

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: P966062

Luminaire Tested: **NAV-SB4B-722-U-T3R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P966062  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4B-722-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15909 lumens  
Efficiency: N/A  
Efficacy: 108.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G3

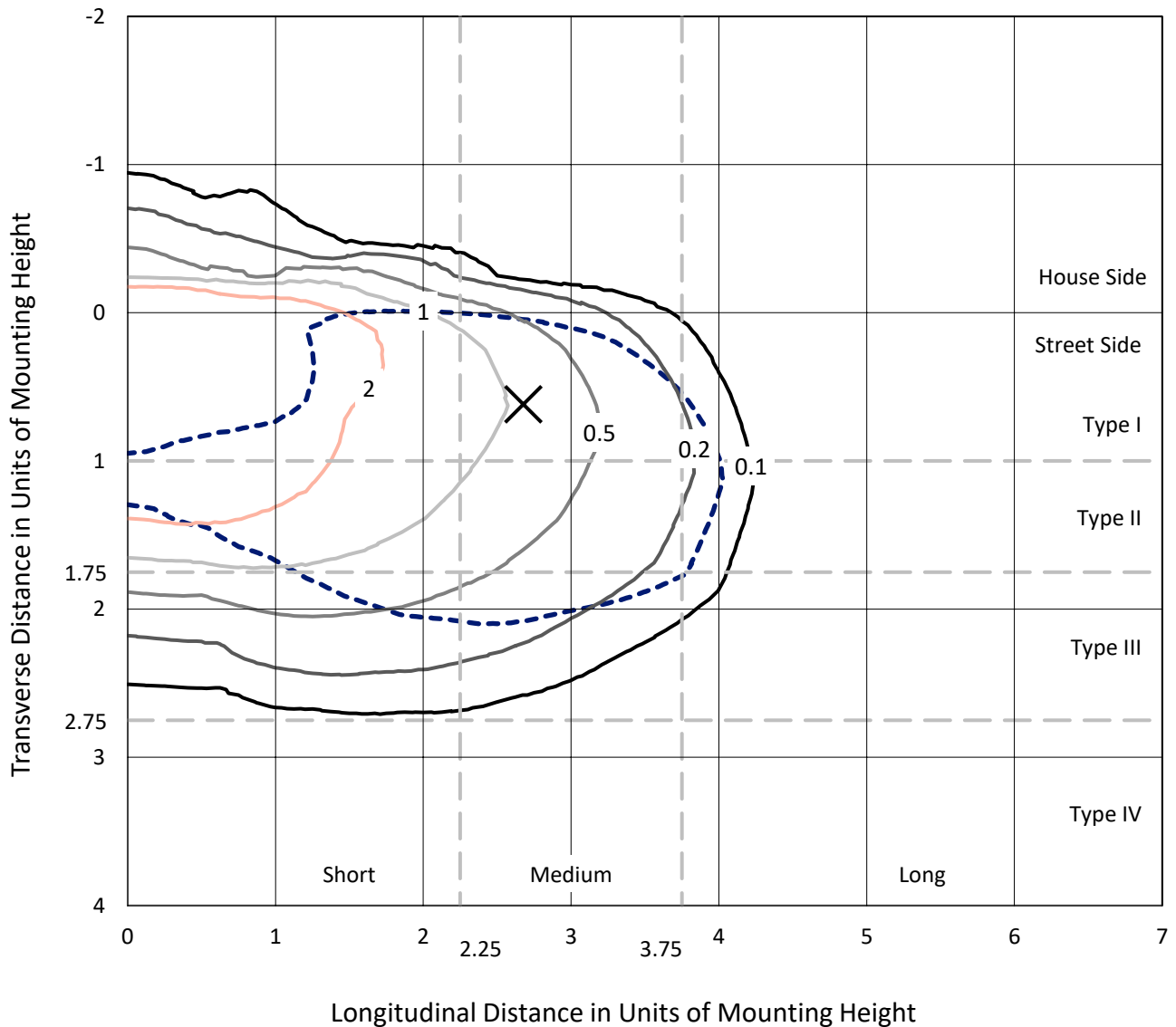
Input Watts (W): 147  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

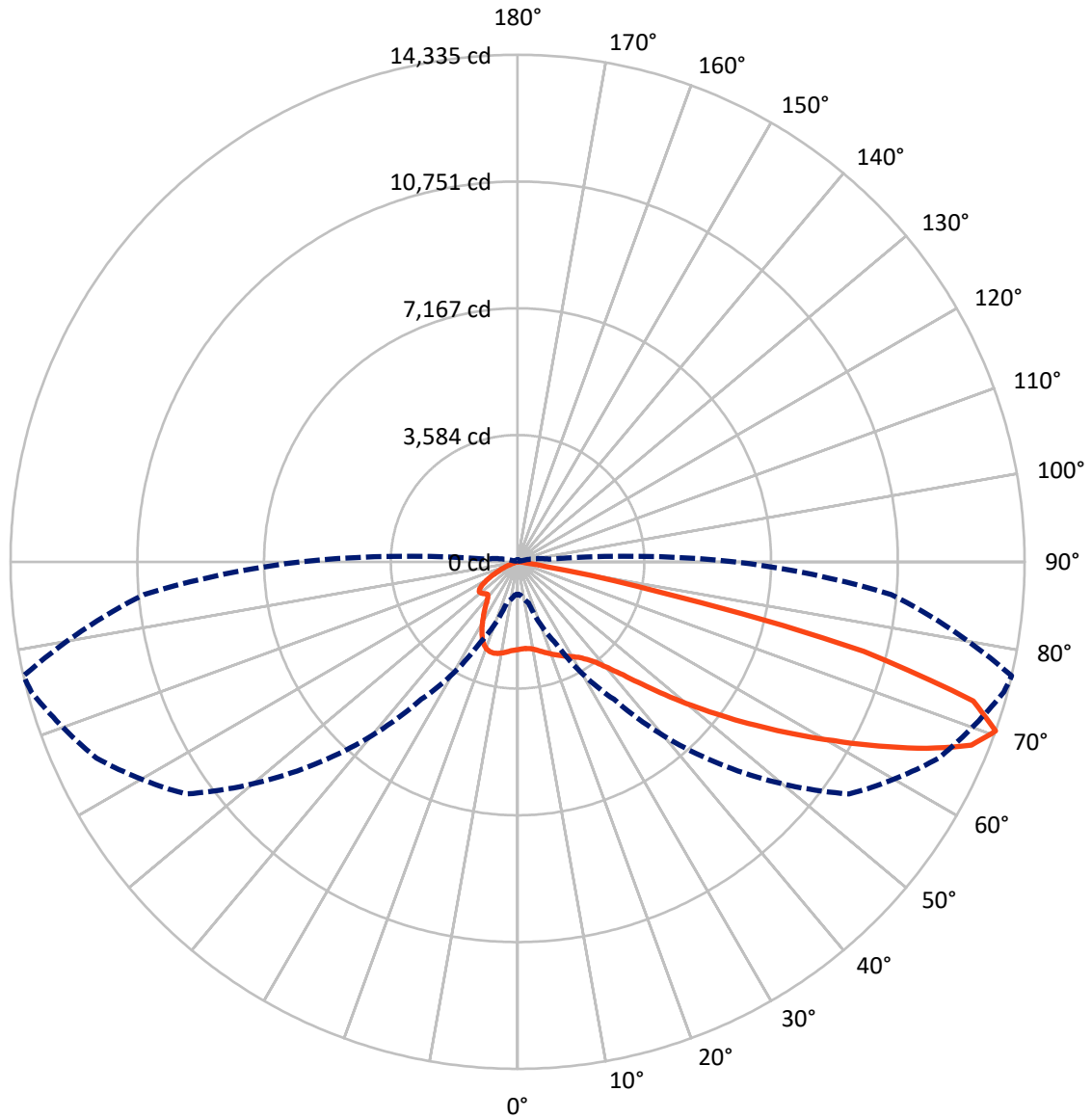
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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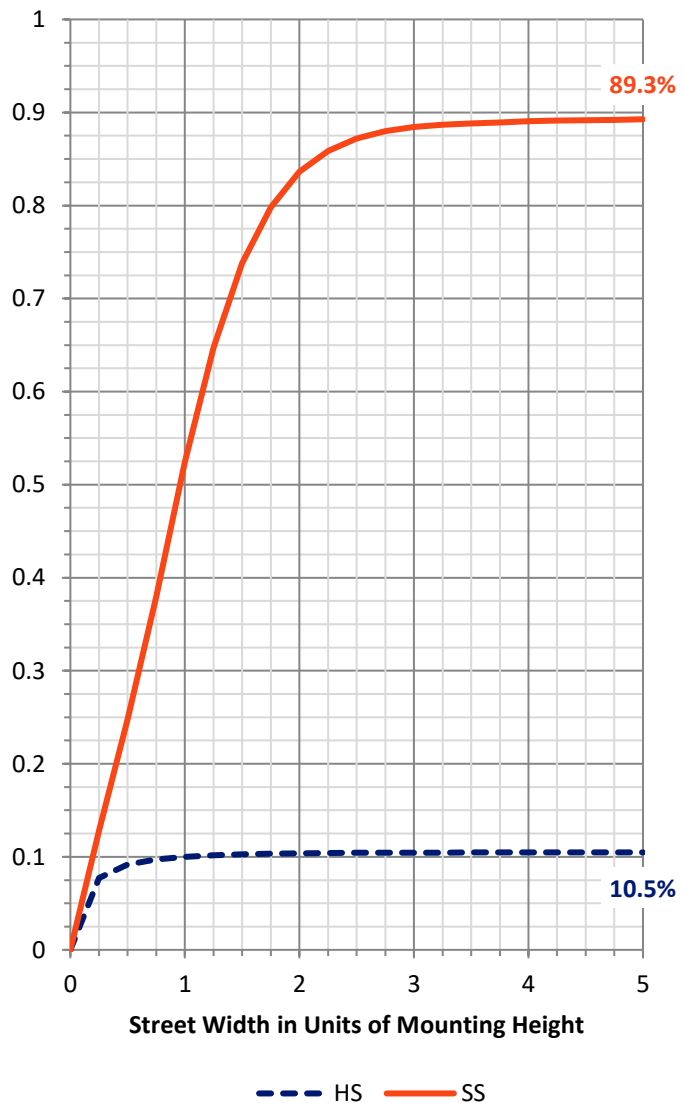
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1677.0	0.0	1677.0
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	14232.0	0.0	14232.0
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	15909.0	0.0	15909.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.9	1.3
10°-20°	507.7	3.2
20°-30°	785.3	4.9
30°-40°	1424.9	9.0
40°-50°	2689.7	16.9
50°-60°	3886.4	24.4
60°-70°	4136.9	26.0
70°-80°	2192.3	13.8
80°-90°	72.0	0.5
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°	15909.0	100.0
0°-180°	15909.0	100.0

**Coefficient of Utilization**

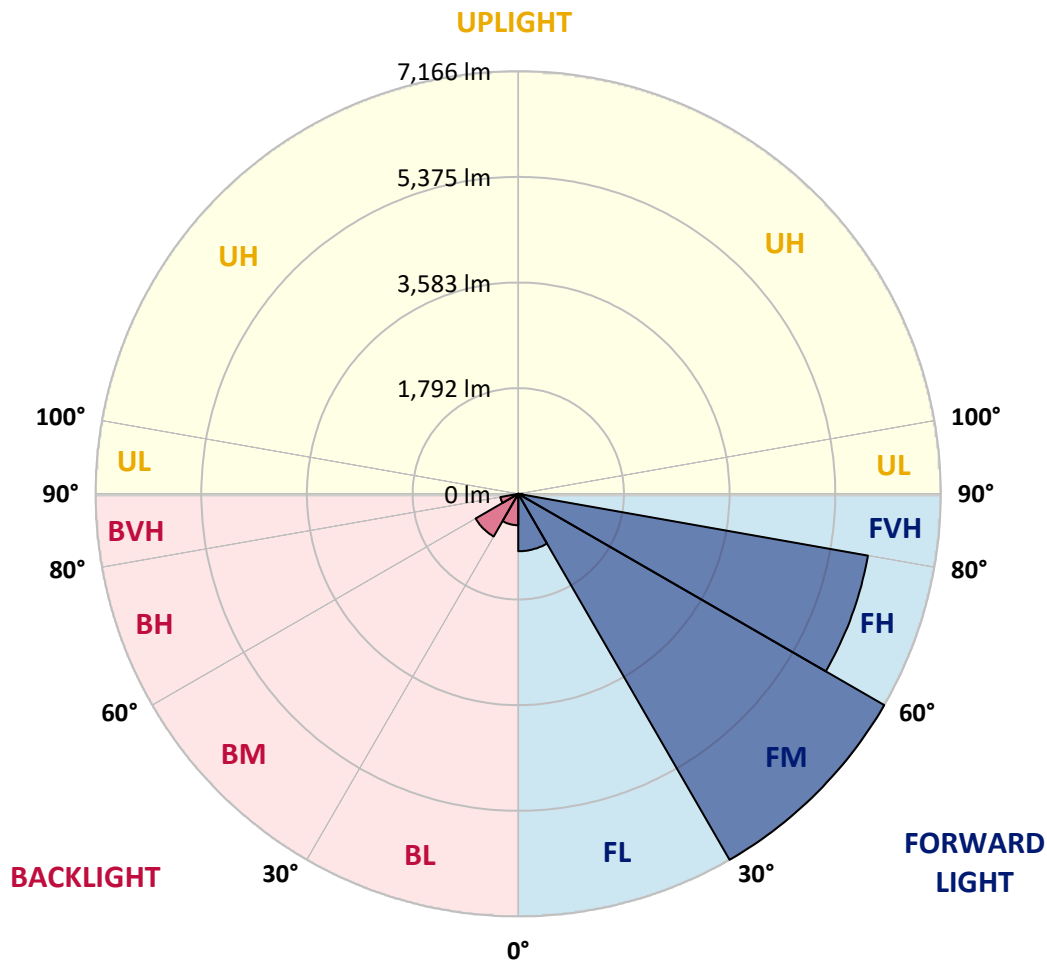


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	974.0	6.1			
FM (30°-60°)	7166.1	45.0			
FH (60°-80°)	6021.8	37.9			G3/7500
FVH (80°-90°)	70.1	0.4			G1/100
BL (0°-30°)	532.8	3.3	B2/1000		
BM (30°-60°)	834.8	5.2	B1/1000		
BH (60°-80°)	307.4	1.9	B1/500		G1/500
BVH (80°-90°)	1.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5
2.5°	2329.8	2350.9	2347.9	2362.0	2367.0	2387.1	2407.2	2434.3	2464.4	2463.5	2483.6
5°	2198.2	2219.3	2224.4	2243.4	2267.5	2298.7	2339.9	2394.1	2450.4	2459.4	2499.6
7.5°	2042.5	2064.6	2077.7	2115.8	2160.0	2224.4	2291.6	2371.0	2464.4	2477.5	2554.8
10°	1886.7	1906.8	1923.9	1978.1	2048.5	2144.0	2253.5	2368.0	2493.6	2512.7	2622.2
12.5°	1790.3	1809.4	1828.5	1875.7	1963.1	2079.6	2228.4	2382.1	2541.8	2569.0	2713.6
15°	1756.1	1773.2	1788.3	1830.5	1911.8	2044.5	2223.3	2411.2	2603.1	2639.3	2824.1
17.5°	1761.2	1770.2	1780.2	1812.4	1891.7	2028.4	2232.3	2461.4	2675.5	2707.5	2934.6
20°	1790.3	1795.3	1796.3	1818.5	1888.8	2026.4	2250.5	2509.6	2743.7	2787.0	3044.1
22.5°	1827.5	1829.5	1827.5	1842.5	1907.8	2041.5	2274.6	2567.9	2820.1	2860.3	3154.6
25°	2001.3	1963.1	1914.9	1885.8	1940.0	2070.6	2310.8	2646.2	2903.5	2942.7	3262.2
27.5°	2540.8	2431.3	2258.5	2064.6	2006.3	2112.8	2361.0	2725.7	2987.9	3023.0	3377.7
30°	3416.8	3273.2	2979.9	2542.8	2219.3	2201.2	2426.3	2805.0	3077.3	3115.5	3501.3
32.5°	4295.0	4259.8	3921.2	3316.4	2698.5	2398.1	2534.7	2912.5	3195.8	3226.0	3668.1
35°	5183.0	5111.8	4834.4	4236.6	3436.9	2799.0	2715.6	3053.2	3351.5	3385.7	3911.2
37.5°	5863.2	5820.1	5648.3	5156.0	4313.0	3417.9	3025.1	3271.2	3577.7	3615.8	4222.6
40°	6464.1	6443.9	6385.6	6061.1	5292.6	4227.6	3506.3	3608.7	3891.1	3936.3	4604.4
42.5°	6936.2	6983.4	7016.5	6926.1	6302.2	5152.0	4153.3	4083.0	4328.1	4374.3	5090.7
45°	7419.5	7435.6	7569.1	7699.7	7304.9	6118.4	4882.7	4638.5	4871.6	4928.9	5673.4
47.5°	7729.9	7794.2	8029.2	8259.3	8147.8	7076.8	5666.3	5294.5	5501.6	5609.0	6326.4
50°	7753.0	7874.6	8198.1	8598.9	8761.7	7989.1	6518.3	6042.1	6262.0	6380.6	7023.6
52.5°	7368.2	7557.1	8058.4	8645.2	9093.2	8761.7	7399.4	6789.5	7071.8	7226.6	7746.9
55°	5649.2	5896.4	7532.9	8393.9	9106.3	9347.4	8257.3	7568.1	7974.0	8148.9	8528.6
57.5°	4921.8	5046.4	5922.4	7957.9	8864.2	9583.4	9032.9	8309.6	8955.5	9172.6	9267.0
60°	4095.0	4258.8	4967.0	7244.6	8535.6	9606.6	9718.1	9266.0	10019.5	10263.6	9944.1
62.5°	2782.9	2960.7	3665.0	6018.9	8086.5	9595.5	10279.7	10250.6	11202.0	11464.2	10517.8
65°	1724.0	1835.6	2299.7	4914.8	7458.6	9607.6	10867.5	11446.2	12449.8	12716.0	10961.9
67.5°	1362.3	1413.6	1655.7	3773.5	6376.6	9336.3	11454.2	12570.4	13624.3	13835.2	11097.5
70°	915.2	946.4	1204.6	2529.7	4744.0	8084.5	11443.1	13135.0	14229.0	14334.5	10603.2
72.5°	482.3	506.4	704.3	1171.5	2865.3	5746.7	9645.8	12459.8	13627.3	13468.5	9063.0
75°	241.1	281.3	474.2	594.8	1223.6	3204.9	5989.8	9823.6	10725.8	10110.9	5815.0
77.5°	182.9	221.0	391.9	391.9	426.0	1079.0	2536.8	5357.9	4941.9	4115.1	1706.9
80°	116.5	150.7	342.6	296.3	177.8	274.3	661.0	1501.0	1049.9	798.7	310.5
82.5°	68.4	98.5	285.4	195.9	99.4	101.5	186.9	319.5	272.2	212.0	95.4
85°	27.2	64.3	195.9	77.4	39.2	25.1	56.3	68.4	56.3	42.2	24.1
87.5°	0.0	15.1	34.1	0.0	3.0	2.0	4.0	5.0	5.0	4.0	8.0
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°	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5	2481.5
2.5°	2492.6	2494.5	2500.6	2501.6	2487.6	2469.4	2462.5	2459.4	2447.4	2446.4	2448.4
5°	2522.7	2531.8	2522.7	2496.6	2434.3	2346.9	2280.6	2226.3	2177.1	2162.0	2153.0
7.5°	2583.0	2592.0	2564.9	2462.5	2305.7	2131.9	1975.2	1864.7	1765.2	1728.0	1713.0
10°	2669.4	2681.4	2596.0	2389.1	2111.8	1832.5	1567.2	1380.4	1234.7	1175.5	1150.4
12.5°	2777.9	2782.9	2613.1	2277.5	1859.7	1460.8	1085.1	885.1	755.5	707.2	692.2
15°	2897.5	2890.4	2615.2	2125.8	1516.1	1032.8	708.3	581.7	529.4	513.4	513.4
17.5°	3023.0	2993.9	2575.0	1906.8	1139.3	706.3	525.4	495.3	486.3	482.3	481.2
20°	3146.6	3081.4	2501.6	1620.5	817.8	527.5	477.2	468.2	463.2	461.1	459.1
22.5°	3259.1	3147.6	2376.1	1288.0	593.8	466.2	451.1	443.1	434.0	430.0	429.0
25°	3368.7	3185.8	2199.2	977.5	475.2	436.0	423.9	408.9	396.9	391.9	389.8
27.5°	3475.2	3209.9	1978.1	723.3	423.9	407.8	385.8	364.7	355.7	353.6	351.7
30°	3588.6	3218.0	1727.0	539.5	392.8	372.7	340.6	316.5	311.4	312.4	312.4
32.5°	3727.3	3230.0	1473.8	442.1	366.7	330.6	292.3	267.2	263.2	267.2	266.2
35°	3893.1	3254.1	1229.7	406.9	343.6	287.3	246.1	225.1	221.0	224.1	223.0
37.5°	4118.1	3293.3	1001.6	399.9	324.5	251.1	206.9	189.9	189.9	190.9	189.9
40°	4417.5	3397.8	797.7	394.8	314.5	224.1	174.8	167.8	170.8	172.8	172.8
42.5°	4782.2	3619.8	660.1	388.8	303.4	212.0	158.8	155.7	160.7	162.8	162.8
45°	5191.1	3901.2	611.8	378.7	293.4	220.1	151.7	147.7	153.8	154.7	155.7
47.5°	5614.0	4176.4	605.8	367.7	283.3	232.1	149.6	140.6	147.7	148.7	149.6
50°	6042.1	4356.2	611.8	350.7	267.2	232.1	150.7	133.7	139.6	142.7	143.7
52.5°	6473.1	4438.6	607.8	313.4	239.1	218.0	150.7	127.6	133.7	135.6	135.6
55°	6891.0	4422.6	546.5	258.2	203.0	192.9	146.7	122.6	126.6	127.6	127.6
57.5°	7221.5	4198.5	433.0	200.9	164.7	160.7	133.7	116.5	119.5	118.6	118.6
60°	7394.4	3706.2	309.4	154.7	129.6	126.6	117.6	108.5	110.5	105.5	104.4
62.5°	7396.3	3055.2	206.9	122.6	103.5	100.4	100.4	97.5	95.4	85.4	82.4
65°	7238.7	2332.8	137.7	97.5	83.4	78.4	84.4	83.4	76.4	62.3	60.3
67.5°	6880.9	1529.1	104.4	76.4	64.3	61.3	67.3	70.3	65.3	52.3	51.2
70°	6145.5	890.1	86.4	59.2	48.2	45.2	54.2	60.3	54.2	42.2	40.2
72.5°	5104.7	480.2	70.3	44.2	33.1	30.1	43.2	49.2	43.2	31.2	30.1
75°	3312.4	257.2	54.2	29.1	17.1	19.1	32.2	36.2	30.1	20.1	18.0
77.5°	1112.1	113.6	34.1	14.0	8.0	8.0	19.1	22.1	14.0	7.1	6.0
80°	248.2	47.3	14.0	6.0	3.0	3.0	4.0	4.0	2.0	0.0	0.0
82.5°	81.4	19.1	6.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	31.2	7.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)