

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: P961872

Luminaire Tested: **NAV-SB2B-727-U-T2R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P961872  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2B-727-U-T2R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10905 lumens  
Efficiency: N/A  
Efficacy: 147.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

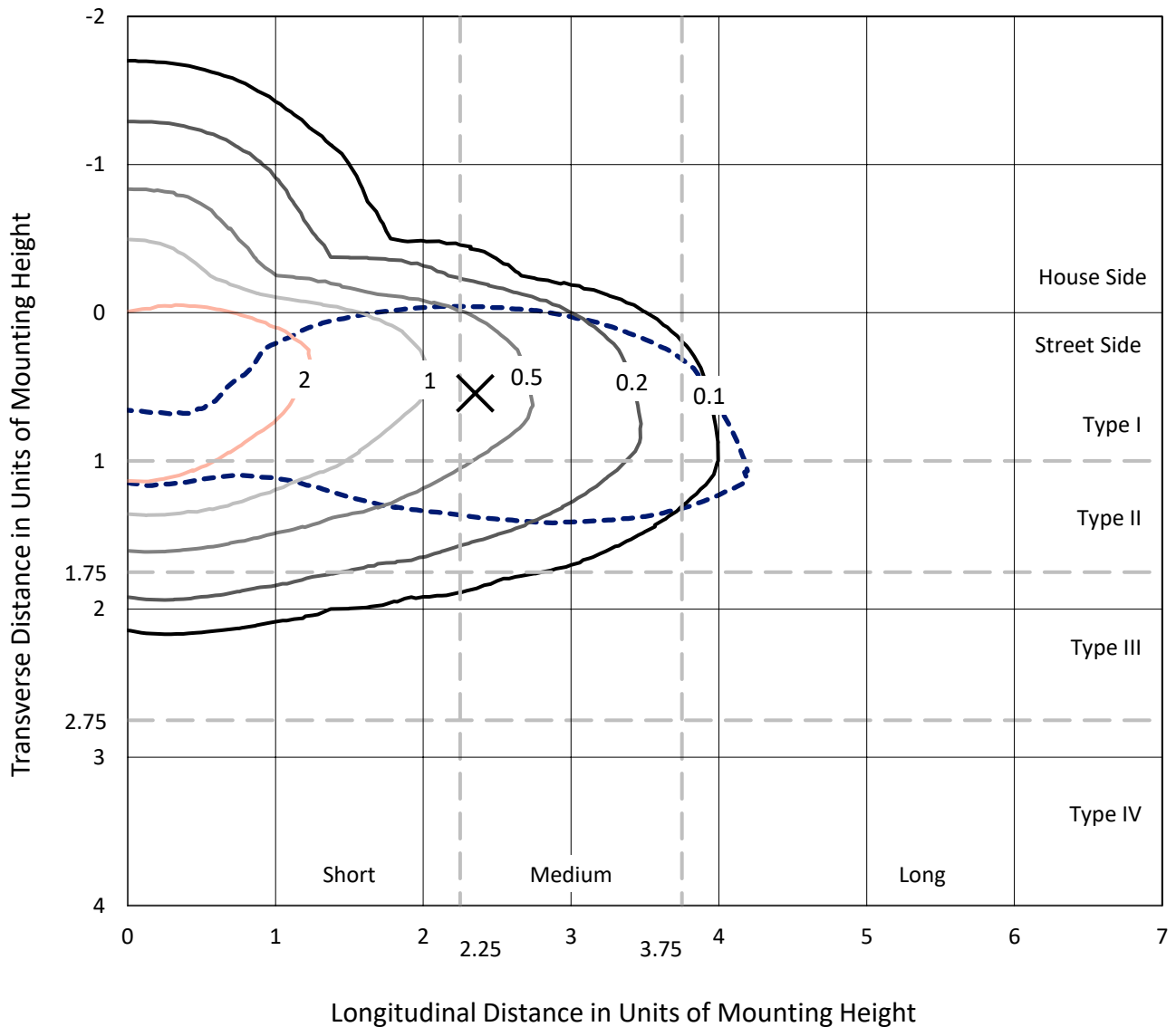
Input Watts (W): 73.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

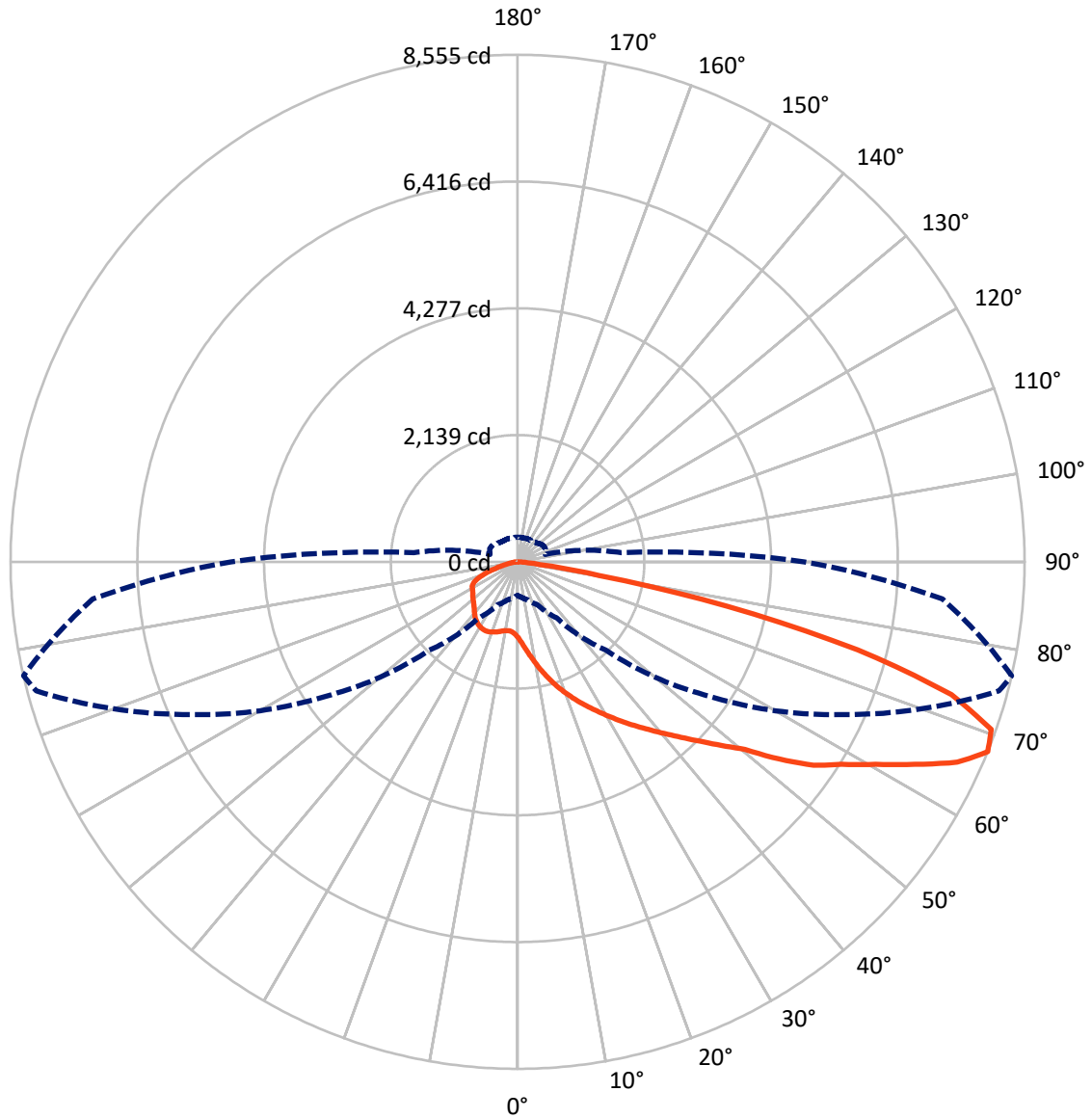
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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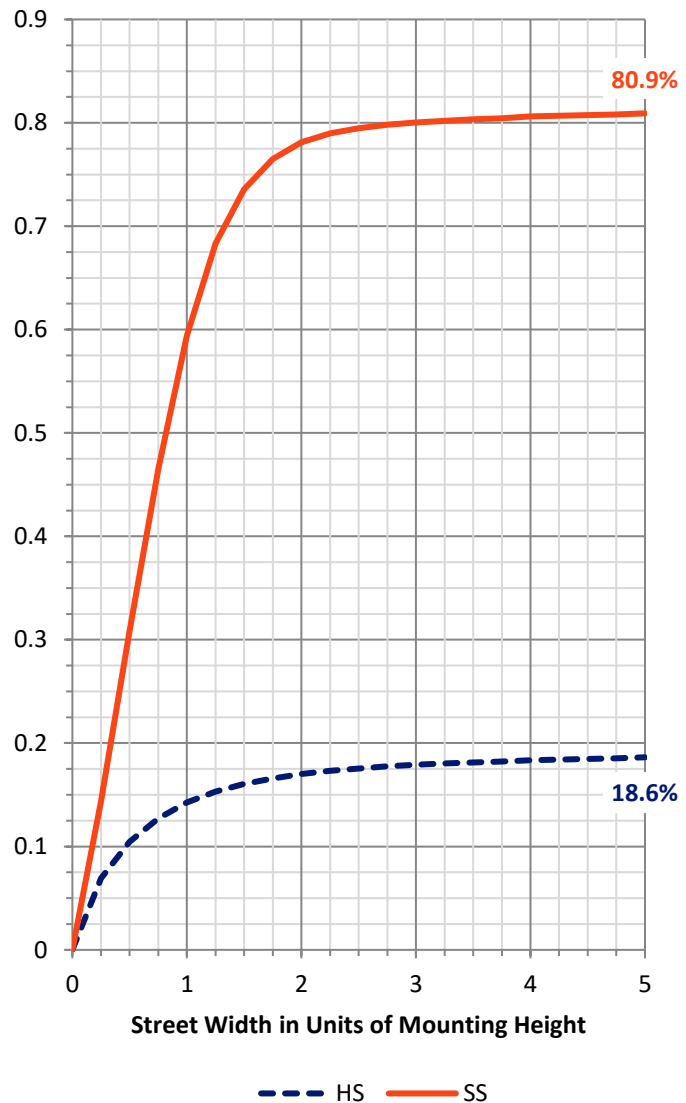
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2062.8	0.0	2062.8
	% Fixture	18.9	0.0	18.9
<b>Street Side</b>	Lumens	8842.2	0.0	8842.2
	% Fixture	81.1	0.0	81.1
<b>Total</b>	Lumens	10905.0	0.0	10905.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.1	1.3
10°-20°	492.7	4.5
20°-30°	930.3	8.5
30°-40°	1498.7	13.7
40°-50°	2049.9	18.8
50°-60°	2312.3	21.2
60°-70°	2158.2	19.8
70°-80°	1183.1	10.8
80°-90°	142.7	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°	10905.0	100.0
0°-180°	10905.0	100.0

**Coefficient of Utilization**

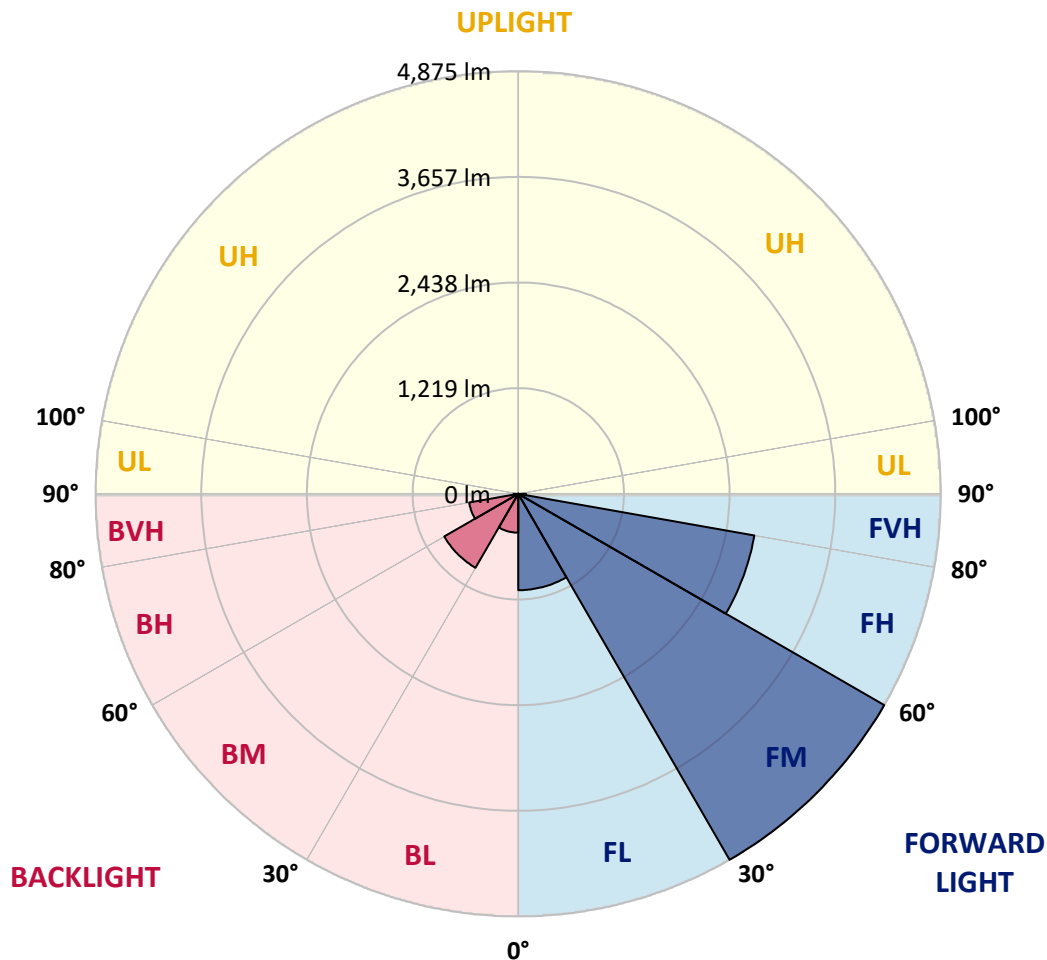


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1111.6	10.2			
FM (30°-60°)	4875.5	44.7			
FH (60°-80°)	2765.8	25.4			G2/5000
FVH (80°-90°)	89.2	0.8			G1/100
BL (0°-30°)	448.5	4.1	B1/500		
BM (30°-60°)	985.3	9.0	B1/1000		
BH (60°-80°)	575.5	5.3	B2/1000		G2/1000
BVH (80°-90°)	53.5	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5
2.5°	1602.1	1613.2	1599.2	1599.2	1552.0	1527.1	1479.9	1443.8	1379.1	1367.9	1325.1
5°	1893.6	1907.7	1887.9	1879.5	1823.8	1772.6	1693.2	1615.0	1499.6	1487.8	1387.0
7.5°	2119.4	2137.3	2119.9	2110.9	2061.4	2004.0	1911.1	1801.8	1639.2	1616.1	1470.4
10°	2303.4	2306.2	2300.6	2304.0	2265.1	2217.9	2122.8	1995.5	1792.3	1760.7	1571.1
12.5°	2407.5	2420.5	2431.8	2452.0	2445.2	2416.0	2330.4	2178.4	1954.5	1913.9	1680.9
15°	2456.5	2479.1	2504.4	2551.1	2588.8	2596.1	2530.8	2374.9	2119.4	2070.4	1791.7
17.5°	2473.9	2495.4	2535.3	2602.9	2684.0	2738.6	2709.3	2565.8	2282.6	2226.3	1908.2
20°	2562.4	2568.5	2592.7	2656.9	2744.7	2835.4	2857.3	2749.3	2444.1	2380.6	2028.7
22.5°	2751.5	2739.1	2745.9	2775.2	2838.2	2926.0	2976.1	2911.4	2610.2	2537.1	2150.3
25°	3063.9	3027.8	2991.9	2958.0	2990.1	3039.7	3096.5	3073.5	2784.1	2691.2	2273.0
27.5°	3458.6	3414.6	3335.2	3224.3	3185.5	3202.9	3228.2	3223.8	2945.1	2851.1	2399.7
30°	3846.9	3795.7	3701.2	3540.7	3438.3	3392.1	3373.0	3360.1	3120.2	3020.0	2527.4
32.5°	4157.1	4116.6	4023.6	3844.1	3695.5	3616.7	3553.1	3506.9	3303.2	3202.9	2662.5
35°	4428.4	4390.7	4284.3	4088.4	3926.9	3842.9	3759.7	3661.2	3493.4	3392.1	2807.8
37.5°	4676.0	4638.3	4492.6	4288.8	4126.1	4068.1	3993.8	3826.6	3684.3	3588.5	2961.4
40°	4832.6	4824.2	4687.9	4457.1	4288.3	4259.5	4234.8	4018.6	3895.9	3807.0	3130.4
42.5°	4872.5	4891.1	4783.1	4593.3	4432.3	4409.2	4467.3	4235.9	4133.4	4048.4	3321.7
45°	4776.3	4829.8	4758.9	4629.9	4534.8	4522.4	4673.3	4473.4	4396.3	4318.6	3552.5
47.5°	4532.5	4623.2	4593.9	4575.9	4562.4	4615.9	4854.5	4725.7	4694.1	4626.5	3816.0
50°	4040.6	4212.2	4263.5	4377.2	4507.7	4688.5	5019.4	5000.9	5042.0	4973.9	4136.8
52.5°	3190.0	3426.5	3723.6	4008.5	4340.1	4664.3	5200.7	5396.0	5569.4	5532.2	4646.8
55°	2633.3	2739.7	2968.2	3490.6	4014.6	4562.4	5282.3	5715.2	6092.9	6059.7	5033.6
57.5°	2205.5	2300.6	2441.3	2877.6	3522.7	4331.0	5333.0	5909.9	6451.5	6448.2	5415.2
60°	1746.7	1847.5	1991.6	2300.6	2948.0	3931.4	5321.7	6131.8	6909.1	6937.3	5880.7
62.5°	1228.9	1339.7	1499.6	1787.8	2360.9	3413.5	5092.1	6292.2	7447.9	7524.4	6440.8
65°	807.8	881.0	1001.4	1250.2	1759.1	2747.5	4653.6	6313.0	8024.3	8153.8	6966.5
67.5°	566.3	594.4	665.3	800.4	1159.6	2107.0	3955.0	6097.4	8408.7	8554.5	7194.6
70°	441.9	455.9	492.0	546.0	728.4	1416.9	3030.7	5536.7	8326.6	8478.5	6956.5
72.5°	381.6	395.1	408.7	415.4	488.6	874.7	2053.0	4629.4	7552.5	7655.5	6048.4
75°	346.1	349.5	360.8	358.5	372.7	567.4	1184.9	3373.0	5958.9	5923.5	4465.0
77.5°	291.0	295.5	314.1	311.3	331.0	387.9	615.3	2176.8	3863.2	3622.4	2485.2
80°	246.5	248.8	269.1	265.7	287.6	280.8	314.1	1109.5	1638.7	1388.2	716.6
82.5°	85.6	105.8	205.5	211.7	219.6	170.0	181.2	452.5	500.4	383.3	150.3
85°	41.6	44.5	104.7	148.6	148.0	85.6	88.4	161.5	157.6	123.8	50.1
87.5°	6.8	8.4	12.4	58.0	46.1	22.5	30.4	31.6	32.7	28.2	11.3
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°	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5	1279.5
2.5°	1293.6	1265.5	1206.3	1151.7	1108.9	1067.8	1044.8	1025.1	1013.8	1011.6	1011.6
5°	1328.5	1270.5	1163.0	1072.4	1013.2	969.3	946.3	931.6	924.3	919.8	919.2
7.5°	1378.5	1293.6	1140.4	1037.4	975.5	944.0	932.1	929.9	929.4	929.9	931.6
10°	1447.8	1331.3	1138.2	1029.0	977.2	959.8	959.2	959.8	962.0	962.6	963.1
12.5°	1522.6	1370.1	1147.2	1036.3	998.6	989.0	987.4	986.8	988.5	989.6	990.1
15°	1604.3	1421.4	1162.5	1052.1	1022.2	1012.1	1010.4	1007.1	1006.4	1005.9	1005.3
17.5°	1688.2	1472.0	1179.3	1069.0	1037.4	1023.4	1017.2	1009.3	1003.1	1001.4	1003.1
20°	1773.1	1522.1	1191.2	1077.4	1038.5	1018.8	1006.4	993.0	982.3	976.1	978.4
22.5°	1863.8	1574.5	1198.4	1075.1	1028.5	1001.4	978.9	963.1	946.8	936.1	936.6
25°	1952.2	1620.0	1197.9	1063.3	1008.7	974.4	945.7	925.5	902.9	891.6	891.6
27.5°	2037.2	1661.1	1183.8	1042.5	980.6	942.3	907.9	883.8	861.8	851.2	850.5
30°	2125.0	1695.5	1161.8	1012.1	947.4	905.2	867.5	846.6	826.9	816.8	816.2
32.5°	2212.3	1727.0	1130.9	974.4	909.1	868.6	831.4	812.3	800.4	800.4	801.0
35°	2304.5	1749.0	1089.8	930.5	868.6	829.7	800.4	789.1	788.1	781.4	779.6
37.5°	2401.9	1763.0	1039.7	885.5	828.6	792.0	783.0	769.5	758.2	743.6	741.4
40°	2504.4	1777.1	979.5	838.8	786.4	766.1	762.2	744.2	712.1	676.1	671.0
42.5°	2628.8	1786.7	917.0	792.0	741.9	735.1	740.8	709.8	658.6	631.6	632.1
45°	2772.9	1802.5	859.6	745.9	696.3	696.3	720.0	679.5	637.2	620.3	623.1
47.5°	2959.8	1839.1	806.1	695.2	654.1	665.3	673.8	642.9	619.2	598.4	597.8
50°	3230.0	1926.8	750.9	644.0	622.0	644.5	632.7	614.7	587.1	570.2	568.6
52.5°	3565.5	1978.7	701.9	597.8	594.4	616.9	600.0	583.2	562.3	539.9	535.4
55°	3794.0	1988.2	660.8	564.1	575.8	573.6	567.4	552.2	541.0	511.2	511.7
57.5°	4049.6	2007.4	627.1	543.8	564.1	539.3	537.0	524.1	509.4	489.1	482.4
60°	4355.2	2037.2	597.8	535.9	553.9	516.7	505.5	500.4	485.7	475.7	478.5
62.5°	4688.5	2064.1	568.0	537.0	542.1	494.8	478.0	476.2	467.2	463.8	463.8
65°	4915.9	1990.4	530.8	535.9	523.5	472.3	450.9	450.3	443.0	441.9	441.4
67.5°	4836.6	1756.8	480.7	520.1	504.4	449.8	426.1	423.8	414.3	414.8	414.8
70°	4439.1	1423.6	411.5	481.2	480.7	429.5	400.3	392.9	380.0	382.2	384.5
72.5°	3693.8	1054.9	318.6	416.6	443.0	410.9	370.4	358.5	342.2	344.5	343.9
75°	2667.7	717.2	232.0	316.9	385.6	389.0	341.1	320.8	301.1	304.5	305.7
77.5°	1365.1	406.4	170.6	218.4	302.9	353.5	314.7	287.6	283.1	314.7	310.2
80°	445.3	203.8	118.2	153.1	198.7	289.4	275.8	244.9	243.7	251.0	215.6
82.5°	132.8	86.1	76.0	100.8	109.8	221.8	238.1	185.2	159.3	167.8	173.3
85°	45.6	41.6	43.4	50.1	52.4	130.1	166.7	122.7	115.9	127.8	126.1
87.5°	10.7	14.7	12.4	11.3	11.3	31.6	64.8	51.2	70.9	47.3	45.6
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)