

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: P969221

Luminaire Tested: **NAV-SB5D-722-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-722-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44108.8 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

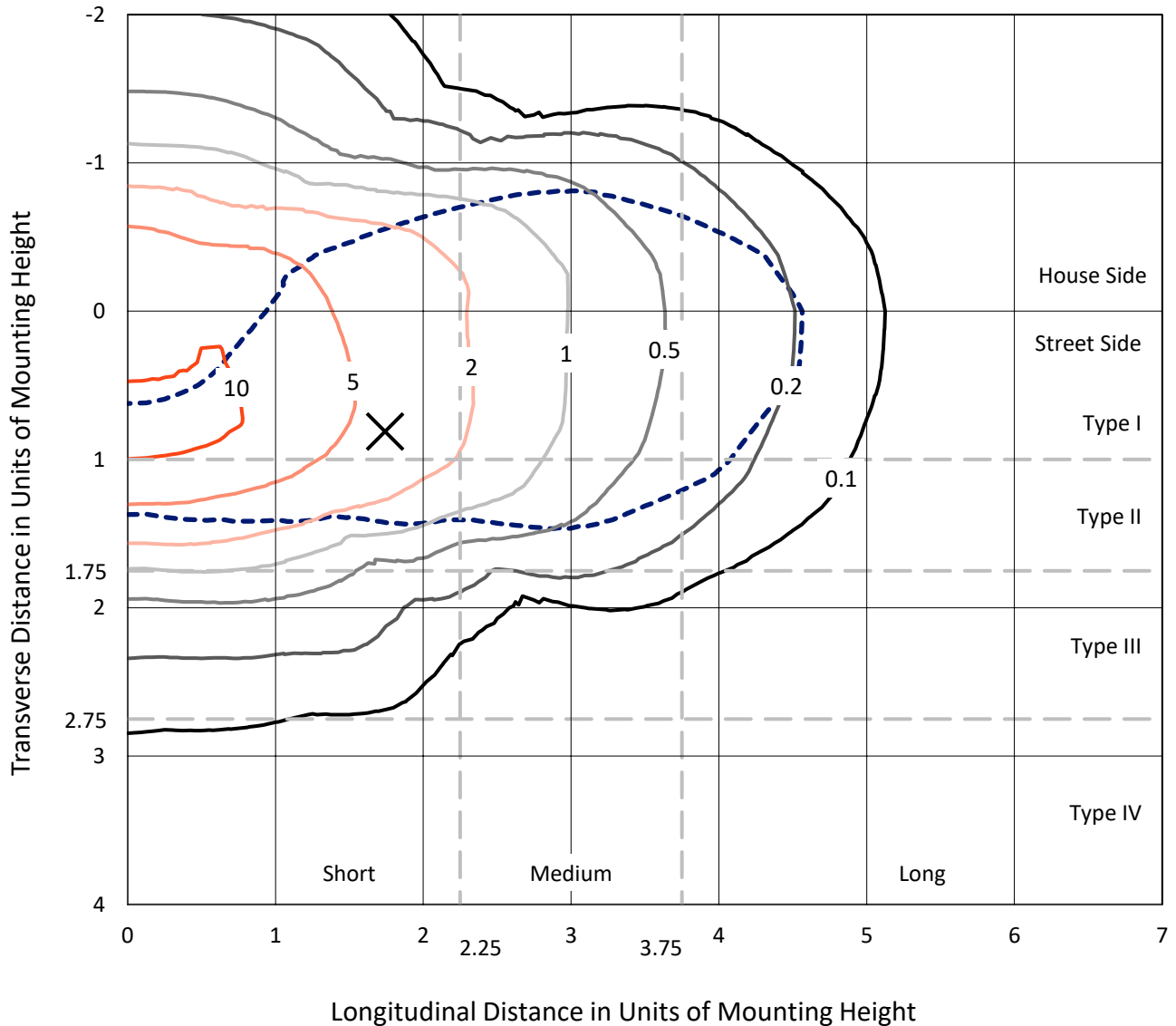
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

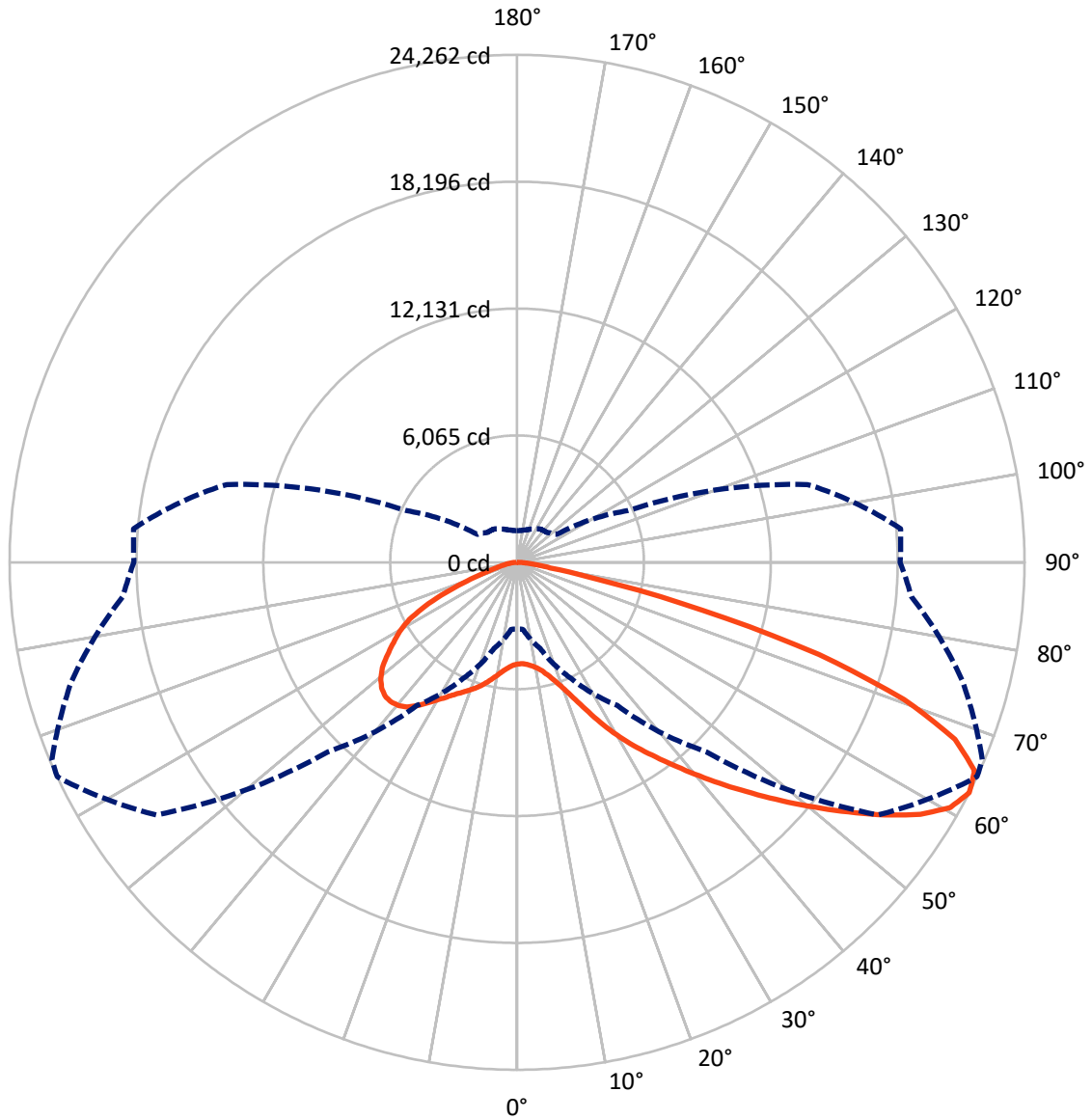
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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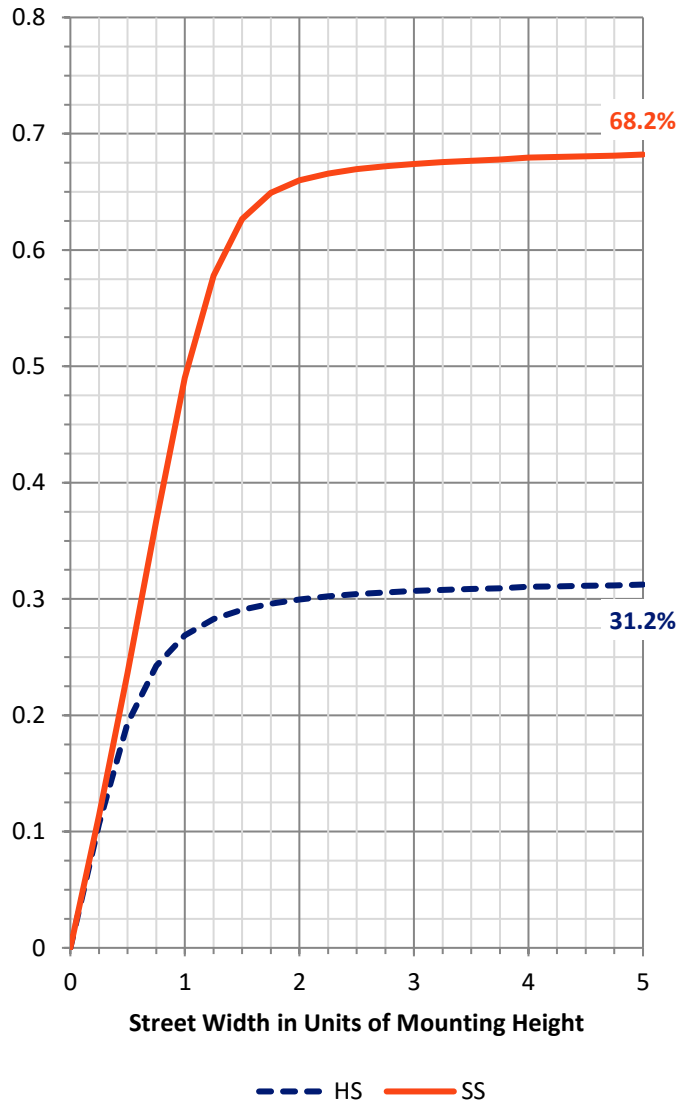
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13918.8	0.0	13918.8
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	30190.0	0.0	30190.0
	% Fixture	68.4	0.0	68.4
Total	Lumens	44108.8	0.0	44108.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	484.6	1.1
10°-20°	1643.3	3.7
20°-30°	3332.0	7.6
30°-40°	5765.9	13.1
40°-50°	8725.7	19.8
50°-60°	10230.3	23.2
60°-70°	8576.9	19.4
70°-80°	4735.1	10.7
80°-90°	615.1	1.4
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°	44108.8	100.0
0°-180°	44108.8	100.0

Coefficient of Utilization

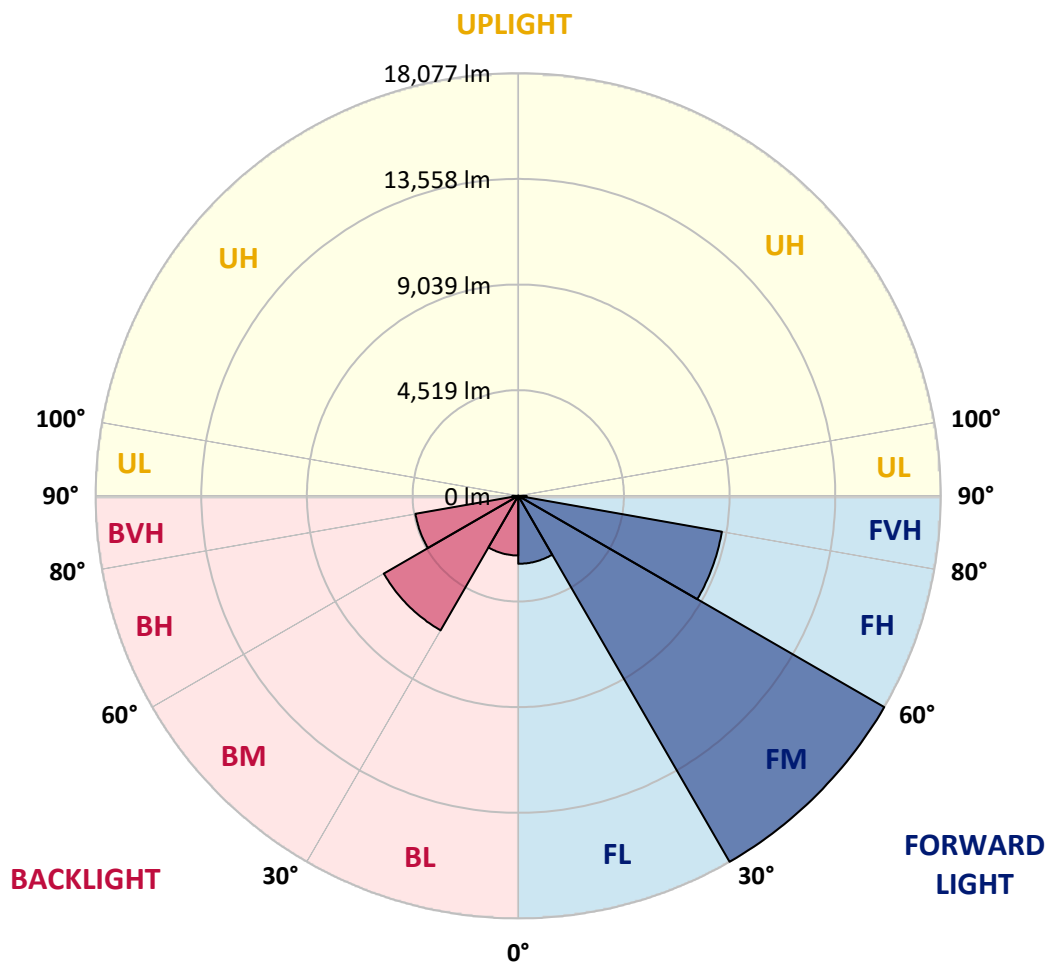


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2907.4	6.6			
FM (30°-60°)	18077.2	41.0			
FH (60°-80°)	8846.9	20.1			G4/12000
FVH (80°-90°)	358.5	0.8			G3/500
BL (0°-30°)	2552.5	5.8	B4/5000		
BM (30°-60°)	6644.6	15.1	B4/8500		
BH (60°-80°)	4465.0	10.1	B4/5000		G4/5000
BVH (80°-90°)	256.6	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5
2.5°	4828.6	4814.8	4826.3	4826.3	4830.8	4828.6	4844.6	4849.2	4856.0	4869.8	4869.8
5°	4780.5	4778.2	4798.8	4817.1	4835.4	4851.4	4872.0	4901.8	4906.4	4922.4	4943.0
7.5°	4764.5	4750.8	4782.8	4805.7	4849.2	4888.0	4943.0	4993.3	5013.9	5020.8	5059.7
10°	4888.0	4865.2	4894.9	4908.6	4945.3	4984.2	5048.2	5128.4	5151.2	5178.7	5222.2
12.5°	5098.6	5073.4	5116.9	5137.5	5171.8	5206.2	5249.6	5327.4	5338.9	5389.2	5430.4
15°	5386.9	5357.2	5384.6	5409.8	5467.0	5499.0	5542.6	5618.0	5618.0	5657.0	5686.7
17.5°	5778.2	5739.4	5760.0	5769.1	5805.7	5853.8	5927.0	5993.4	6027.7	6014.0	5972.8
20°	6361.8	6313.8	6313.8	6268.0	6254.2	6293.2	6389.2	6480.8	6517.5	6446.4	6345.8
22.5°	7238.2	7169.6	7130.7	6975.1	6913.3	6917.9	7014.0	7126.1	7155.9	7030.1	6803.4
25°	8352.7	8245.2	8192.5	7963.7	7824.1	7702.8	7778.3	7922.5	7963.7	7808.0	7441.9
27.5°	9467.2	9474.1	9423.7	9149.0	8918.0	8696.0	8657.0	8808.1	8851.6	8675.4	8222.2
30°	11030.1	10867.7	10771.6	10442.1	10112.5	9801.3	9641.2	9702.9	9714.3	9503.8	8977.5
32.5°	12378.1	12336.9	12130.9	11842.5	11419.2	10931.7	10664.0	10565.6	10547.4	10247.5	9622.8
35°	13913.6	13890.7	13673.3	13330.0	12872.4	12194.9	11712.2	11430.7	11407.7	10986.7	10261.3
37.5°	15474.3	15474.3	15261.4	14886.2	14412.4	13565.8	12831.2	12385.0	12311.7	11762.5	10911.2
40°	16719.2	16643.6	16682.6	16524.6	15982.3	15083.0	14073.8	13426.2	13327.8	12668.7	11602.3
42.5°	17426.3	17401.1	17634.5	17810.8	17588.8	16870.3	15442.2	14554.4	14417.0	13666.4	12398.6
45°	17584.2	17556.7	17973.3	18618.6	18929.8	18634.6	16929.7	15742.1	15575.0	14710.0	13252.2
47.5°	17220.3	17165.5	17776.5	18794.8	19792.5	20312.0	18540.8	17030.4	16787.9	15726.1	14128.7
50°	16126.5	16073.8	16998.4	18350.8	20083.1	21451.6	20289.2	18396.6	18025.9	16815.3	15014.3
52.5°	13748.8	13774.0	15222.6	17080.8	19701.0	22161.0	21794.9	19836.0	19389.8	17929.7	15845.0
55°	10709.8	10764.8	12545.1	14591.0	18172.3	22053.5	22822.4	21318.9	20874.9	18977.9	16703.2
57.5°	7668.5	7911.1	9579.3	11604.5	15236.3	20348.6	23046.7	22728.6	22298.4	20122.1	17543.0
60°	4970.4	5013.9	6730.3	8771.5	11602.3	17318.7	22591.3	23797.2	23460.9	21289.1	18245.5
62.5°	3185.5	3215.2	4261.0	6135.2	8350.5	12812.8	21058.0	24261.9	24158.8	22060.4	18920.7
65°	2341.1	2318.1	2862.8	4055.1	5624.9	7901.9	18080.8	24037.6	24241.2	22543.2	19479.0
67.5°	1954.3	1922.3	2190.0	2807.9	4144.3	4487.6	13378.1	22579.8	23325.8	22488.3	19888.7
70°	1780.4	1753.0	1915.4	2084.7	3233.6	3004.7	6744.0	19630.1	20778.8	21863.6	19822.3
72.5°	1508.1	1460.0	1682.0	1851.4	2514.9	2304.4	2787.3	15078.4	16478.9	19861.2	18888.6
75°	1169.4	1137.3	1327.3	1629.3	1890.2	1798.7	1762.1	9155.9	10684.6	15359.8	16524.6
77.5°	926.8	883.3	1057.3	1270.1	1700.3	1357.0	1283.8	3943.0	5457.9	9805.9	12364.4
80°	697.9	659.1	803.2	1004.6	1306.7	1023.0	830.7	1608.7	2057.3	4968.2	6217.6
82.5°	496.6	462.3	560.7	736.9	878.7	917.7	510.3	901.6	1013.7	1915.4	1389.1
85°	318.1	297.5	375.3	462.3	558.4	590.4	311.2	471.4	517.2	789.5	578.9
87.5°	173.9	141.9	201.4	215.1	258.6	235.7	148.7	171.6	185.3	286.1	244.9
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°	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5	4860.5
2.5°	4878.9	4885.8	4908.6	4915.5	4931.6	4952.2	4965.8	4979.6	4979.6	4993.3	4993.3
5°	4945.3	4961.3	5009.4	5034.5	5075.7	5116.9	5142.1	5171.8	5190.1	5199.3	5203.8
7.5°	5073.4	5098.6	5167.2	5210.7	5281.6	5338.9	5377.8	5419.0	5428.1	5453.3	5444.2
10°	5247.4	5277.1	5354.9	5437.3	5522.0	5592.9	5629.5	5659.2	5670.7	5675.3	5663.8
12.5°	5446.4	5489.9	5590.7	5691.3	5780.6	5842.3	5851.5	5844.7	5812.6	5785.1	5785.1
15°	5691.3	5730.2	5842.3	5952.2	6039.1	6050.6	5993.4	5956.8	5917.8	5911.0	5911.0
17.5°	5984.3	6004.9	6107.8	6215.4	6222.2	6183.3	6098.6	6064.3	6027.7	6002.5	6004.9
20°	6325.2	6318.3	6391.6	6437.3	6389.2	6270.2	6142.1	6084.9	6048.3	6018.5	6020.8
22.5°	6732.5	6679.9	6670.7	6659.3	6531.2	6281.7	6107.8	6034.6	5977.4	5936.2	5949.9
25°	7325.3	7123.9	6984.2	6906.4	6618.1	6219.9	5998.0	5835.4	5727.9	5657.0	5684.4
27.5°	8066.6	7728.0	7375.6	7185.7	6618.1	6094.0	5732.5	5469.3	5293.1	5219.9	5256.5
30°	8773.8	8419.0	7899.6	7522.1	6602.1	5888.1	5304.6	4938.4	4732.4	4659.2	4702.7
32.5°	9377.9	8991.2	8455.7	7890.4	6563.2	5554.0	4773.6	4368.5	4169.5	4082.6	4126.0
35°	9938.6	9526.7	9014.1	8295.5	6460.2	5064.3	4190.1	3881.2	3659.1	3519.5	3565.4
37.5°	10513.0	10023.3	9542.8	8661.7	6274.8	4492.2	3741.6	3478.4	3217.5	3029.9	3080.2
40°	11137.8	10551.9	10107.9	8879.1	5970.5	3947.5	3393.8	3153.4	2876.6	2677.4	2716.4
42.5°	11867.8	11185.8	10737.3	8991.2	5554.0	3560.7	3167.1	2931.5	2670.5	2508.1	2540.2
45°	12629.7	11883.7	11311.7	8988.9	5089.4	3380.0	3094.0	2860.6	2572.1	2402.8	2430.3
47.5°	13428.4	12613.8	11808.2	8842.5	4686.7	3405.2	3052.8	2707.2	2389.1	2224.4	2247.2
50°	14229.4	13412.4	12288.8	8567.9	4515.0	3350.2	2899.4	2492.1	2116.8	1968.0	1977.2
52.5°	15023.4	14261.4	12703.0	8176.5	4341.1	3146.5	2702.6	2212.9	2004.7	1901.7	1901.7
55°	15822.1	15101.3	13153.8	7606.7	3906.4	2908.5	2373.1	2107.6	1915.4	1821.6	1812.4
57.5°	16623.0	16071.6	13581.8	7036.9	3359.4	2615.7	2192.3	1979.5	1826.1	1746.1	1732.4
60°	17456.1	17181.5	14023.4	6512.8	2819.4	2240.3	2059.5	1876.5	1720.9	1631.6	1624.7
62.5°	18314.2	18403.5	14369.0	5837.8	2322.8	2011.6	1940.5	1753.0	1601.9	1517.2	1514.9
65°	19179.3	19582.0	14595.5	4901.8	1883.3	1794.2	1812.4	1618.0	1464.6	1391.3	1389.1
67.5°	19831.4	20431.0	14531.4	3709.6	1544.7	1588.1	1652.2	1476.0	1331.9	1274.7	1276.9
70°	19904.7	20330.4	13899.8	2540.2	1292.9	1386.8	1473.7	1336.4	1187.7	1146.5	1148.8
72.5°	18929.8	18957.3	12140.1	1659.1	1093.9	1217.4	1286.1	1194.5	1050.4	1009.2	1006.9
75°	16373.7	15678.0	8913.4	1093.9	915.3	1045.8	1109.9	1045.8	906.2	915.3	883.3
77.5°	12405.5	11103.4	5412.1	778.1	764.3	878.7	965.8	919.9	800.9	899.3	791.8
80°	6391.6	6007.1	2414.3	581.3	604.1	702.5	794.1	734.6	633.9	604.1	551.6
82.5°	1464.6	1702.6	952.0	416.5	437.1	505.7	606.4	551.6	455.4	384.5	379.9
85°	512.6	560.7	421.1	260.9	256.4	315.8	411.9	368.4	308.9	247.1	260.9
87.5°	162.5	212.8	157.8	105.3	109.9	141.9	189.9	173.9	144.2	93.8	98.4
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)