2346.8	2014.0	1676.9	1501.8	1473.3
67.5°	9168.1	5608.6	1405.4	1517.1	1764.4	2064.4	2184.8	1917.7	1587.1	1420.8	1394.5
70°	5225.5	3185.2	1212.8	1379.2	1595.9	1841.1	2060.0	1841.1	1490.8	1352.9	1335.4
72.5°	1981.2	1462.3	1048.6	1241.2	1433.9	1652.8	1922.1	1720.7	1379.2	1276.3	1258.8
75°	1057.4	891.0	882.2	1079.2	1247.8	1468.9	1749.1	1602.5	1296.0	1348.5	1392.3
77.5°	720.2	630.5	737.7	923.8	1044.2	1265.3	1565.2	1422.9	1123.0	1118.7	1031.1
80°	499.1	446.6	599.8	744.3	807.8	1063.9	1366.0	1221.5	915.1	853.8	816.5
82.5°	299.9	291.2	448.8	556.0	571.4	820.9	1131.8	1024.5	748.7	652.4	656.7
85°	164.2	172.9	286.8	326.2	332.7	573.6	886.6	792.5	575.7	483.8	488.2
87.5°	46.0	59.1	105.1	129.2	159.8	297.7	527.6	470.7	289.0	201.4	201.4
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)