

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: P965598

Luminaire Tested: **NAV-SB4A-730-U-T3R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965598  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4A-730-U-T3R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18917.4 lumens  
Efficiency: N/A  
Efficacy: 165.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

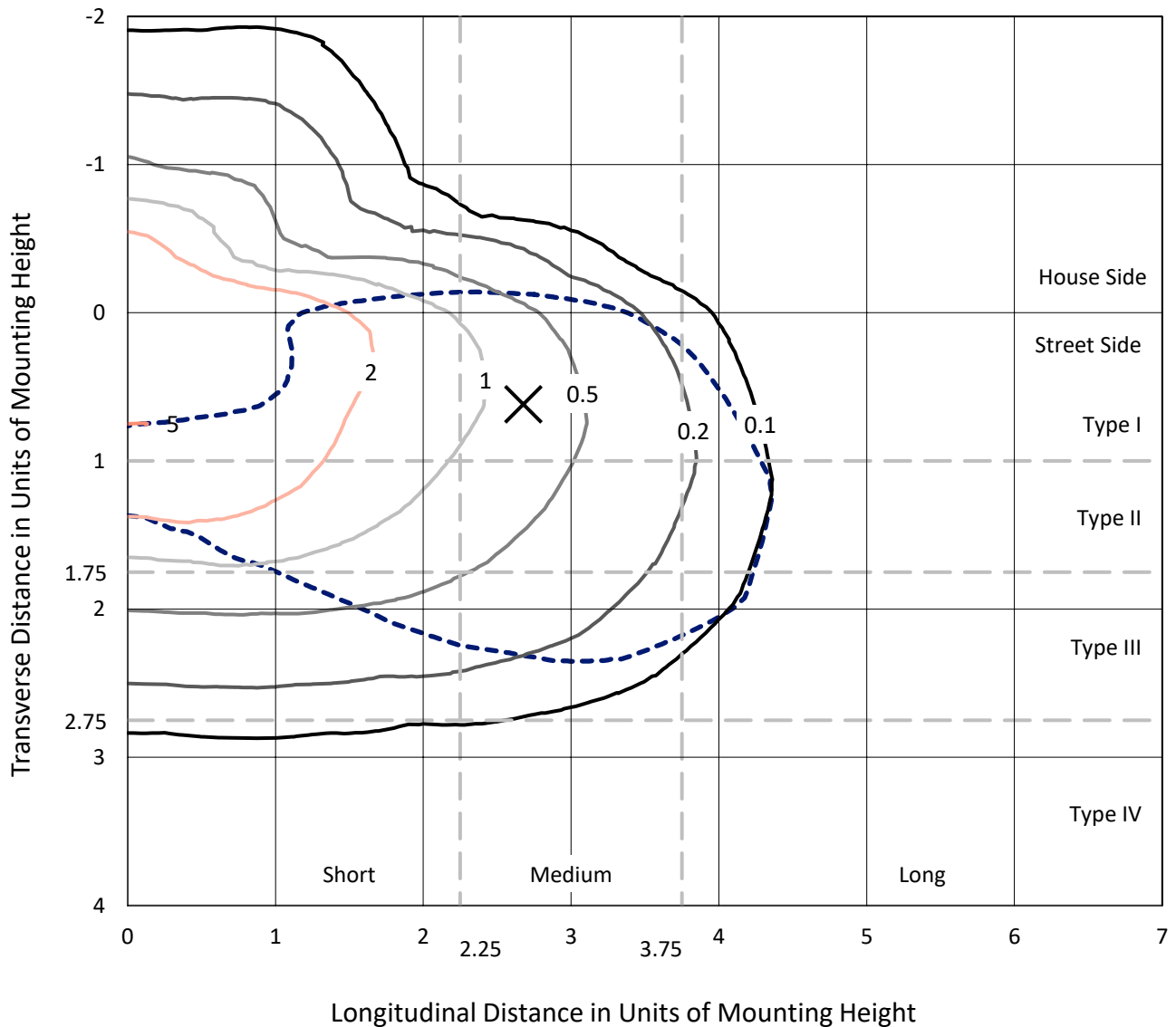
Input Watts (W): 114  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

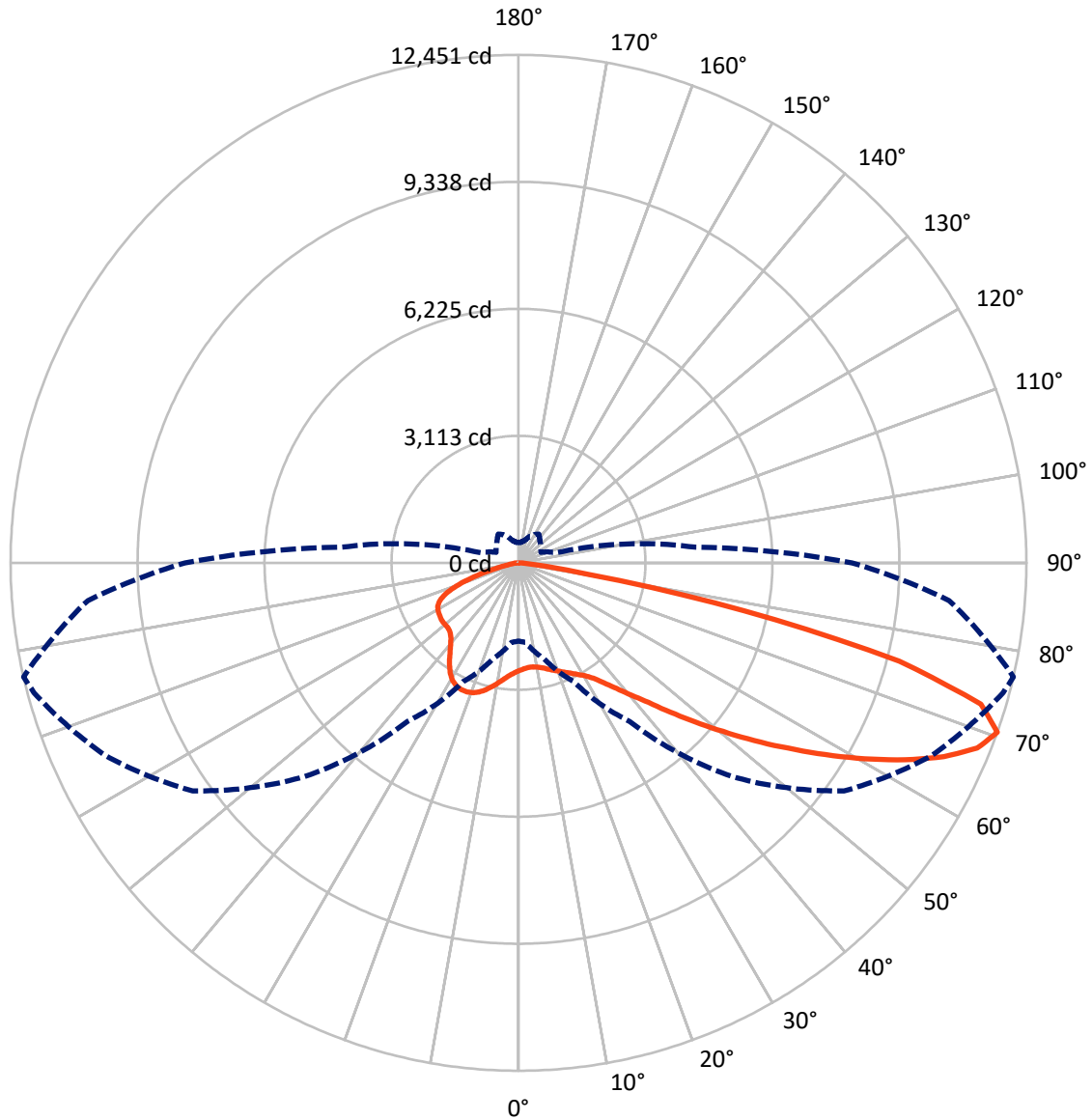
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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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 CATALOG NUMBER: NAV-SB4A-730-U-T3R

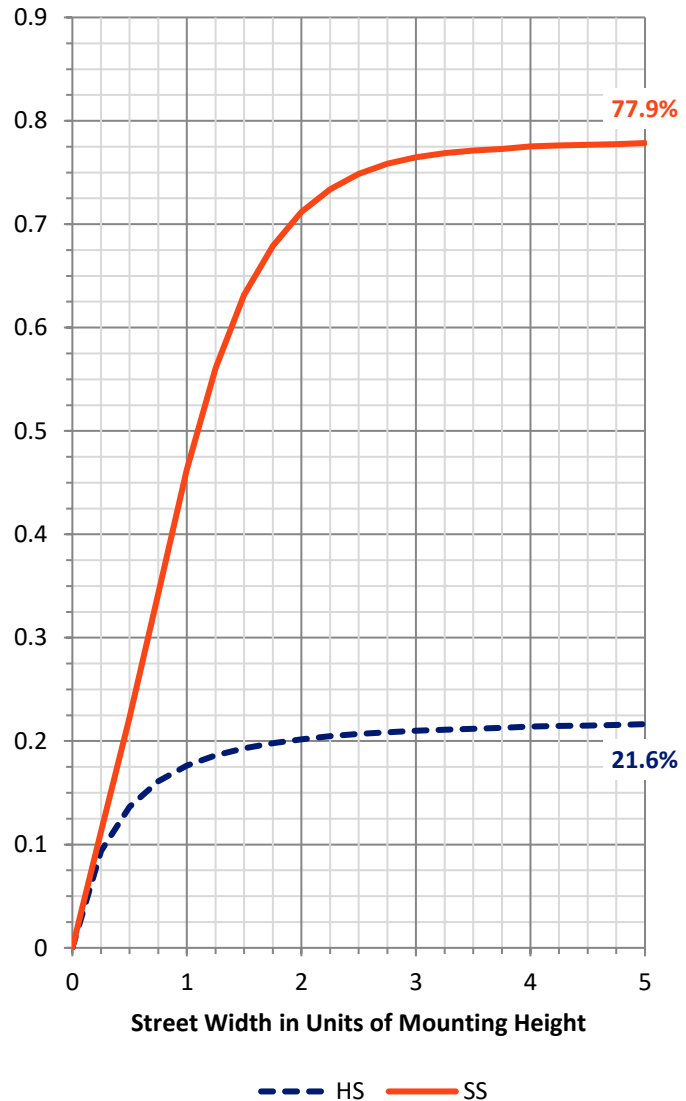
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4142.6	0.0	4142.6
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	14774.8	0.0	14774.8
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	18917.4	0.0	18917.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	251.7	1.3
10°-20°	726.4	3.8
20°-30°	1242.3	6.6
30°-40°	1997.8	10.6
40°-50°	3119.0	16.5
50°-60°	4166.3	22.0
60°-70°	4440.6	23.5
70°-80°	2733.6	14.5
80°-90°	239.5	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°	18917.4	100.0
0°-180°	18917.4	100.0

**Coefficient of Utilization**

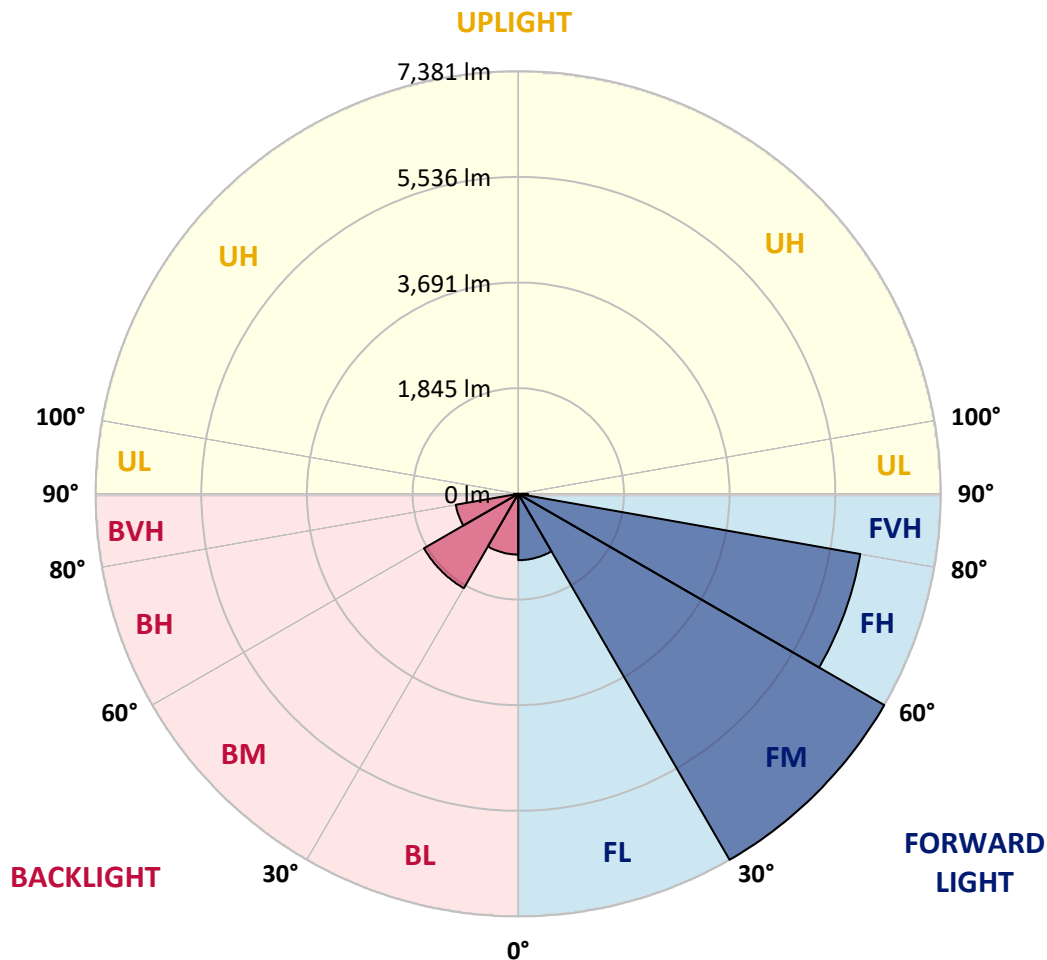


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 CATALOG NUMBER: NAV-SB4A-730-U-T3R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1159.0	6.1			
FM (30°-60°)	7381.2	39.0			
FH (60°-80°)	6067.1	32.1			G3/7500
FVH (80°-90°)	167.5	0.9			G2/225
BL (0°-30°)	1061.5	5.6	B3/2500		
BM (30°-60°)	1902.0	10.1	B2/2500		
BH (60°-80°)	1107.1	5.9	B3/2500		G3/2500
BVH (80°-90°)	72.0	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2
2.5°	2432.7	2431.8	2444.4	2448.3	2471.6	2488.0	2519.0	2551.9	2594.6	2599.4	2625.5
5°	2292.3	2292.3	2306.9	2322.3	2352.4	2385.3	2432.7	2489.9	2563.6	2575.2	2640.1
7.5°	2173.1	2180.9	2193.5	2223.5	2258.4	2305.8	2378.5	2459.9	2556.8	2575.2	2679.9
10°	2077.3	2086.0	2101.5	2125.6	2178.0	2243.8	2338.8	2443.4	2573.3	2602.4	2738.0
12.5°	2047.2	2055.9	2064.7	2083.0	2131.5	2209.0	2322.3	2451.2	2613.0	2642.0	2817.4
15°	2116.9	2127.6	2120.8	2116.0	2141.1	2211.8	2330.1	2479.3	2662.4	2704.1	2915.3
17.5°	2277.8	2281.6	2266.2	2220.6	2216.8	2254.5	2366.9	2518.0	2724.4	2770.0	3014.1
20°	2537.4	2530.6	2498.6	2408.5	2357.2	2349.5	2429.9	2576.1	2788.3	2836.8	3120.7
22.5°	2890.1	2882.3	2818.3	2676.0	2561.7	2486.0	2521.0	2651.8	2860.1	2914.3	3224.3
25°	3329.9	3319.3	3225.3	3031.5	2854.2	2667.3	2645.0	2751.5	2948.2	2998.6	3332.9
27.5°	3843.4	3834.7	3732.9	3477.2	3221.5	2915.3	2799.0	2868.8	3040.3	3097.4	3455.0
30°	4395.7	4420.8	4240.6	3965.5	3641.9	3238.9	3006.3	3013.1	3159.5	3210.8	3603.2
32.5°	5044.8	5088.4	4871.4	4522.6	4080.8	3590.6	3267.9	3214.6	3332.9	3375.4	3790.1
35°	5688.1	5737.5	5557.3	5171.7	4663.0	4005.2	3541.2	3446.2	3563.4	3609.9	4038.2
37.5°	6244.2	6310.1	6217.1	5881.9	5286.0	4505.2	3897.7	3718.5	3847.3	3905.5	4371.4
40°	6683.1	6783.9	6777.1	6567.8	6020.4	5111.7	4350.1	4054.6	4199.9	4263.0	4775.5
42.5°	7039.7	7126.8	7202.5	7191.8	6786.8	5800.5	4882.1	4491.5	4602.0	4674.7	5229.9
45°	7285.8	7378.8	7541.5	7716.9	7524.1	6537.8	5491.4	5009.9	5110.6	5220.1	5771.5
47.5°	7505.7	7611.3	7822.5	8100.6	8150.0	7278.0	6159.0	5613.5	5705.6	5818.9	6314.9
50°	7525.0	7616.2	7943.6	8338.0	8594.7	7989.2	6875.9	6290.7	6376.9	6498.1	6897.2
52.5°	7057.1	7200.5	7772.2	8331.2	8799.1	8584.1	7588.1	6995.1	7092.0	7237.3	7499.9
55°	5477.9	5688.1	7269.3	8071.5	8726.4	8968.6	8265.3	7744.0	7868.0	8020.1	8106.4
57.5°	4718.3	4810.3	5770.4	7598.7	8395.1	9068.5	8836.9	8500.7	8700.3	8867.0	8747.8
60°	4240.6	4317.2	4884.9	6863.3	7959.1	8910.5	9278.7	9206.0	9550.9	9749.6	9403.7
62.5°	3729.2	3801.7	4318.1	5730.8	7401.0	8647.9	9557.7	9857.1	10422.9	10639.9	10021.8
65°	3221.5	3283.5	3778.6	4815.1	6691.8	8385.4	9702.0	10419.9	11229.9	11454.7	10535.3
67.5°	2655.6	2706.9	3174.9	4062.4	5829.6	8026.0	9773.8	10862.7	11932.3	12125.1	10789.2
70°	1916.3	1956.1	2439.6	3212.8	4747.4	7407.9	9744.7	11176.7	12296.6	12450.7	10597.3
72.5°	905.9	941.8	1509.5	2086.0	3353.2	6204.5	9156.6	10927.6	11926.6	11850.0	9423.0
75°	483.5	514.4	867.2	1144.2	1771.1	4253.2	7493.1	9413.4	10015.0	9643.0	6964.1
77.5°	327.5	351.7	536.8	687.0	809.0	2019.0	4816.2	6517.5	6270.4	5656.2	3487.9
80°	259.6	284.8	439.8	465.0	391.4	729.6	1990.0	3017.0	2167.4	1733.3	992.1
82.5°	199.6	227.7	370.1	337.1	213.1	299.4	579.3	954.3	555.1	422.4	240.3
85°	122.1	152.1	290.7	215.0	120.1	136.6	196.7	265.5	169.5	141.4	86.2
87.5°	62.0	87.2	147.3	78.5	54.2	32.0	52.3	52.3	44.6	38.7	22.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P965598  
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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2	2639.2
2.5°	2648.8	2668.2	2701.2	2732.1	2756.4	2779.6	2802.9	2815.5	2819.4	2834.8	2843.6
5°	2679.9	2715.7	2779.6	2839.7	2877.5	2900.7	2917.3	2926.9	2928.8	2933.7	2941.4
7.5°	2737.0	2794.1	2883.3	2943.4	2971.5	2969.5	2962.8	2938.6	2928.8	2920.1	2922.1
10°	2817.4	2893.0	3002.4	3044.1	3026.7	2980.2	2920.1	2849.4	2816.5	2784.5	2774.8
12.5°	2917.3	3013.1	3120.7	3118.8	3032.5	2913.4	2773.9	2665.3	2596.5	2547.1	2535.4
15°	3038.3	3148.8	3231.1	3165.2	2976.3	2762.2	2557.8	2416.3	2354.3	2300.1	2294.3
17.5°	3163.3	3281.5	3319.3	3150.7	2834.8	2538.4	2306.9	2195.4	2134.4	2105.4	2114.1
20°	3285.3	3402.6	3371.6	3067.4	2619.8	2284.5	2078.2	2017.1	2004.6	2011.4	2008.4
22.5°	3414.3	3518.8	3382.3	2906.6	2345.6	2024.9	1911.5	1913.5	1941.6	1962.0	1966.8
25°	3546.0	3616.7	3354.2	2674.0	2051.0	1834.0	1805.9	1836.9	1892.2	1931.9	1942.6
27.5°	3672.9	3703.9	3293.1	2386.3	1798.2	1697.4	1702.3	1766.2	1849.5	1904.8	1918.3
30°	3816.3	3781.4	3175.9	2062.7	1622.8	1580.2	1620.9	1695.5	1778.8	1828.2	1839.9
32.5°	3978.1	3848.3	2989.9	1763.3	1498.9	1486.2	1553.1	1601.5	1638.4	1652.8	1660.6
35°	4179.6	3942.3	2751.5	1553.1	1387.4	1417.5	1481.3	1457.1	1442.6	1434.9	1442.6
37.5°	4441.2	4069.1	2472.5	1416.4	1297.3	1368.1	1394.2	1318.6	1261.5	1233.4	1240.1
40°	4756.1	4255.2	2204.2	1310.9	1240.1	1325.4	1279.8	1188.8	1116.1	1076.4	1079.3
42.5°	5105.8	4449.9	1978.4	1231.4	1208.2	1290.5	1195.6	1087.0	969.9	957.2	969.9
45°	5473.1	4650.5	1824.4	1170.3	1192.7	1260.4	1147.1	971.8	888.5	939.8	966.9
47.5°	5840.2	4834.5	1731.3	1124.8	1184.9	1226.5	1104.5	907.8	848.7	923.3	958.2
50°	6249.1	4999.2	1689.7	1091.9	1176.2	1213.0	1040.6	891.3	807.1	856.5	893.3
52.5°	6655.0	5127.2	1658.7	1058.9	1163.6	1202.3	1009.5	872.0	756.7	759.6	779.9
55°	7060.0	5210.5	1624.7	1015.4	1135.5	1179.1	1006.7	850.6	718.9	705.3	715.0
57.5°	7492.1	5257.9	1583.1	966.9	1087.0	1120.0	1003.7	834.1	707.2	685.0	687.9
60°	7932.0	5327.7	1528.9	907.8	1022.1	1049.3	996.9	828.4	700.5	662.7	665.6
62.5°	8326.3	5351.9	1463.9	851.6	938.8	979.5	982.5	823.5	682.0	617.2	617.2
65°	8585.0	5247.3	1350.5	787.7	848.7	907.8	954.3	807.1	649.1	584.2	584.2
67.5°	8574.3	4948.9	1173.3	705.3	761.5	828.4	913.6	779.0	609.4	543.6	546.4
70°	8175.2	4359.8	948.5	609.4	665.6	743.1	861.3	737.3	561.9	499.0	504.8
72.5°	7011.6	3412.3	688.9	497.0	554.2	655.0	793.5	687.0	513.5	459.2	456.3
75°	5009.0	2159.6	467.0	381.7	431.1	555.1	709.2	627.8	468.9	461.1	435.0
77.5°	2558.7	1031.9	309.0	279.0	300.3	437.9	595.8	561.0	475.7	380.8	339.1
80°	832.2	380.8	194.7	189.9	199.6	291.6	461.1	460.2	360.4	258.7	228.7
82.5°	265.5	163.7	126.9	122.1	117.3	183.1	321.6	364.3	243.2	163.7	162.8
85°	105.6	97.9	74.6	68.8	49.4	86.2	168.6	242.2	181.2	118.2	121.2
87.5°	38.7	38.7	20.3	14.6	10.7	29.1	45.5	72.7	103.6	61.0	60.1
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)