

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: P966119

Luminaire Tested: **NAV-SB4B-730-U-T2R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P966119  
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-SB4B-730-U-T2R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23561.7 lumens  
Efficiency: N/A  
Efficacy: 160.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

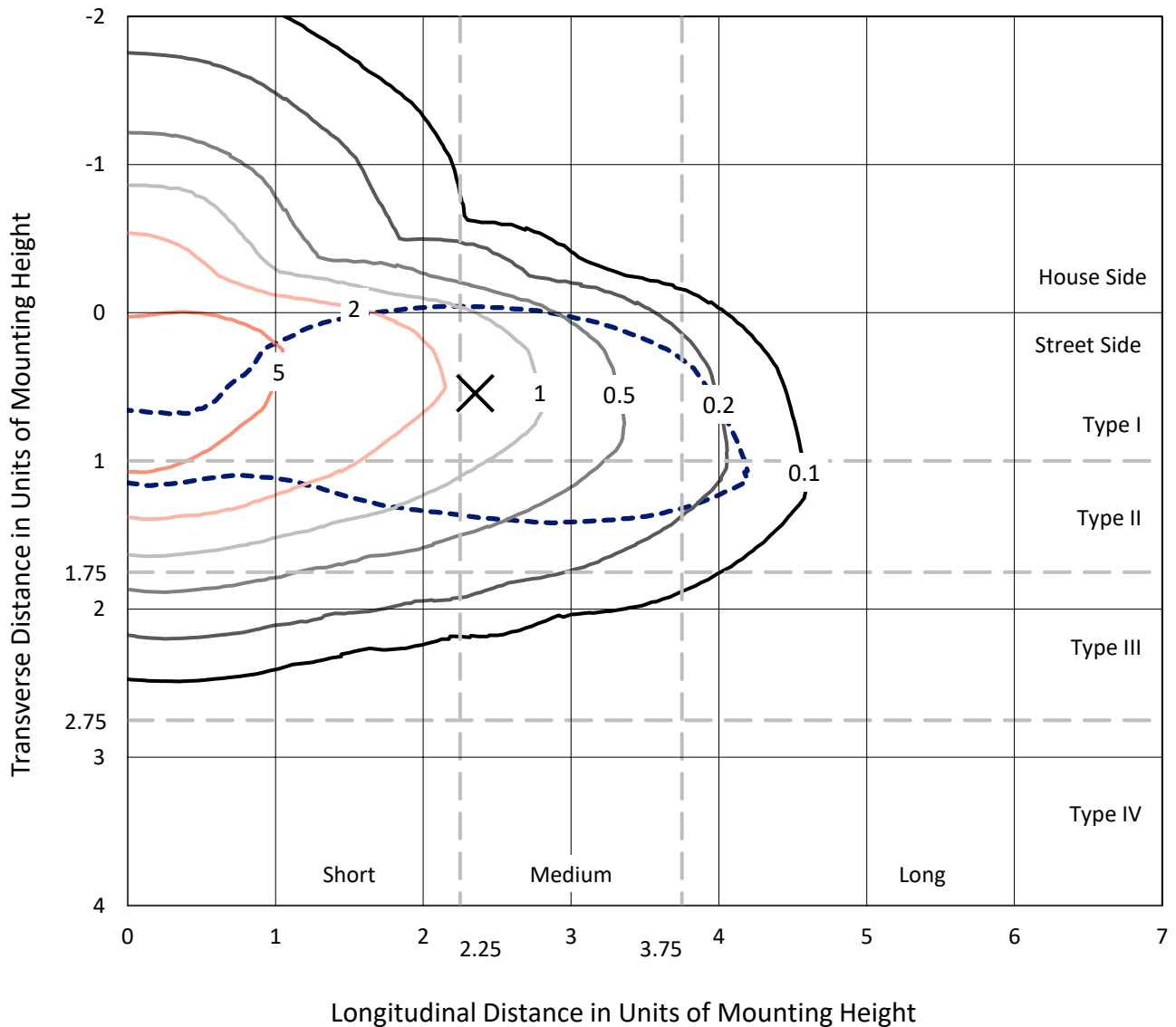
Input Watts (W): 147  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

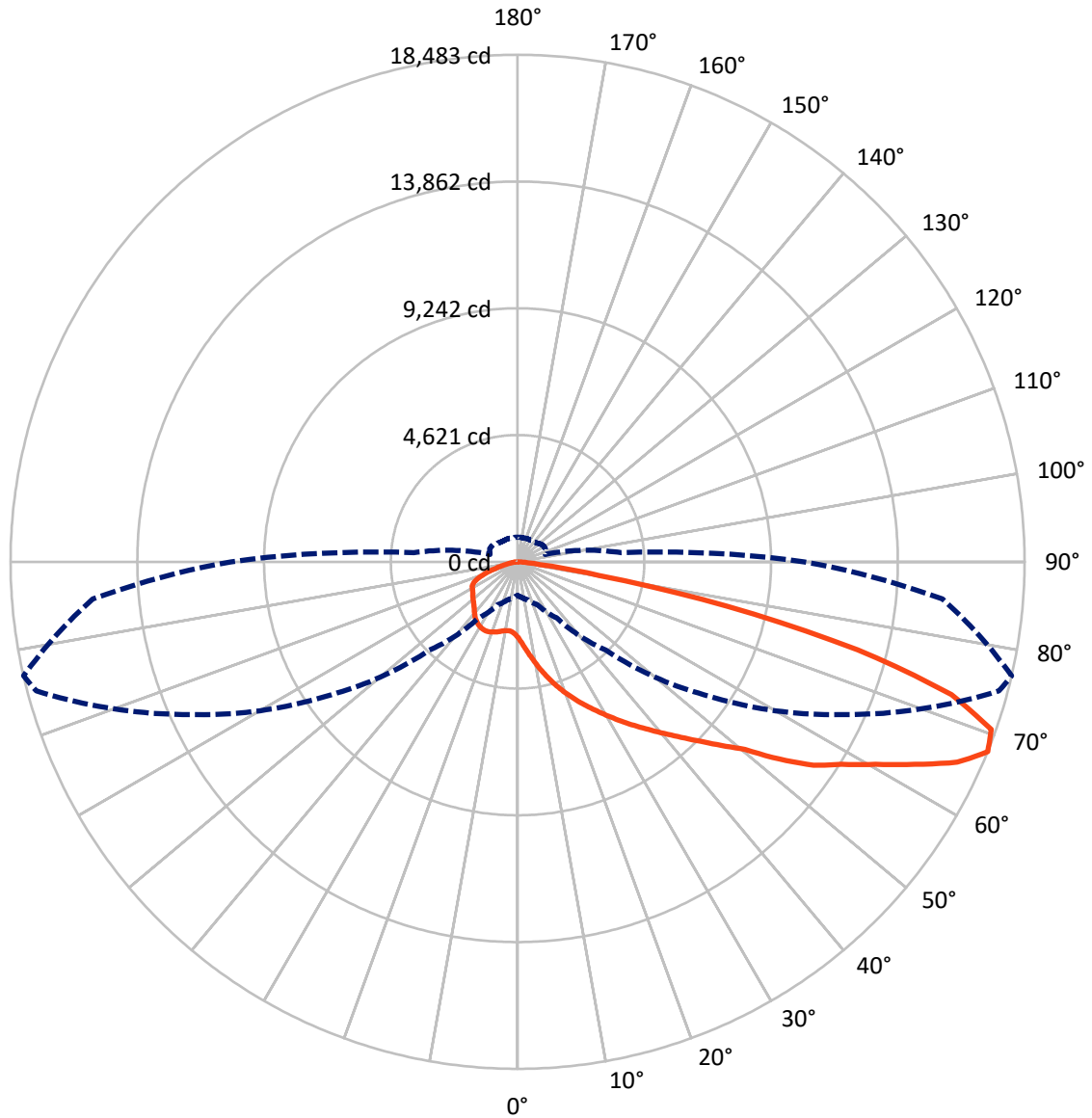
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 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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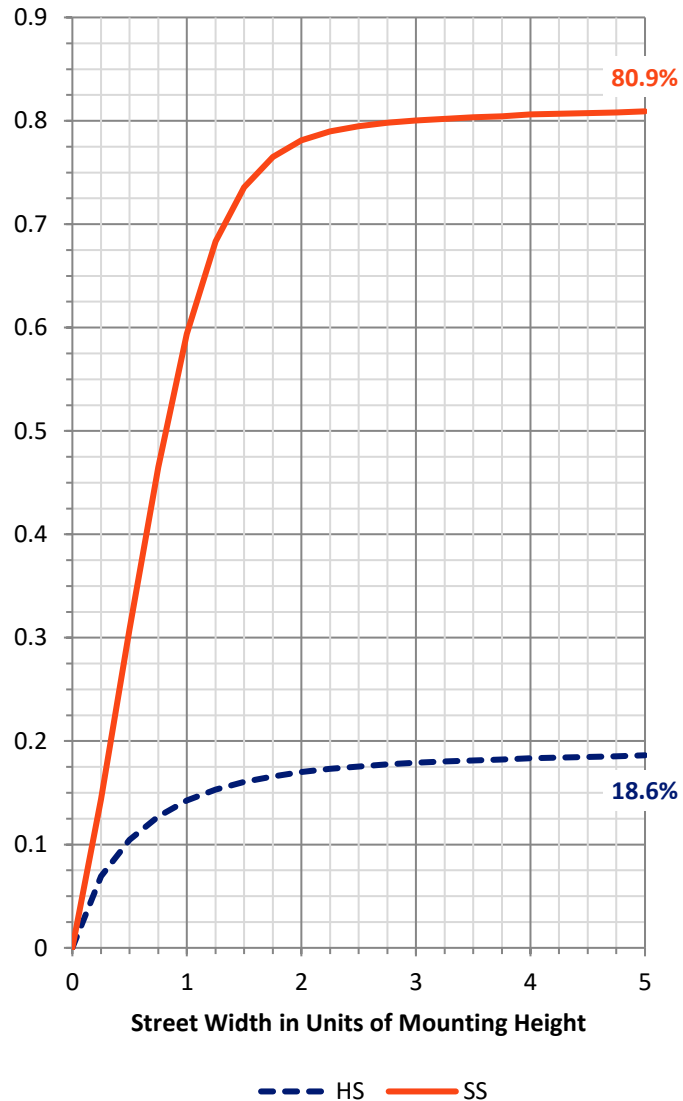
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4456.9	0.0	4456.9
	% Fixture	18.9	0.0	18.9
<b>Street Side</b>	Lumens	19104.7	0.0	19104.7
	% Fixture	81.1	0.0	81.1
<b>Total</b>	Lumens	23561.7	0.0	23561.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	296.3	1.3
10°-20°	1064.6	4.5
20°-30°	2010.0	8.5
30°-40°	3238.1	13.7
40°-50°	4429.1	18.8
50°-60°	4996.0	21.2
60°-70°	4663.2	19.8
70°-80°	2556.2	10.8
80°-90°	308.3	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°	23561.7	100.0
0°-180°	23561.7	100.0

**Coefficient of Utilization**

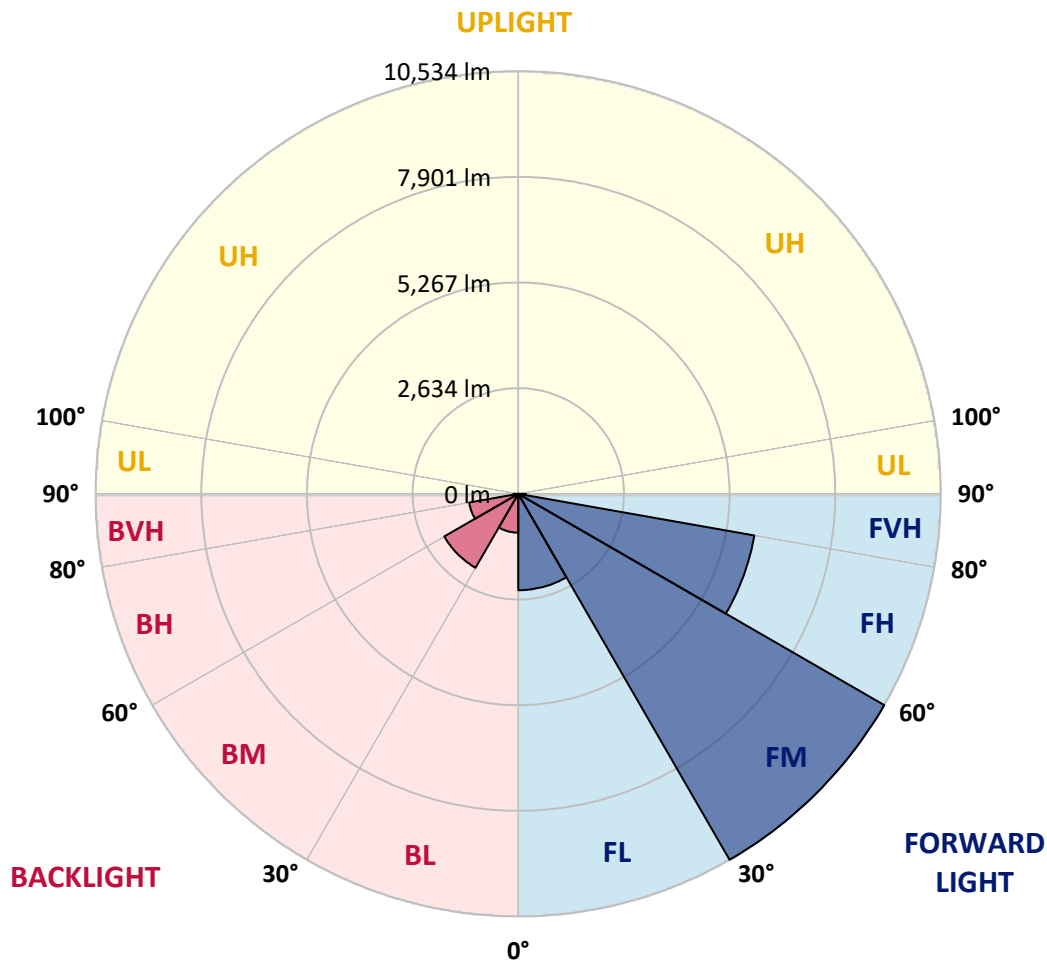


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2401.8	10.2			
FM (30°-60°)	10534.2	44.7			
FH (60°-80°)	5975.9	25.4			G3/7500
FVH (80°-90°)	192.8	0.8			G2/225
BL (0°-30°)	969.0	4.1	B2/1000		
BM (30°-60°)	2128.9	9.0	B2/2500		
BH (60°-80°)	1243.4	5.3	B3/2500		G3/2500
BVH (80°-90°)	115.5	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-G3**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5
2.5°	3461.4	3485.7	3455.4	3455.4	3353.2	3299.7	3197.5	3119.7	2979.8	2955.5	2863.0
5°	4091.4	4121.8	4079.3	4061.0	3940.6	3829.9	3658.4	3489.4	3240.0	3214.5	2996.8
7.5°	4579.2	4618.0	4580.3	4560.9	4453.8	4329.8	4129.1	3893.2	3541.7	3491.9	3176.8
10°	4976.9	4982.9	4970.7	4978.1	4894.2	4792.0	4586.5	4311.6	3872.6	3804.4	3394.5
12.5°	5201.9	5229.9	5254.2	5297.9	5283.4	5220.1	5035.2	4706.9	4222.8	4135.3	3631.7
15°	5307.7	5356.3	5411.1	5512.0	5593.5	5609.3	5468.2	5131.4	4579.2	4473.3	3871.3
17.5°	5345.4	5391.6	5477.9	5623.9	5799.0	5917.0	5853.8	5543.6	4931.9	4810.2	4123.1
20°	5536.3	5549.8	5602.0	5740.6	5930.3	6126.2	6173.7	5940.1	5280.9	5143.4	4383.3
22.5°	5945.0	5918.2	5932.8	5996.0	6132.3	6322.0	6430.2	6290.4	5639.8	5481.6	4646.0
25°	6620.0	6542.2	6464.4	6391.4	6460.7	6567.7	6690.6	6640.7	6015.5	5814.8	4911.2
27.5°	7472.6	7377.7	7206.3	6966.6	6882.7	6920.4	6975.1	6965.4	6363.4	6160.2	5184.9
30°	8311.8	8201.1	7996.7	7650.2	7428.8	7329.1	7287.7	7259.8	6741.6	6525.2	5460.9
32.5°	8982.0	8894.3	8693.7	8305.7	7984.6	7814.4	7676.9	7577.2	7136.9	6920.4	5752.8
35°	9568.2	9486.7	9256.8	8833.6	8484.5	8303.3	8123.2	7910.4	7548.0	7329.1	6066.6
37.5°	10103.3	10021.8	9706.9	9266.5	8915.0	8789.8	8629.3	8268.0	7960.3	7753.5	6398.7
40°	10441.5	10423.2	10128.8	9630.2	9265.3	9203.3	9149.8	8682.8	8417.6	8225.4	6763.6
42.5°	10527.8	10568.0	10334.4	9924.6	9576.7	9526.9	9652.1	9152.2	8930.8	8747.2	7177.0
45°	10319.8	10435.3	10282.1	10003.6	9798.1	9771.3	10097.3	9665.4	9498.9	9331.0	7675.7
47.5°	9793.2	9989.0	9925.8	9886.8	9857.6	9973.1	10488.8	10210.3	10142.3	9996.3	8244.9
50°	8730.1	9101.2	9211.8	9457.5	9739.7	10130.1	10845.2	10805.0	10893.9	10746.7	8938.2
52.5°	6892.4	7403.3	8045.4	8660.8	9377.2	10077.8	11236.9	11658.9	12033.5	11953.2	10040.1
55°	5689.6	5919.5	6413.2	7541.9	8674.3	9857.6	11413.2	12348.5	13164.6	13092.8	10875.7
57.5°	4765.2	4970.7	5274.9	6217.4	7611.2	9357.7	11522.6	12769.3	13939.4	13932.0	11700.3
60°	3773.9	3991.7	4303.1	4970.7	6369.5	8494.3	11498.3	13248.5	14928.1	14989.0	12706.1
62.5°	2655.1	2894.7	3240.0	3862.8	5100.9	7375.3	11002.1	13595.2	16092.1	16257.5	13916.2
65°	1745.3	1903.4	2163.7	2701.3	3800.8	5936.5	10054.6	13640.2	17337.6	17617.3	15052.2
67.5°	1223.5	1284.3	1437.6	1729.5	2505.4	4552.4	8545.3	13174.3	18168.2	18483.2	15544.7
70°	954.8	985.1	1063.0	1179.8	1573.8	3061.3	6548.2	11963.0	17990.6	18319.0	15030.3
72.5°	824.6	853.8	883.0	897.6	1055.6	1890.0	4435.6	10002.4	16318.3	16540.8	13068.5
75°	747.9	755.3	779.6	774.7	805.1	1226.0	2560.1	7287.7	12875.1	12798.5	9647.2
77.5°	628.8	638.6	678.7	672.6	715.1	838.0	1329.3	4703.2	8347.1	7826.5	5369.7
80°	532.7	537.6	581.4	574.1	621.5	606.9	678.7	2397.2	3540.5	2999.3	1548.3
82.5°	184.9	228.7	443.9	457.4	474.4	367.3	391.7	977.8	1081.3	828.3	324.7
85°	90.0	96.0	226.2	321.1	319.9	184.9	191.0	349.0	340.5	267.5	108.2
87.5°	14.6	18.2	26.8	125.3	99.7	48.7	65.7	68.1	70.5	60.8	24.3
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°	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5	2764.5
2.5°	2795.0	2734.1	2606.4	2488.4	2396.0	2307.2	2257.4	2214.8	2190.4	2185.6	2185.6
5°	2870.3	2745.1	2512.8	2316.9	2189.2	2094.4	2044.5	2012.9	1997.1	1987.4	1986.1
7.5°	2978.5	2795.0	2464.1	2241.6	2107.7	2039.6	2014.1	2009.2	2008.0	2009.2	2012.9
10°	3128.2	2876.5	2459.3	2223.3	2111.4	2073.7	2072.4	2073.7	2078.6	2079.7	2081.0
12.5°	3289.9	2960.3	2478.7	2239.1	2157.6	2136.9	2133.3	2132.1	2135.7	2138.1	2139.4
15°	3466.2	3071.0	2511.6	2273.1	2208.7	2186.8	2183.1	2175.9	2174.6	2173.4	2172.2
17.5°	3647.5	3180.5	2548.0	2309.6	2241.6	2211.1	2197.7	2180.7	2167.4	2163.7	2167.4
20°	3831.1	3288.7	2573.6	2327.9	2243.9	2201.4	2174.6	2145.4	2122.4	2108.9	2113.9
22.5°	4027.0	3401.9	2589.4	2323.1	2222.1	2163.7	2115.1	2081.0	2045.7	2022.6	2023.9
25°	4217.9	3500.4	2588.1	2297.4	2179.5	2105.4	2043.2	1999.5	1950.9	1926.5	1926.5
27.5°	4401.6	3589.1	2557.8	2252.4	2118.7	2036.0	1961.7	1909.5	1862.0	1839.0	1837.7
30°	4591.3	3663.4	2510.3	2186.8	2046.9	1955.7	1874.2	1829.2	1786.7	1764.7	1763.5
32.5°	4779.8	3731.4	2443.4	2105.4	1964.2	1876.7	1796.4	1755.0	1729.5	1729.5	1730.7
35°	4979.2	3778.9	2354.6	2010.4	1876.7	1792.7	1729.5	1705.2	1702.7	1688.2	1684.5
37.5°	5189.7	3809.3	2246.4	1913.2	1790.3	1711.2	1691.8	1662.7	1638.3	1606.7	1601.8
40°	5411.1	3839.6	2116.2	1812.2	1699.0	1655.3	1646.8	1607.9	1538.5	1460.7	1449.8
42.5°	5679.8	3860.4	1981.2	1711.2	1603.0	1588.4	1600.5	1533.7	1423.0	1364.6	1365.8
45°	5991.2	3894.4	1857.2	1611.5	1504.5	1504.5	1555.5	1468.0	1376.8	1340.3	1346.3
47.5°	6395.0	3973.4	1741.7	1502.0	1413.3	1437.6	1455.8	1389.0	1337.8	1292.8	1291.6
50°	6978.8	4163.2	1622.5	1391.3	1344.0	1392.6	1367.0	1328.1	1268.5	1232.0	1228.4
52.5°	7703.7	4275.1	1516.7	1291.6	1284.3	1333.0	1296.5	1260.0	1215.0	1166.3	1156.6
55°	8197.4	4295.8	1427.8	1218.7	1244.2	1239.3	1226.0	1193.1	1168.8	1104.3	1105.6
57.5°	8749.6	4337.1	1354.8	1174.9	1218.7	1165.1	1160.3	1132.3	1100.7	1056.9	1042.3
60°	9410.0	4401.6	1291.6	1157.8	1196.8	1116.5	1092.1	1081.3	1049.6	1027.8	1033.8
62.5°	10130.1	4460.0	1227.2	1160.3	1171.3	1069.1	1032.6	1028.9	1009.5	1002.1	1002.1
65°	10621.5	4300.6	1146.9	1157.8	1131.1	1020.4	974.2	973.0	957.1	954.8	953.6
67.5°	10450.0	3795.9	1038.6	1123.8	1089.8	971.8	920.7	915.8	895.1	896.4	896.4
70°	9591.2	3075.9	889.1	1039.9	1038.6	928.0	864.8	848.9	820.9	825.8	830.7
72.5°	7981.0	2279.2	688.4	900.1	957.1	887.9	800.3	774.7	739.4	744.4	743.1
75°	5763.8	1549.5	501.1	684.7	833.1	840.4	737.1	693.2	650.7	657.9	660.4
77.5°	2949.3	878.1	368.5	471.9	654.4	763.8	679.9	621.5	611.7	679.9	670.1
80°	962.1	440.2	255.4	330.8	429.4	625.1	595.9	529.1	526.6	542.4	465.9
82.5°	287.0	186.0	164.2	217.7	237.2	479.2	514.4	400.2	344.2	362.4	374.6
85°	98.5	90.0	93.7	108.2	113.2	281.0	360.0	265.2	250.5	276.1	272.4
87.5°	23.1	31.7	26.8	24.3	24.3	68.1	139.9	110.7	153.2	102.2	98.5
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)