

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: P968165

Luminaire Tested: **NAV-SB5B-722-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968165
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-SB5B-722-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24532.4 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

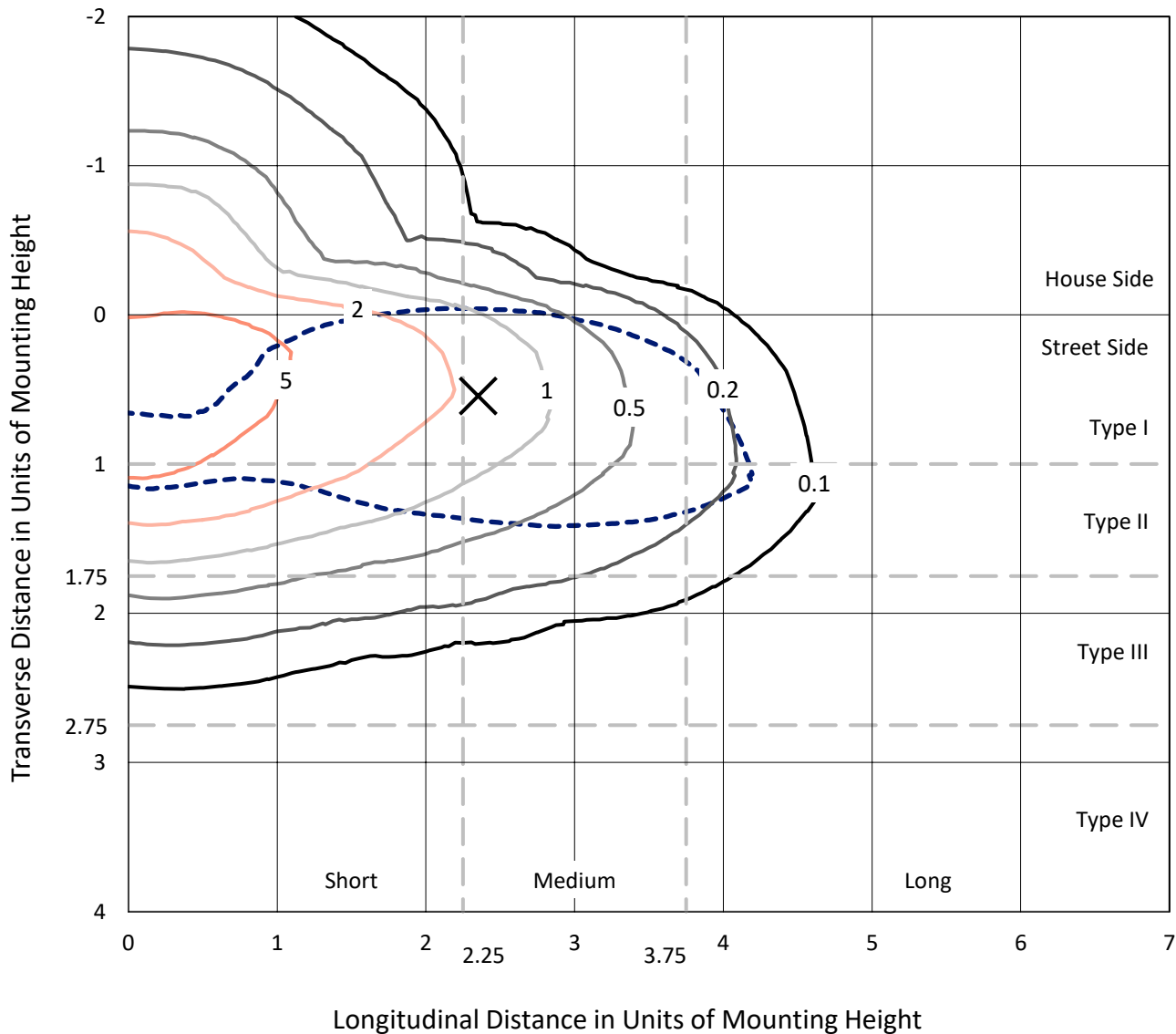
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

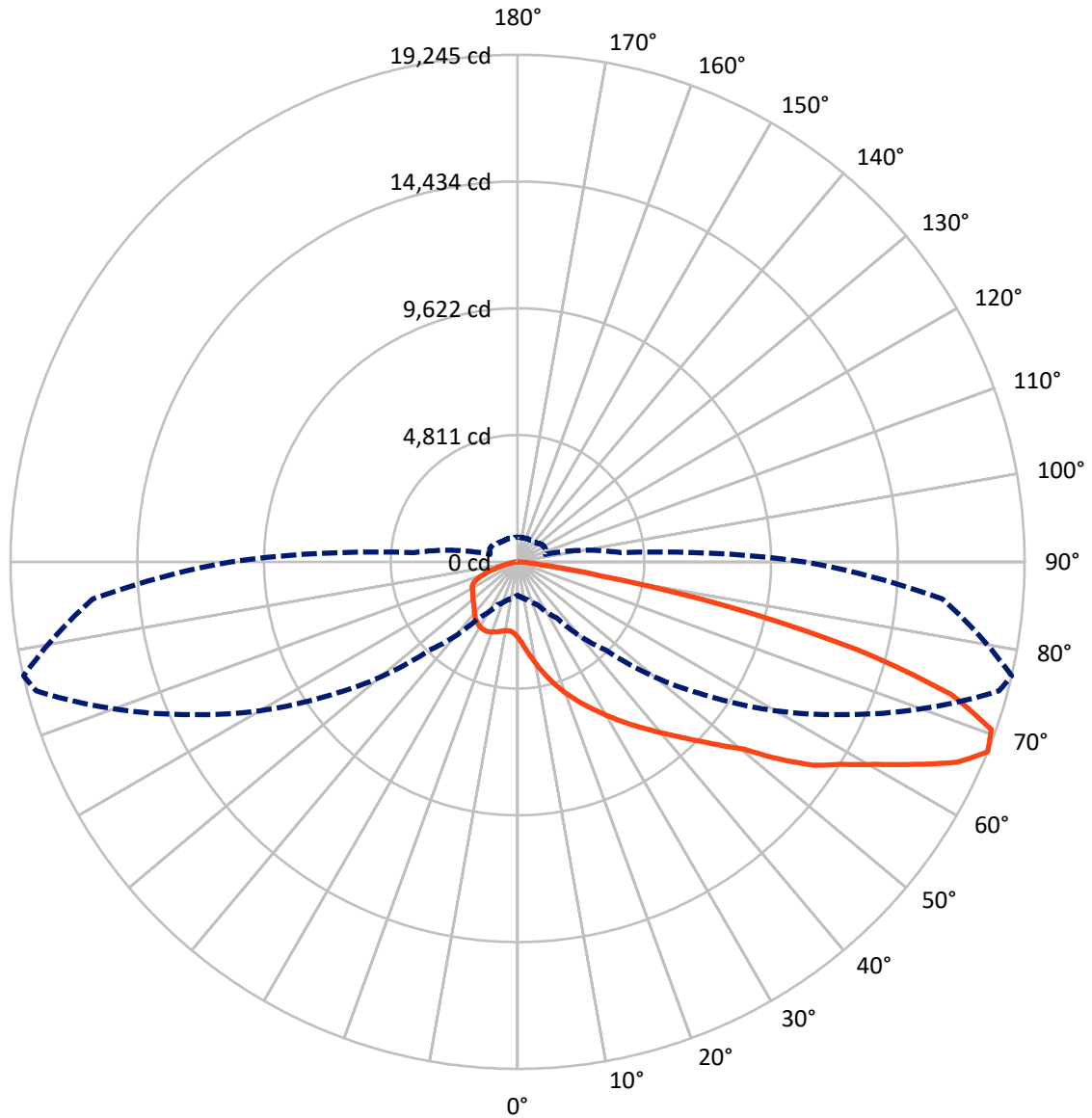
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 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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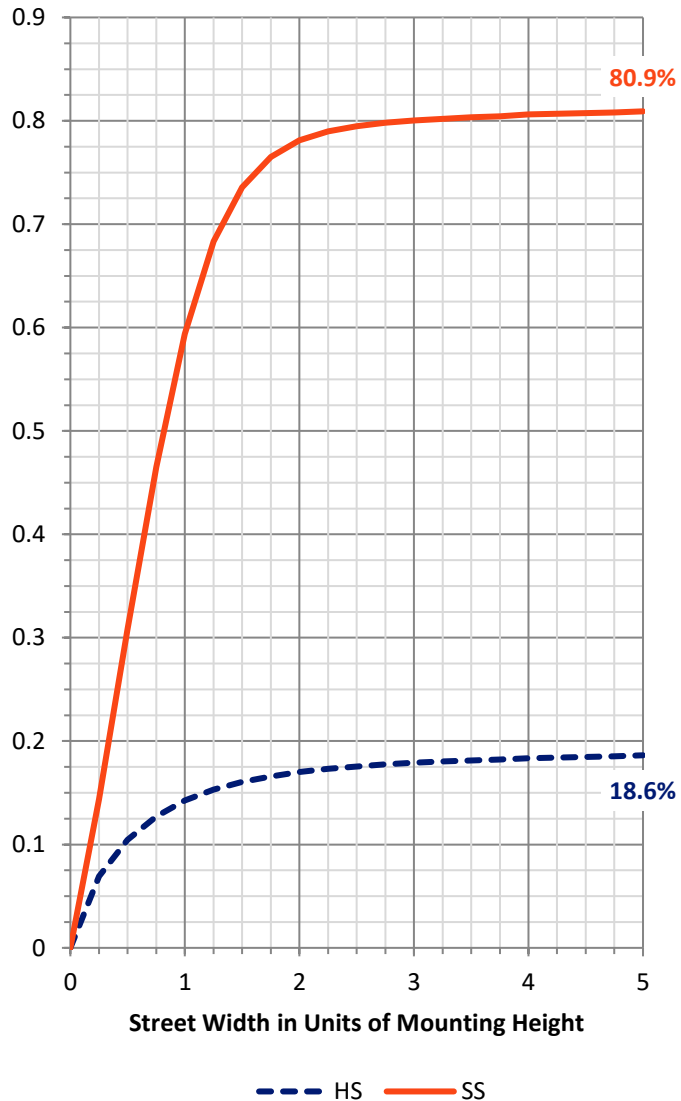
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4640.5	0.0	4640.5
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	19891.8	0.0	19891.8
	% Fixture	81.1	0.0	81.1
Total	Lumens	24532.4	0.0	24532.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.5	1.3
10°-20°	1108.4	4.5
20°-30°	2092.8	8.5
30°-40°	3371.5	13.7
40°-50°	4611.5	18.8
50°-60°	5201.8	21.2
60°-70°	4855.3	19.8
70°-80°	2661.5	10.8
80°-90°	321.0	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°	24532.4	100.0
0°-180°	24532.4	100.0

Coefficient of Utilization

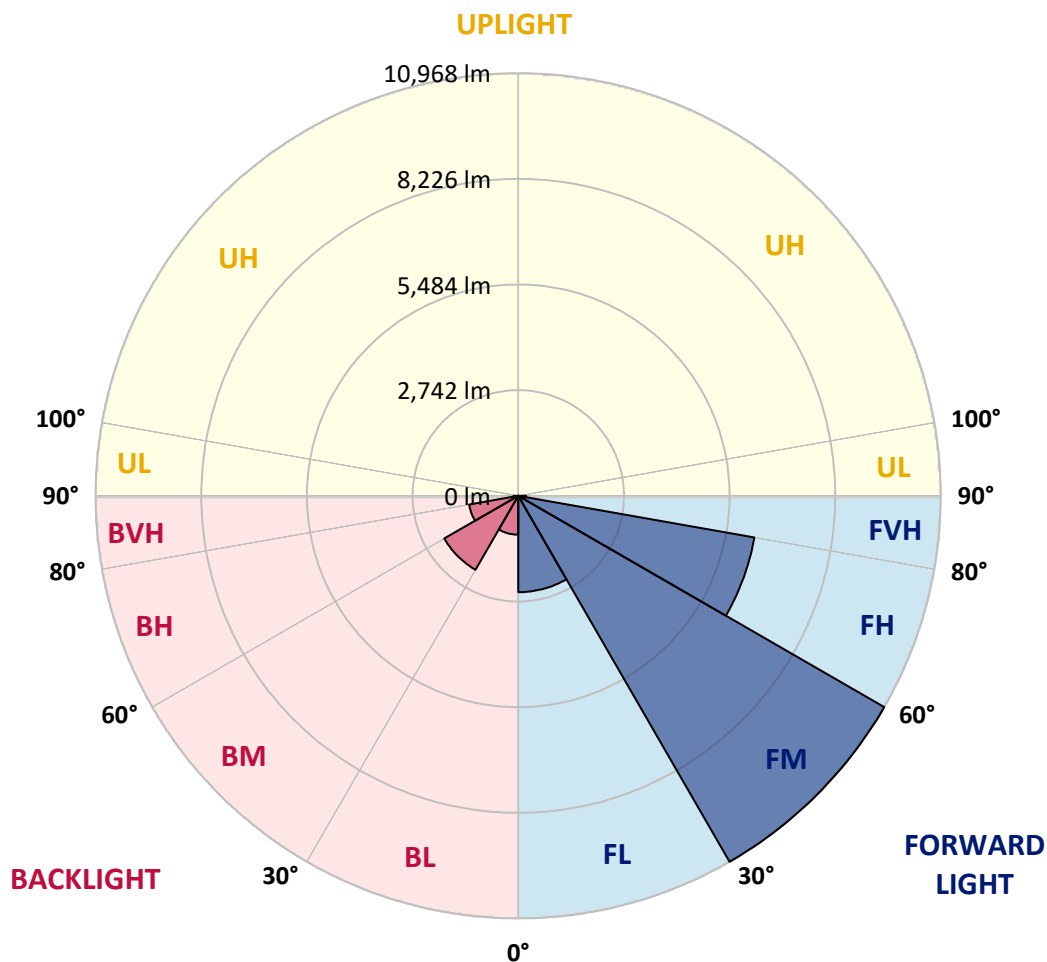


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2500.8	10.2			
FM (30°-60°)	10968.1	44.7			
FH (60°-80°)	6222.1	25.4			G3/7500
FVH (80°-90°)	200.8	0.8			G2/225
BL (0°-30°)	1009.0	4.1	B3/2500		
BM (30°-60°)	2216.7	9.0	B2/2500		
BH (60°-80°)	1294.6	5.3	B3/2500		G3/2500
BVH (80°-90°)	120.3	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°	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4
2.5°	3604.0	3629.3	3597.6	3597.6	3491.4	3435.6	3329.2	3248.2	3102.6	3077.3	2981.0
5°	4260.0	4291.7	4247.3	4228.3	4103.0	3987.8	3809.2	3633.1	3373.6	3346.9	3120.3
7.5°	4767.8	4808.3	4769.0	4748.8	4637.4	4508.2	4299.3	4053.6	3687.6	3635.7	3307.7
10°	5181.9	5188.2	5175.5	5183.1	5095.8	4989.4	4775.4	4489.2	4032.0	3961.1	3534.4
12.5°	5416.2	5445.3	5470.6	5516.2	5501.0	5435.2	5242.7	4900.7	4396.7	4305.6	3781.3
15°	5526.3	5577.0	5634.0	5739.1	5823.9	5840.3	5693.5	5342.7	4767.8	4657.6	4030.8
17.5°	5565.5	5613.7	5703.6	5855.6	6038.0	6160.8	6095.0	5772.0	5135.0	5008.4	4292.9
20°	5764.4	5778.3	5832.8	5977.2	6174.7	6378.6	6428.0	6184.8	5498.5	5355.4	4563.9
22.5°	6189.9	6162.1	6177.3	6243.1	6384.9	6582.4	6695.2	6549.5	5872.0	5707.4	4837.5
25°	6892.7	6811.6	6730.7	6654.6	6726.9	6838.3	6966.2	6914.2	6263.4	6054.4	5113.5
27.5°	7780.5	7681.7	7503.1	7253.6	7166.3	7205.5	7262.5	7252.4	6625.5	6414.0	5398.5
30°	8654.2	8539.0	8326.3	7965.3	7734.9	7631.0	7588.0	7558.9	7019.4	6793.9	5685.9
32.5°	9352.0	9260.8	9051.9	8647.9	8313.6	8136.2	7993.2	7889.3	7430.9	7205.5	5989.8
35°	9962.4	9877.5	9638.2	9197.4	8834.1	8645.4	8457.9	8236.3	7859.0	7631.0	6316.6
37.5°	10519.6	10434.7	10106.7	9648.3	9282.3	9151.9	8984.7	8608.7	8288.3	8073.0	6662.3
40°	10871.6	10852.6	10546.1	10027.0	9647.0	9582.4	9526.8	9040.5	8764.4	8564.3	7042.2
42.5°	10961.5	11003.3	10760.1	10333.4	9971.2	9919.3	10049.7	9529.2	9298.8	9107.5	7472.8
45°	10745.0	10865.3	10705.7	10415.7	10201.7	10173.8	10513.2	10063.7	9890.1	9715.5	7991.9
47.5°	10196.6	10400.5	10334.7	10294.2	10263.7	10384.1	10921.0	10631.0	10560.1	10408.2	8584.6
50°	9089.8	9476.1	9591.3	9847.1	10140.9	10547.5	11292.0	11250.2	11342.6	11189.4	9306.4
52.5°	7176.4	7708.2	8376.9	9017.6	9763.5	10492.9	11699.8	12139.2	12529.2	12445.7	10453.7
55°	5924.0	6163.3	6677.5	7852.6	9031.6	10263.7	11883.4	12857.2	13706.9	13632.2	11323.7
57.5°	4961.5	5175.5	5492.2	6473.6	7924.8	9743.2	11997.4	13295.4	14513.6	14506.0	12182.2
60°	3929.4	4156.2	4480.4	5175.5	6631.9	8844.2	11972.0	13794.3	15543.1	15606.4	13229.6
62.5°	2764.4	3013.9	3373.6	4021.9	5311.0	7679.1	11455.4	14155.2	16755.1	16927.3	14489.5
65°	1817.2	1981.8	2252.8	2812.6	3957.3	6181.1	10468.9	14202.1	18051.8	18343.0	15672.4
67.5°	1274.0	1337.2	1496.8	1800.7	2608.6	4739.9	8897.3	13717.1	18916.7	19244.7	16185.2
70°	994.0	1025.7	1106.8	1228.4	1638.7	3187.4	6818.0	12455.8	18731.8	19073.7	15649.5
72.5°	858.5	889.0	919.3	934.6	1099.2	1967.9	4618.3	10414.4	16990.6	17222.4	13606.9
75°	778.8	786.4	811.7	806.7	838.3	1276.4	2665.6	7588.0	13405.6	13325.8	10044.7
77.5°	654.7	664.8	706.6	700.3	744.7	872.5	1384.2	4896.9	8691.0	8149.0	5591.0
80°	554.6	559.8	605.4	597.7	647.1	631.9	706.6	2496.0	3686.3	3122.8	1612.0
82.5°	192.5	238.1	462.2	476.1	493.8	382.4	407.7	1018.1	1125.8	862.3	338.1
85°	93.7	100.0	235.5	334.4	333.0	192.5	198.8	363.5	354.5	278.6	112.7
87.5°	15.2	19.0	27.9	130.5	103.8	50.6	68.4	70.9	73.5	63.3	25.3
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°	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4	2878.4
2.5°	2910.1	2846.7	2713.8	2591.0	2494.7	2402.3	2350.3	2306.0	2280.7	2275.6	2275.6
5°	2988.6	2858.1	2616.3	2412.4	2279.4	2180.7	2128.7	2095.8	2079.3	2069.2	2067.9
7.5°	3101.2	2910.1	2565.6	2333.9	2194.6	2123.7	2097.0	2092.0	2090.7	2092.0	2095.8
10°	3257.0	2994.9	2560.6	2314.9	2198.4	2159.2	2157.8	2159.2	2164.2	2165.4	2166.7
12.5°	3425.4	3082.3	2580.8	2331.4	2246.5	2225.0	2221.2	2219.9	2223.7	2226.2	2227.5
15°	3609.1	3197.5	2615.0	2366.8	2299.7	2276.9	2273.1	2265.5	2264.2	2263.0	2261.7
17.5°	3797.7	3311.5	2653.0	2404.8	2333.9	2302.3	2288.3	2270.6	2256.6	2252.8	2256.6
20°	3989.0	3424.2	2679.6	2423.8	2336.4	2292.1	2264.2	2233.9	2209.8	2195.9	2200.9
22.5°	4192.9	3542.0	2696.1	2418.7	2313.6	2252.8	2202.2	2166.7	2130.0	2106.0	2107.2
25°	4391.7	3644.6	2694.8	2392.1	2269.2	2192.1	2127.5	2081.9	2031.2	2005.9	2005.9
27.5°	4582.9	3736.9	2663.2	2345.3	2206.0	2119.9	2042.6	1988.2	1938.8	1914.7	1913.5
30°	4780.5	3814.2	2613.8	2276.9	2131.3	2036.3	1951.4	1904.6	1860.3	1837.5	1836.2
32.5°	4976.8	3885.2	2544.0	2192.1	2045.2	1954.0	1870.4	1827.4	1800.7	1800.7	1802.1
35°	5184.4	3934.6	2451.7	2093.3	1954.0	1866.6	1800.7	1775.4	1772.8	1757.7	1753.9
37.5°	5403.5	3966.2	2338.9	1992.0	1864.1	1781.8	1761.5	1731.1	1705.8	1672.8	1667.8
40°	5634.0	3997.8	2203.4	1886.8	1769.0	1723.5	1714.6	1674.1	1602.0	1520.9	1509.5
42.5°	5913.8	4019.4	2062.9	1781.8	1669.0	1653.8	1666.5	1596.8	1481.6	1420.9	1422.1
45°	6238.0	4054.8	1933.7	1677.9	1566.5	1566.5	1619.7	1528.5	1433.5	1395.5	1401.9
47.5°	6658.5	4137.1	1813.4	1563.9	1471.5	1496.8	1515.8	1446.2	1393.0	1346.1	1344.9
50°	7266.3	4334.7	1689.3	1448.7	1399.3	1450.0	1423.4	1382.8	1320.8	1282.8	1279.0
52.5°	8021.0	4451.2	1579.1	1344.9	1337.2	1388.0	1349.9	1311.9	1265.1	1214.4	1204.3
55°	8535.2	4472.7	1486.7	1268.8	1295.5	1290.4	1276.4	1242.3	1217.0	1149.8	1151.1
57.5°	9110.1	4515.8	1410.7	1223.3	1268.8	1213.2	1208.1	1179.0	1146.1	1100.4	1085.3
60°	9797.8	4582.9	1344.9	1205.6	1246.1	1162.6	1137.1	1125.8	1092.9	1070.1	1076.4
62.5°	10547.5	4643.7	1277.8	1208.1	1219.4	1113.1	1075.1	1071.3	1051.0	1043.4	1043.4
65°	11059.0	4477.8	1194.1	1205.6	1177.7	1062.5	1014.3	1013.1	996.6	994.0	992.8
67.5°	10880.5	3952.3	1081.5	1170.1	1134.7	1011.8	958.6	953.6	932.0	933.3	933.3
70°	9986.4	3202.6	925.7	1082.7	1081.5	966.3	900.4	884.0	854.7	859.9	864.9
72.5°	8309.8	2373.2	716.8	937.1	996.6	924.4	833.2	806.7	770.0	775.0	773.8
75°	6001.2	1613.4	521.7	713.0	867.5	875.0	767.4	721.8	677.5	685.1	687.7
77.5°	3070.9	914.3	383.7	491.4	681.3	795.3	707.9	647.1	636.9	707.9	697.7
80°	1001.6	458.4	265.9	344.4	447.0	650.9	620.5	550.8	548.4	564.8	485.0
82.5°	298.9	193.7	171.0	226.6	246.9	499.0	535.7	416.7	358.3	377.4	390.0
85°	102.6	93.7	97.5	112.7	117.8	292.5	374.8	276.0	260.9	287.4	283.6
87.5°	24.1	32.9	27.9	25.3	25.3	70.9	145.7	115.2	159.6	106.4	102.6
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)