

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: P968184

Luminaire Tested: **NAV-SB5B-727-U-SL2**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968184  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5B-727-U-SL2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26879.6 lumens  
Efficiency: N/A  
Efficacy: 147.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4

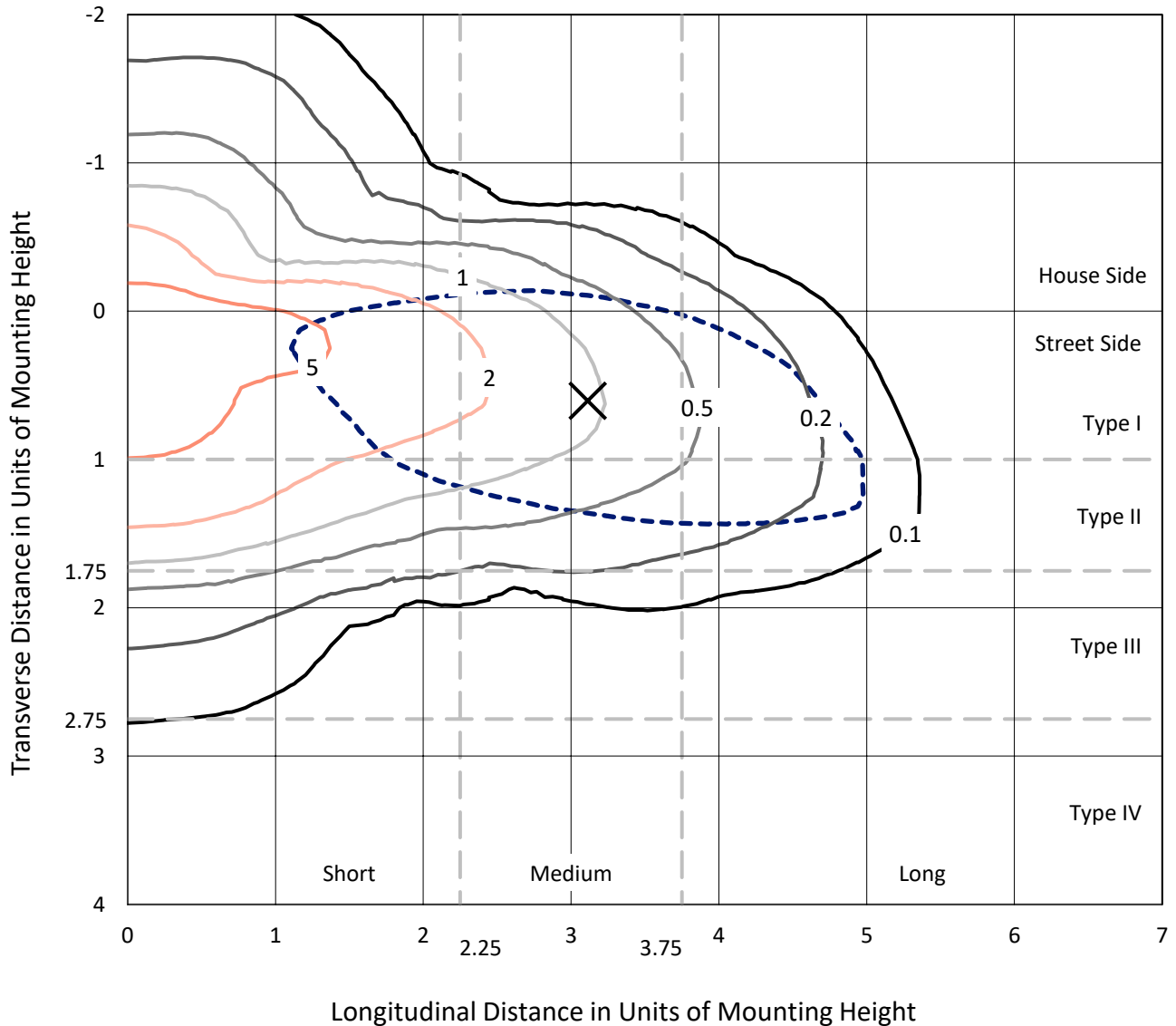
Input Watts (W): 182.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

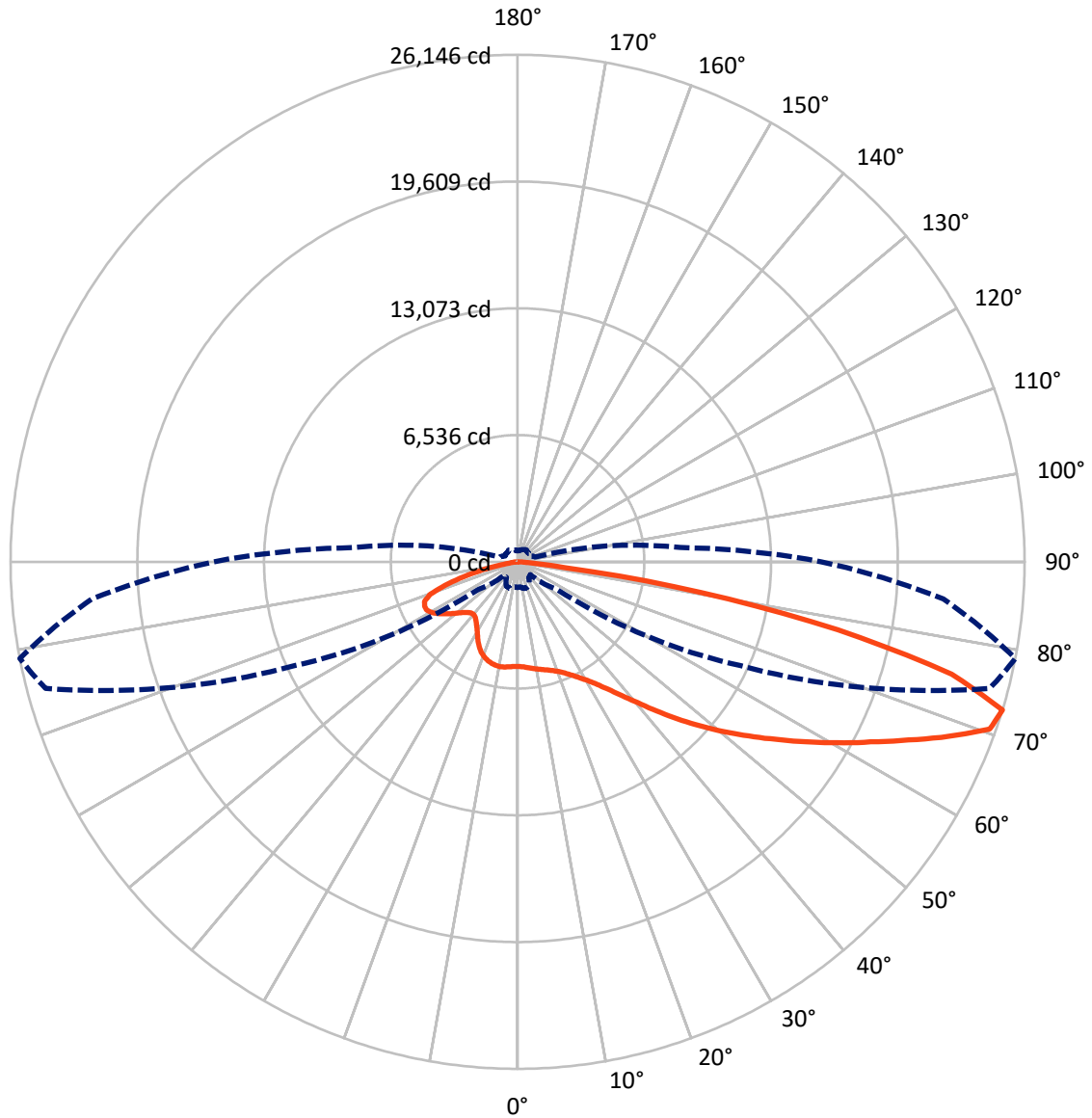
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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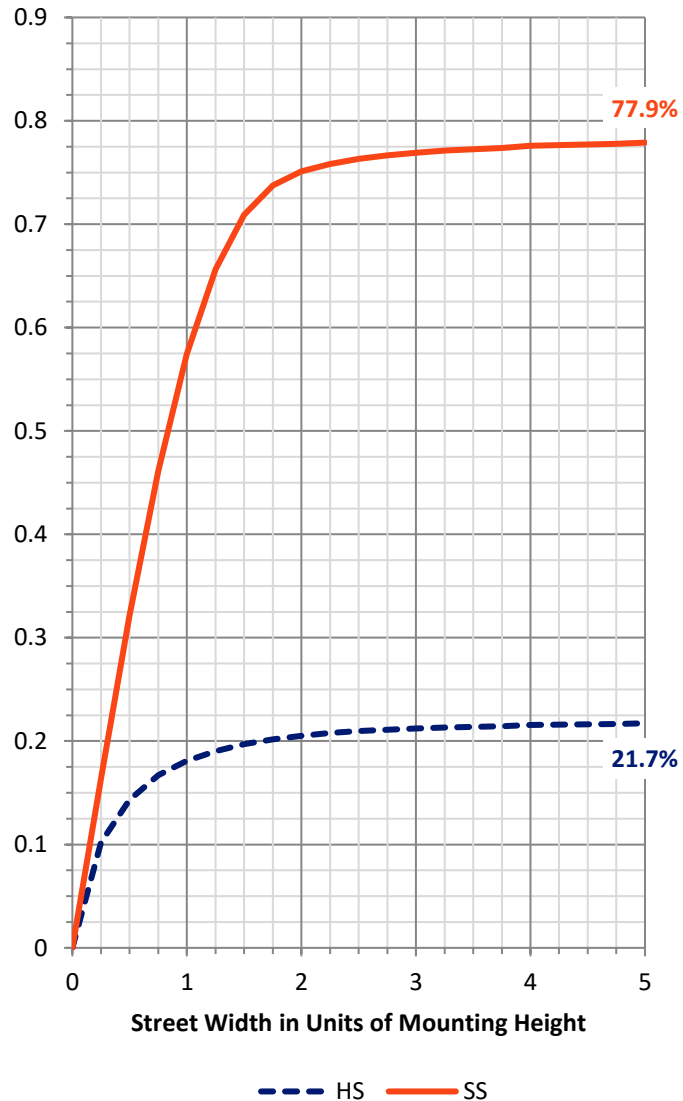
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5915.0	0.0	5915.0
	% Fixture	22.0	0.0	22.0
<b>Street Side</b>	Lumens	20964.6	0.0	20964.6
	% Fixture	78.0	0.0	78.0
<b>Total</b>	Lumens	26879.6	0.0	26879.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	489.8	1.8
10°-20°	1280.5	4.8
20°-30°	2066.3	7.7
30°-40°	3101.2	11.5
40°-50°	4399.2	16.4
50°-60°	5555.6	20.7
60°-70°	5642.5	21.0
70°-80°	3845.6	14.3
80°-90°	498.9	1.9
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°	26879.6	100.0
0°-180°	26879.6	100.0

**Coefficient of Utilization**

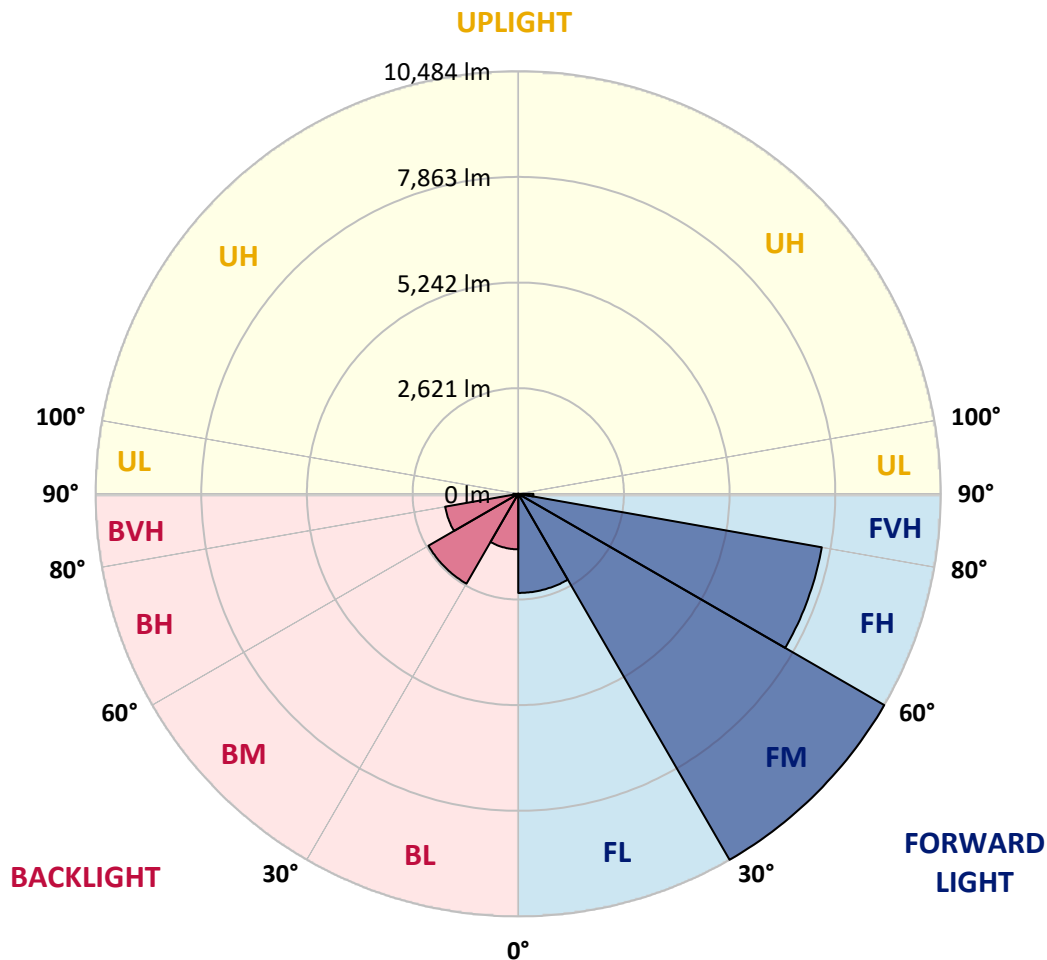


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2458.8	9.1			
FM (30°-60°)	10483.6	39.0			
FH (60°-80°)	7646.3	28.4			G4/12000
FVH (80°-90°)	375.9	1.4			G3/500
BL (0°-30°)	1377.8	5.1	B3/2500		
BM (30°-60°)	2572.4	9.6	B3/5000		
BH (60°-80°)	1841.7	6.9	B3/2500		G3/2500
BVH (80°-90°)	123.1	0.5			G2/225
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 Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8
2.5°	5398.7	5373.0	5388.7	5383.0	5390.2	5398.7	5401.5	5405.7	5420.0	5418.6	5417.1
5°	5387.3	5361.7	5383.0	5375.9	5394.4	5414.4	5431.4	5447.1	5469.8	5479.8	5465.5
7.5°	5363.1	5346.1	5367.4	5388.7	5422.9	5452.7	5476.9	5512.4	5545.1	5550.8	5560.7
10°	5222.4	5209.6	5259.4	5314.8	5408.6	5489.7	5542.3	5583.5	5619.0	5624.7	5638.9
12.5°	5075.9	5060.3	5115.8	5191.1	5343.2	5489.7	5600.6	5654.6	5685.9	5704.3	5725.6
15°	5051.7	5038.9	5070.3	5135.7	5262.1	5451.3	5640.4	5739.9	5767.0	5788.3	5796.8
17.5°	5168.4	5144.2	5157.0	5179.7	5253.6	5415.7	5671.6	5836.6	5877.9	5900.6	5900.6
20°	5438.4	5404.3	5384.4	5338.9	5326.1	5421.4	5668.9	5953.2	6007.2	6035.6	6042.8
22.5°	5798.2	5775.5	5732.8	5617.6	5492.5	5491.1	5722.9	6102.4	6203.4	6230.5	6213.3
25°	6233.2	6199.2	6145.1	5988.8	5748.4	5629.0	5813.8	6293.0	6462.2	6469.3	6419.6
27.5°	6733.7	6682.6	6608.7	6402.5	6078.2	5845.2	5953.2	6511.9	6759.4	6756.5	6654.1
30°	7261.3	7210.1	7131.8	6881.6	6473.6	6136.6	6146.5	6748.0	7112.0	7096.3	6921.4
32.5°	7646.6	7608.2	7592.6	7399.2	6928.6	6480.7	6368.3	7009.6	7547.1	7532.8	7288.3
35°	7942.3	7892.5	7911.1	7813.0	7424.8	6866.0	6640.0	7321.0	8076.0	8074.5	7770.3
37.5°	8235.2	8191.1	8206.8	8141.4	7884.0	7355.1	6971.2	7702.1	8731.5	8762.7	8353.2
40°	8502.5	8455.6	8518.2	8457.0	8240.9	7875.5	7348.0	8132.9	9490.7	9550.4	9058.4
42.5°	8663.2	8626.2	8730.0	8731.5	8550.9	8314.8	7761.7	8607.7	10369.4	10503.0	9925.8
45°	8718.6	8705.8	8862.3	8894.9	8825.2	8569.3	8134.3	9125.3	11316.3	11555.1	10913.9
47.5°	8658.9	8634.7	8850.9	8971.7	9027.2	8688.7	8442.8	9685.4	12283.2	12632.9	11991.7
50°	8357.4	8310.6	8631.9	8886.4	9084.1	8766.9	8754.2	10332.4	13382.2	13764.7	13075.1
52.5°	7815.7	7780.3	8145.7	8587.9	8958.9	8805.4	9103.9	11039.0	14425.8	14920.6	14185.6
55°	7123.3	7076.4	7478.8	8056.1	8647.5	8792.6	9453.7	11829.6	15657.2	16159.0	15333.0
57.5°	6025.7	5931.9	6440.9	7123.3	8139.9	8777.0	9817.7	12615.8	16908.3	17509.8	16557.1
60°	4424.7	4285.4	4909.5	5718.6	7147.5	8624.8	10268.4	13497.4	18409.8	18951.5	17893.6
62.5°	2576.3	2495.3	2903.4	3658.3	5387.3	7729.0	10521.5	14522.5	19885.6	20454.4	19207.5
65°	2000.5	1977.7	2013.3	2071.6	2998.6	5786.8	9740.9	15522.1	21762.5	22160.6	20576.7
67.5°	1829.9	1812.8	1828.5	1719.0	1521.3	3223.3	7706.3	15775.2	23772.9	24014.6	21775.2
70°	1626.6	1606.7	1657.8	1564.0	1197.2	1465.9	4979.2	14856.7	25372.4	25826.0	22686.6
72.5°	1325.1	1302.4	1421.8	1379.1	1008.1	941.3	2501.0	12674.1	25204.6	26145.9	22034.0
75°	1018.0	1005.2	1147.4	1183.0	821.8	740.8	1200.1	9421.0	22180.5	23128.8	18989.9
77.5°	790.6	780.5	853.1	982.5	662.6	574.4	737.9	5976.0	16715.0	16881.3	13086.5
80°	592.9	564.5	631.3	760.7	516.1	419.4	500.5	3484.9	10565.6	9577.4	5695.8
82.5°	371.0	356.9	412.4	507.6	364.0	288.6	325.6	1925.2	4234.2	2493.9	1099.1
85°	211.9	206.1	224.7	290.1	197.6	166.4	186.2	850.2	773.5	531.8	331.3
87.5°	85.3	82.5	102.4	129.4	72.5	61.1	65.4	204.7	170.7	157.8	109.5
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°	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8	5395.8
2.5°	5411.5	5411.5	5391.6	5360.2	5324.8	5302.0	5265.0	5255.1	5216.6	5205.3	5223.8
5°	5476.9	5465.5	5404.3	5316.2	5195.3	5084.4	4962.1	4885.4	4777.3	4739.0	4767.4
7.5°	5559.3	5528.0	5422.9	5229.4	4976.4	4727.6	4468.8	4272.6	4084.9	4018.1	4026.6
10°	5634.7	5590.7	5411.5	5073.0	4635.2	4204.3	3792.0	3503.3	3284.4	3194.8	3214.7
12.5°	5710.1	5629.0	5336.2	4812.9	4150.3	3566.0	3126.6	2902.0	2766.9	2658.8	2694.3
15°	5781.1	5667.4	5219.5	4464.5	3618.6	3025.6	2701.5	2522.3	2414.3	2343.1	2356.0
17.5°	5863.6	5700.1	5044.6	4022.3	3112.4	2651.7	2387.2	2279.2	2257.9	2249.4	2255.0
20°	5978.7	5730.0	4814.3	3527.5	2739.8	2353.1	2216.7	2206.7	2205.3	2201.0	2215.2
22.5°	6102.4	5765.5	4510.0	3078.3	2422.8	2166.8	2142.7	2122.8	2110.0	2108.5	2124.2
25°	6248.9	5776.9	4129.0	2710.0	2152.6	2078.7	2050.3	2020.4	2011.9	2011.9	2020.4
27.5°	6391.1	5738.5	3685.4	2390.1	2000.5	1997.6	1960.7	1950.8	1949.3	1953.5	1964.9
30°	6533.2	5666.0	3244.6	2094.4	1912.3	1912.3	1899.5	1906.7	1912.3	1926.6	1936.5
32.5°	6725.2	5589.2	2876.4	1875.3	1835.6	1821.3	1834.1	1848.4	1854.0	1872.6	1888.2
35°	7006.8	5535.2	2583.4	1755.9	1755.9	1737.5	1744.6	1741.8	1729.0	1720.4	1740.3
37.5°	7379.3	5532.3	2341.7	1700.5	1689.1	1686.3	1687.7	1669.2	1619.5	1559.7	1561.2
40°	7827.1	5609.1	2155.5	1662.1	1653.6	1670.6	1662.1	1612.3	1475.9	1372.1	1369.2
42.5°	8428.6	5828.0	2036.1	1615.2	1640.8	1662.1	1628.0	1455.9	1363.6	1293.9	1291.0
45°	9136.6	6183.5	1974.9	1565.4	1616.6	1642.3	1477.2	1401.9	1328.0	1244.1	1238.4
47.5°	9938.5	6631.3	1960.7	1518.5	1562.6	1578.2	1413.3	1379.1	1295.3	1204.3	1197.2
50°	10811.6	7161.8	1999.1	1463.1	1484.4	1430.4	1391.9	1360.7	1274.0	1184.4	1174.4
52.5°	11714.4	7746.1	2075.8	1387.7	1406.2	1346.4	1383.4	1356.4	1261.2	1140.3	1131.8
55°	12601.7	8334.7	2149.8	1299.6	1326.6	1271.1	1359.3	1339.4	1202.8	1066.4	1059.2
57.5°	13503.0	8920.6	2222.3	1221.4	1249.8	1198.6	1320.9	1293.9	1137.4	998.1	995.3
60°	14440.1	9489.2	2256.4	1145.9	1165.9	1131.8	1262.6	1215.6	1063.5	928.4	924.1
62.5°	15317.3	9962.7	2201.0	1070.6	1083.4	1069.2	1185.8	1123.2	989.6	850.2	848.8
65°	16197.5	10244.3	2030.3	996.7	999.6	992.4	1077.8	1023.7	902.8	782.0	773.5
67.5°	16995.1	10402.1	1758.8	917.1	910.0	907.1	976.8	915.6	819.0	713.7	705.2
70°	17164.2	10001.1	1343.7	823.3	823.3	816.1	865.9	803.3	726.5	641.2	638.4
72.5°	15677.1	8412.9	954.1	716.6	728.0	713.7	755.0	702.4	632.7	575.8	558.7
75°	12641.4	6169.3	693.8	607.1	627.0	602.8	641.2	604.2	544.6	543.1	489.1
77.5°	8686.0	3814.7	503.3	500.5	514.7	483.4	527.5	507.6	453.6	429.4	402.4
80°	3706.7	1521.3	366.8	386.7	386.7	358.3	409.5	415.1	368.3	356.9	356.9
82.5°	737.9	432.2	257.4	265.9	250.2	241.7	290.1	321.3	443.6	493.3	494.8
85°	221.8	159.3	155.0	145.0	127.9	129.4	170.7	322.8	398.1	227.4	196.2
87.5°	61.1	39.8	41.2	32.7	27.1	35.6	58.3	244.6	133.7	56.9	48.4
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)