

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: P882380

Luminaire Tested: **NAV-SB2B-722-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882380
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-722-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6924 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

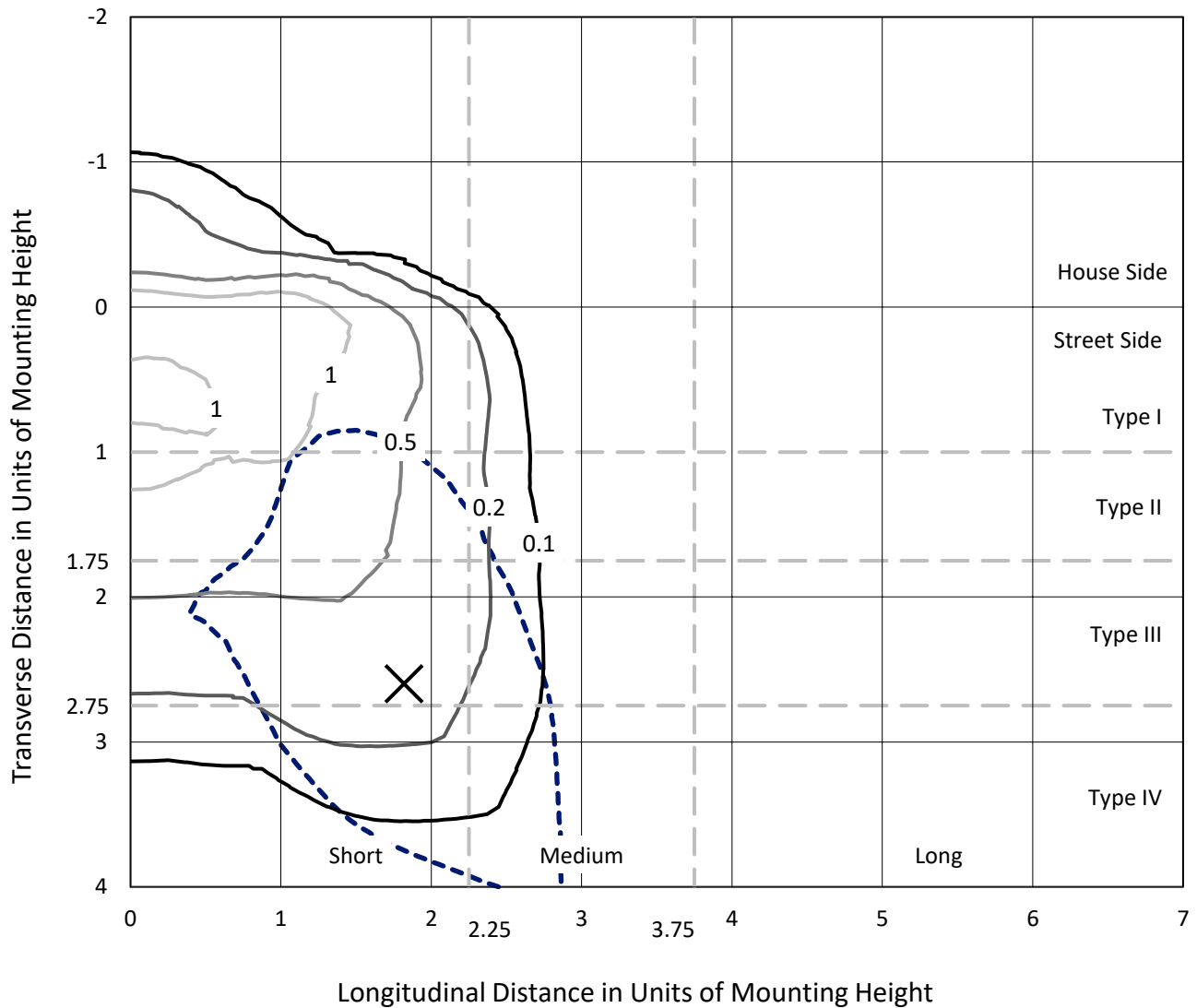
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

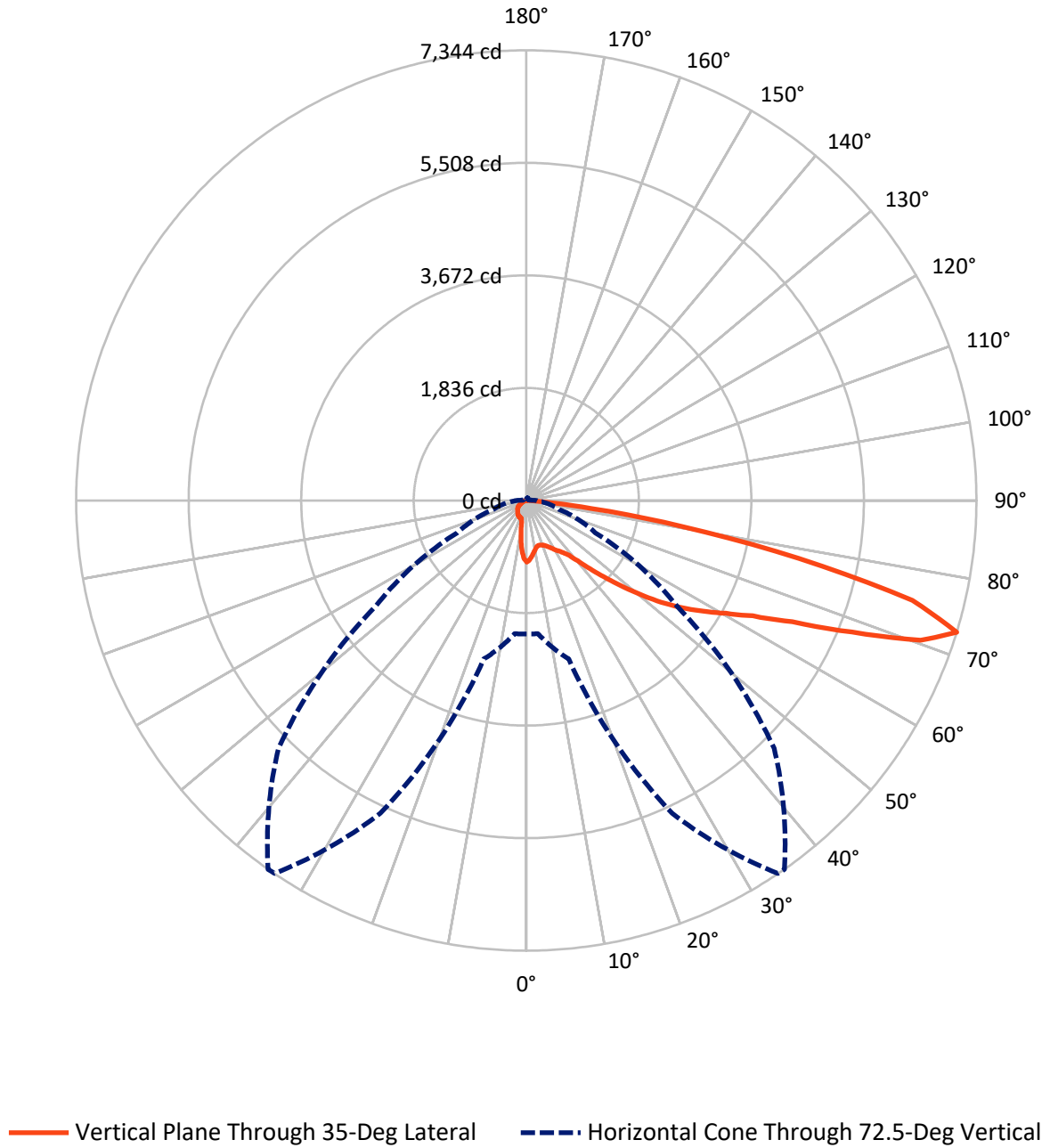
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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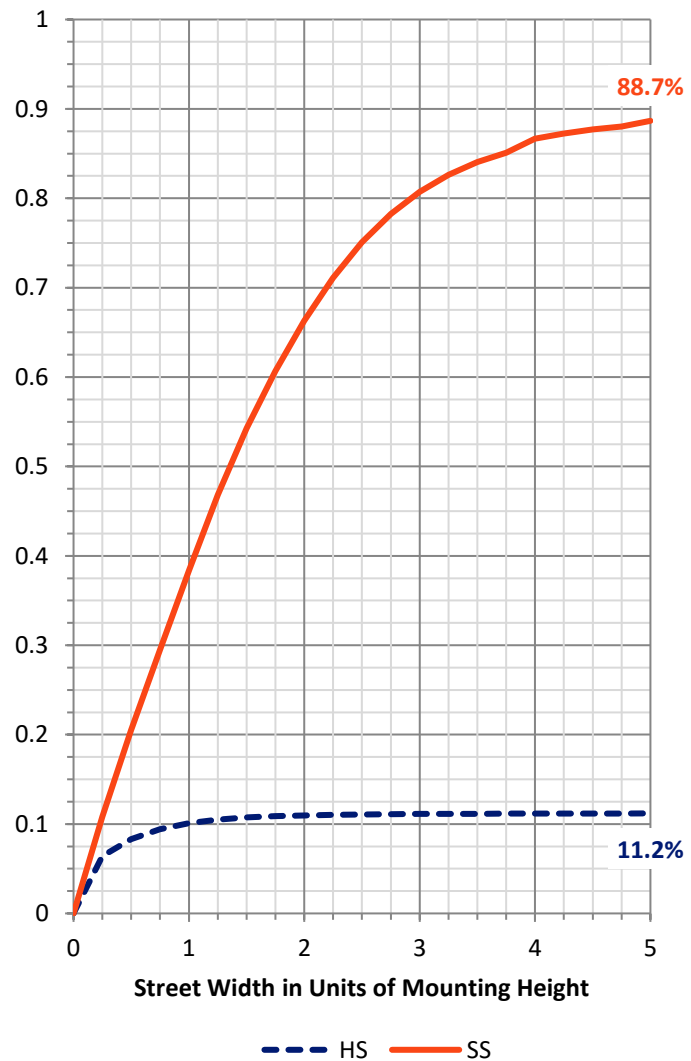
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	779.3	0.0	779.3
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	6144.7	0.0	6144.7
	% Fixture	88.7	0.0	88.7
Total	Lumens	6924.0	0.0	6924.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	1.2
10°-20°	192.9	2.8
20°-30°	313.4	4.5
30°-40°	522.9	7.6
40°-50°	989.3	14.3
50°-60°	1572.0	22.7
60°-70°	1944.6	28.1
70°-80°	1208.8	17.5
80°-90°	97.7	1.4
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°	6924.0	100.0
0°-180°	6924.0	100.0

Coefficient of Utilization



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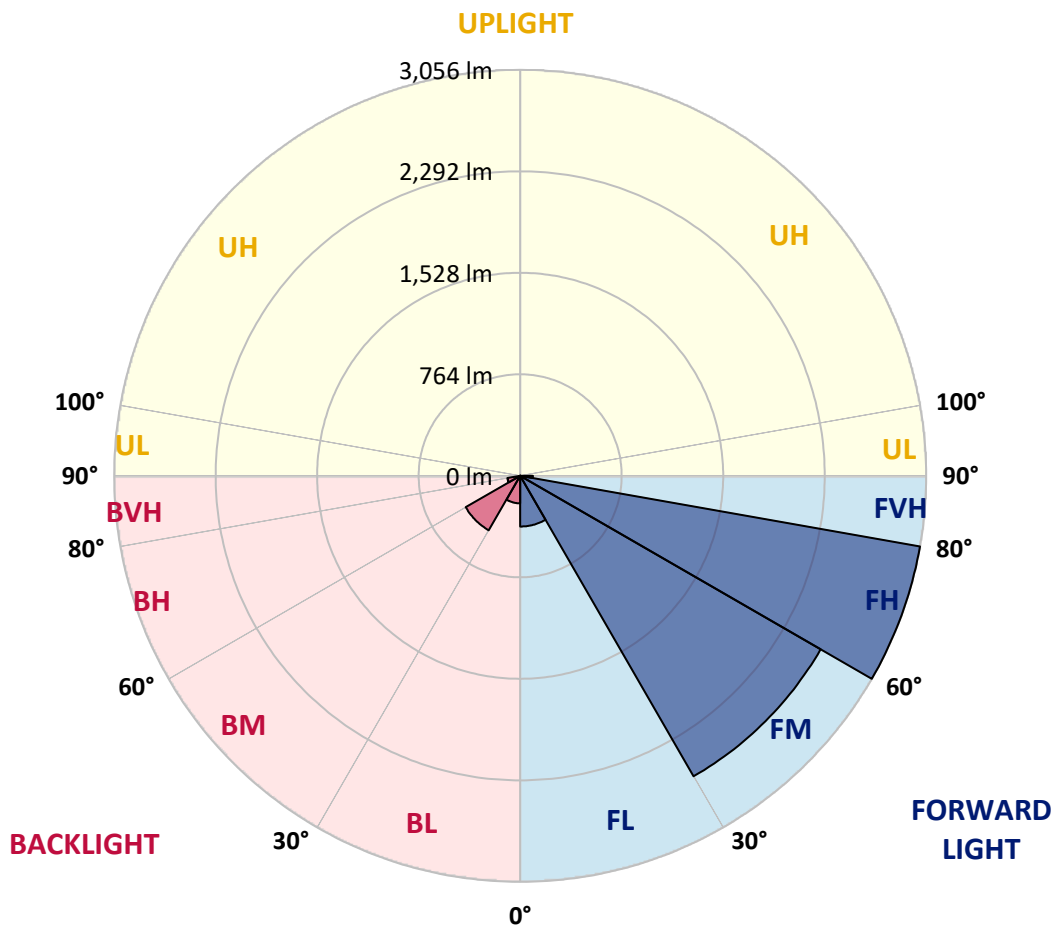
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	381.7	5.5			
FM (30°-60°)	2611.0	37.7			
FH (60°-80°)	3055.6	44.1			G2/5000
FVH (80°-90°)	96.4	1.4			G1/100
BL (0°-30°)	207.1	3.0	B1/500		
BM (30°-60°)	473.1	6.8	B1/1000		
BH (60°-80°)	97.8	1.4	B0/110		G0/110
BVH (80°-90°)	1.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5
2.5°	958.9	967.0	968.5	971.0	971.0	974.1	979.2	986.3	997.9	1004.0	1008.1
5°	883.8	889.9	897.5	903.6	915.2	916.8	936.6	955.8	982.7	1003.0	1017.2
7.5°	808.2	815.3	825.4	840.2	855.4	859.9	889.9	922.3	965.0	1003.0	1026.9
10°	754.9	755.4	764.6	779.3	803.6	809.2	845.7	891.9	945.2	996.9	1036.0
12.5°	725.0	728.5	732.6	743.8	767.1	770.7	809.7	864.0	925.4	993.4	1046.6
15°	725.0	727.5	730.1	735.6	754.4	757.5	792.0	846.2	915.2	994.9	1063.9
17.5°	732.6	736.7	734.6	741.2	761.0	763.0	793.5	841.2	914.7	1004.5	1090.3
20°	750.9	753.9	749.8	753.9	773.7	777.8	809.2	850.8	923.4	1021.3	1123.3
22.5°	779.8	781.3	771.7	774.7	795.0	800.1	836.6	878.2	944.2	1048.2	1167.4
25°	816.3	819.4	804.6	808.2	827.5	833.6	875.7	919.3	977.1	1085.2	1223.7
27.5°	858.4	859.9	847.3	846.8	871.6	880.2	922.9	970.0	1021.3	1131.9	1294.7
30°	906.6	911.2	899.0	897.0	928.4	935.5	977.6	1032.4	1086.2	1201.9	1395.7
32.5°	944.7	948.2	941.1	946.2	978.2	983.7	1044.1	1120.7	1188.2	1301.3	1533.2
35°	999.5	1001.5	985.3	994.4	1030.9	1045.1	1134.9	1244.5	1316.5	1426.1	1712.8
37.5°	1197.8	1197.8	1128.8	1083.7	1118.7	1131.4	1259.2	1400.3	1474.8	1593.6	1939.1
40°	1472.3	1467.7	1366.8	1274.4	1269.9	1294.7	1436.3	1596.6	1679.3	1794.5	2193.7
42.5°	1765.0	1757.9	1620.4	1529.1	1513.9	1522.5	1640.7	1838.6	1922.8	2039.5	2467.7
45°	2024.8	2022.8	1896.9	1774.2	1746.8	1774.2	1895.9	2121.7	2182.1	2304.8	2741.2
47.5°	2242.4	2242.4	2150.6	2070.5	2056.3	2072.5	2241.4	2435.7	2430.2	2587.4	3007.5
50°	2493.1	2491.0	2403.8	2369.3	2384.0	2406.8	2639.2	2766.5	2686.9	2865.0	3245.5
52.5°	2668.6	2680.8	2650.9	2645.3	2720.4	2759.9	3043.0	3090.2	2916.7	3128.3	3423.5
55°	2807.6	2821.8	2856.3	2895.4	3040.0	3091.7	3434.2	3397.2	3109.0	3356.6	3526.0
57.5°	3004.5	2984.2	3037.4	3114.6	3348.4	3410.9	3813.2	3686.8	3263.7	3541.7	3537.2
60°	3243.4	3246.5	3255.6	3353.0	3656.4	3736.6	4186.6	3960.8	3363.2	3655.4	3413.4
62.5°	3530.6	3535.1	3553.9	3703.6	4069.9	4145.5	4584.3	4185.1	3408.8	3623.4	3093.8
65°	3510.8	3530.1	3739.6	4251.5	4698.5	4773.1	5048.5	4342.3	3339.8	3331.2	2518.9
67.5°	3198.3	3229.7	3580.3	4906.0	5646.2	5729.4	5609.7	4373.3	3042.0	2590.5	1643.3
70°	2788.3	2799.5	3221.1	5494.5	6743.6	6827.8	6111.9	4032.9	2308.4	1444.9	736.2
72.5°	2177.5	2180.0	2674.7	5631.0	7339.2	7343.8	5717.7	2993.8	1241.5	555.0	255.7
75°	1555.5	1540.3	1791.4	4566.6	6456.9	6508.7	4286.5	1404.3	474.4	262.3	127.3
77.5°	834.1	850.8	1013.7	2708.2	4460.5	4548.8	2338.8	404.9	241.5	178.6	84.2
80°	257.7	271.9	415.5	1239.9	2526.6	2579.8	867.0	180.1	168.4	127.3	55.3
82.5°	81.2	84.2	193.8	521.0	1048.7	1073.0	251.1	102.0	115.2	84.2	32.5
85°	23.3	23.8	86.2	194.3	259.3	264.3	70.5	39.6	66.0	52.3	16.7
87.5°	2.5	8.1	32.5	32.5	22.8	22.3	7.6	8.6	18.8	6.6	3.0
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°	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5	1003.5
2.5°	1005.5	1006.1	999.5	988.3	976.1	966.0	953.3	943.1	936.0	934.0	937.6
5°	1012.7	1009.1	990.3	956.3	915.7	880.7	841.7	810.7	790.4	781.8	784.9
7.5°	1023.3	1013.2	972.1	905.1	827.5	758.5	688.5	634.2	599.7	582.4	585.0
10°	1032.4	1012.1	941.6	831.0	712.3	607.8	513.4	448.0	411.5	394.2	394.7
12.5°	1041.1	1011.6	902.1	743.3	582.4	454.6	366.8	334.3	324.2	320.6	319.6
15°	1057.3	1013.2	852.3	642.8	453.1	343.5	311.5	311.0	313.0	312.0	311.5
17.5°	1079.6	1014.7	796.0	536.3	349.6	302.9	301.4	305.9	309.0	307.4	306.9
20°	1108.5	1020.8	736.2	430.7	300.3	292.7	296.3	300.3	302.9	300.3	299.8
22.5°	1149.1	1031.4	670.7	346.0	284.6	286.6	289.7	294.3	296.8	293.2	292.7
25°	1198.8	1048.2	606.3	300.9	277.0	279.5	284.1	289.2	292.2	288.7	288.2
27.5°	1263.3	1075.1	546.9	290.7	269.4	270.9	277.5	285.1	289.2	284.6	284.6
30°	1356.6	1119.2	495.7	295.3	264.8	261.3	270.4	281.1	285.6	281.6	281.1
32.5°	1480.4	1181.6	464.2	302.4	262.8	250.1	258.7	272.4	280.1	277.5	277.5
35°	1642.8	1276.5	452.0	310.5	261.3	238.5	244.5	259.3	272.4	275.0	275.0
37.5°	1839.6	1408.4	455.6	314.0	256.7	228.8	231.9	244.5	261.8	269.9	271.9
40°	2063.4	1562.1	475.9	310.5	251.6	220.7	221.2	230.8	246.1	258.2	262.3
42.5°	2294.2	1741.7	513.4	297.3	247.1	213.6	212.1	218.7	228.8	237.4	241.0
45°	2513.9	1926.4	550.5	279.0	241.5	206.5	202.9	205.5	207.5	211.1	213.1
47.5°	2705.6	2056.3	539.8	262.3	233.9	198.4	192.3	191.3	185.2	184.7	184.2
50°	2838.1	2084.7	479.4	245.6	222.7	189.2	179.6	173.5	162.9	157.8	158.3
52.5°	2880.2	1972.5	391.7	228.8	204.5	177.1	163.4	153.7	140.5	136.0	135.5
55°	2824.4	1752.9	313.0	208.5	179.1	160.8	145.6	132.9	122.3	116.7	116.7
57.5°	2687.9	1473.3	247.6	184.7	152.2	142.6	127.3	114.7	105.5	99.9	98.9
60°	2461.6	1169.9	195.8	156.3	129.9	122.8	107.0	98.9	90.8	84.2	82.7
62.5°	2118.1	835.1	153.7	123.8	108.6	100.5	91.3	85.2	75.6	66.5	64.9
65°	1652.9	510.9	118.7	90.8	87.3	83.2	77.6	72.0	60.4	51.2	49.7
67.5°	1042.6	242.0	84.7	68.5	69.0	67.0	64.4	59.9	51.2	43.1	42.1
70°	459.1	117.2	55.8	52.3	51.2	51.2	53.3	51.7	43.6	36.0	34.5
72.5°	156.3	62.9	41.6	39.6	37.0	36.5	44.6	43.1	35.0	27.9	26.4
75°	81.7	42.1	30.4	28.4	22.3	26.9	35.5	33.5	24.9	18.3	16.7
77.5°	53.3	29.9	20.8	18.3	12.7	17.8	26.4	23.3	14.7	9.1	8.1
80°	33.5	19.8	12.2	8.6	6.1	9.6	14.2	10.1	5.6	2.0	1.5
82.5°	17.8	10.1	4.6	3.0	2.5	3.0	3.6	2.5	1.0	0.0	0.0
85°	7.1	3.6	1.5	1.0	0.5	0.0	1.0	0.5	0.0	0.0	0.0
87.5°	2.5	0.5	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)