

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: P882070

Luminaire Tested: **NAV-SB1D-735-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882070  
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-SB1D-735-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

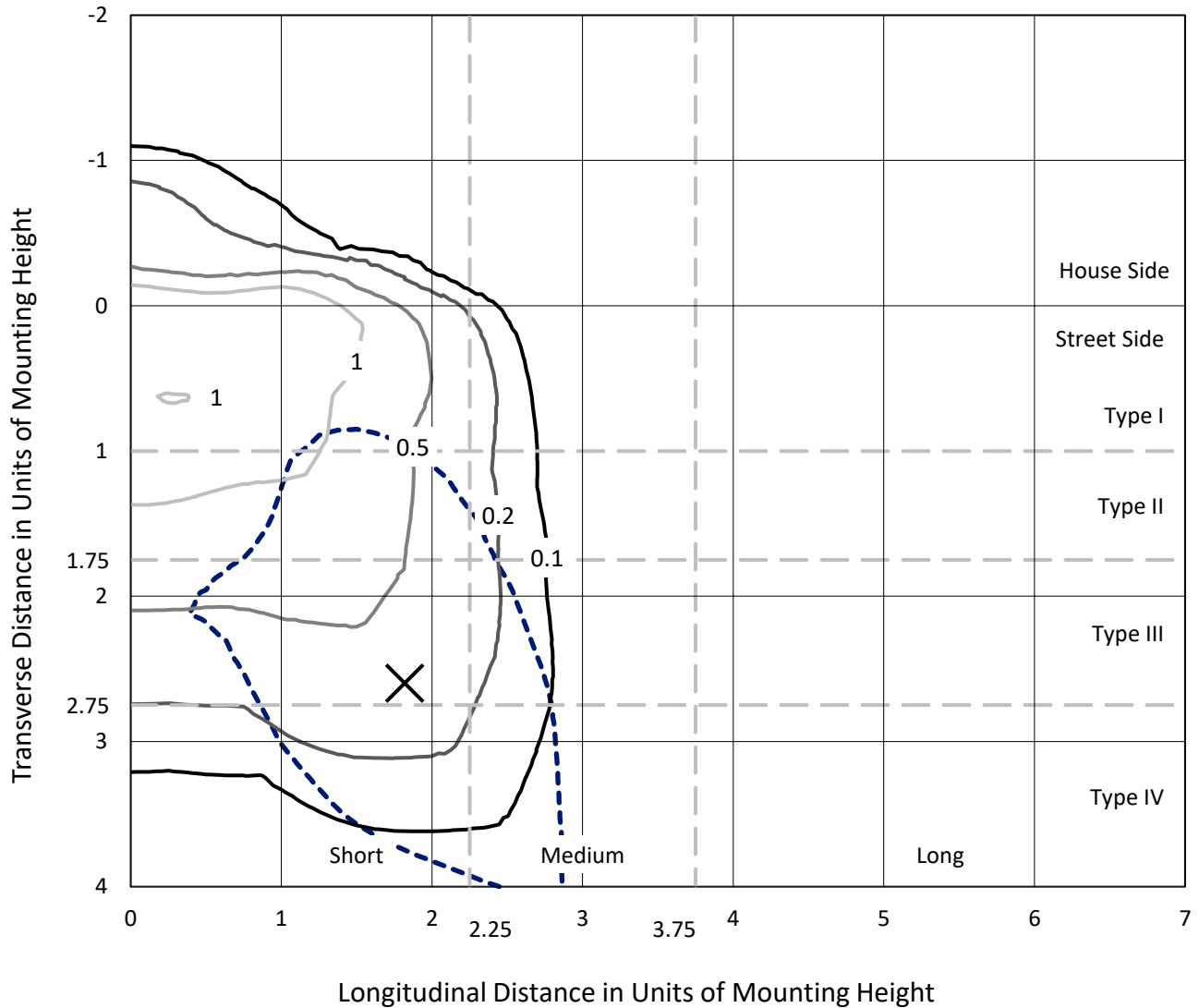
Lumens per Lamp: N/A  
Luminaire Lumens: 7711 lumens  
Efficiency: N/A  
Efficacy: 96.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): 120.0  
Input Current (Ain): 0.638  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 6.673  
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

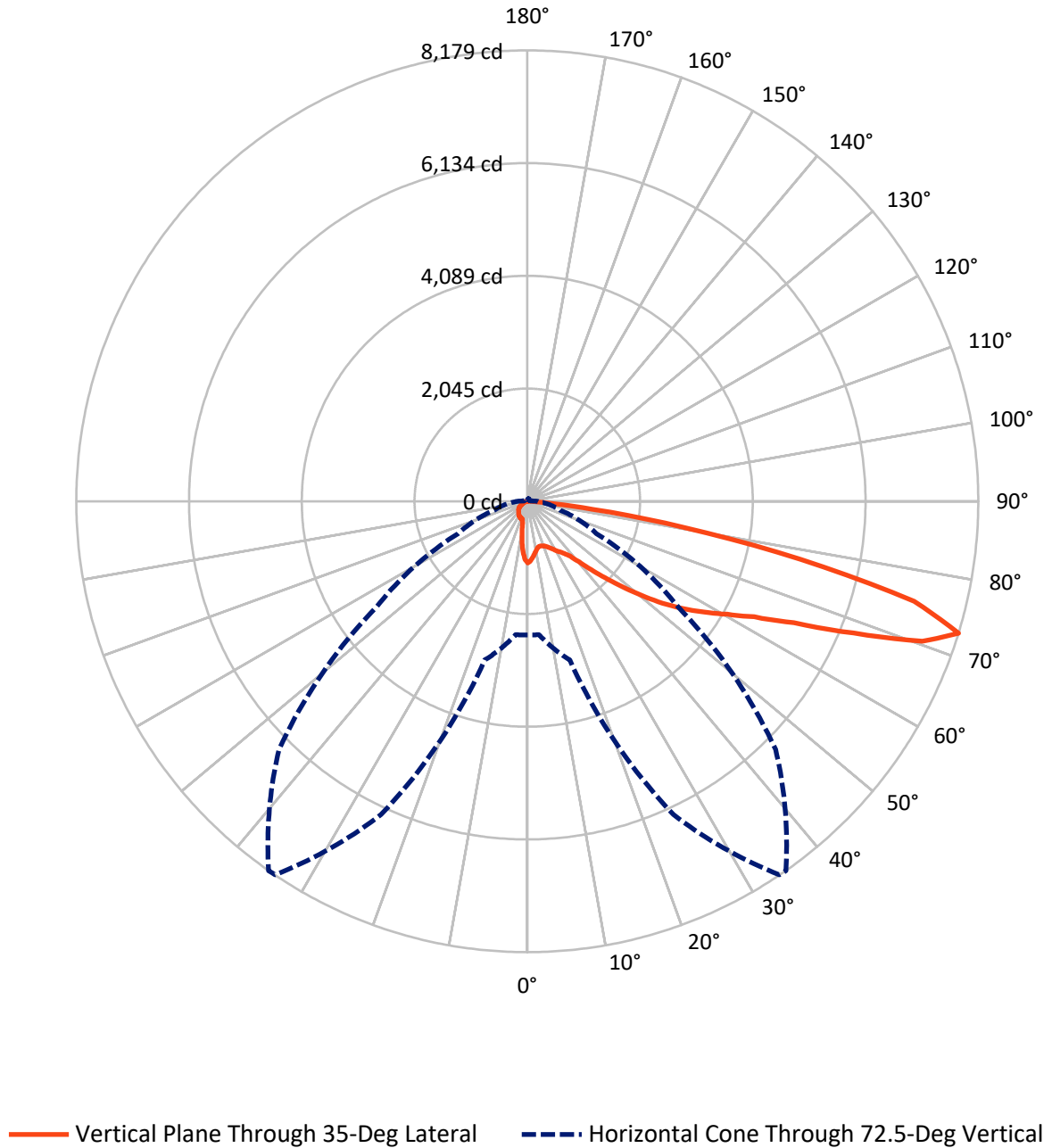
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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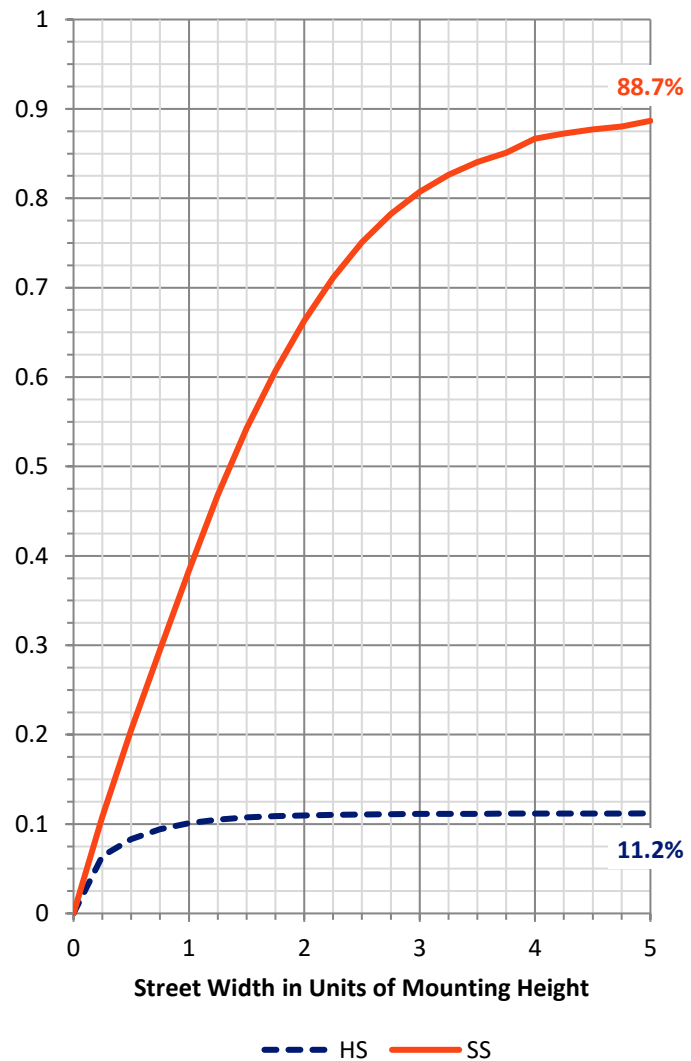
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	867.8	0.0	867.8
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	6843.2	0.0	6843.2
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	7711.0	0.0	7711.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.8	1.2
10°-20°	214.8	2.8
20°-30°	349.0	4.5
30°-40°	582.3	7.6
40°-50°	1101.7	14.3
50°-60°	1750.6	22.7
60°-70°	2165.7	28.1
70°-80°	1346.2	17.5
80°-90°	108.8	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°	7711.0	100.0
0°-180°	7711.0	100.0

**Coefficient of Utilization**



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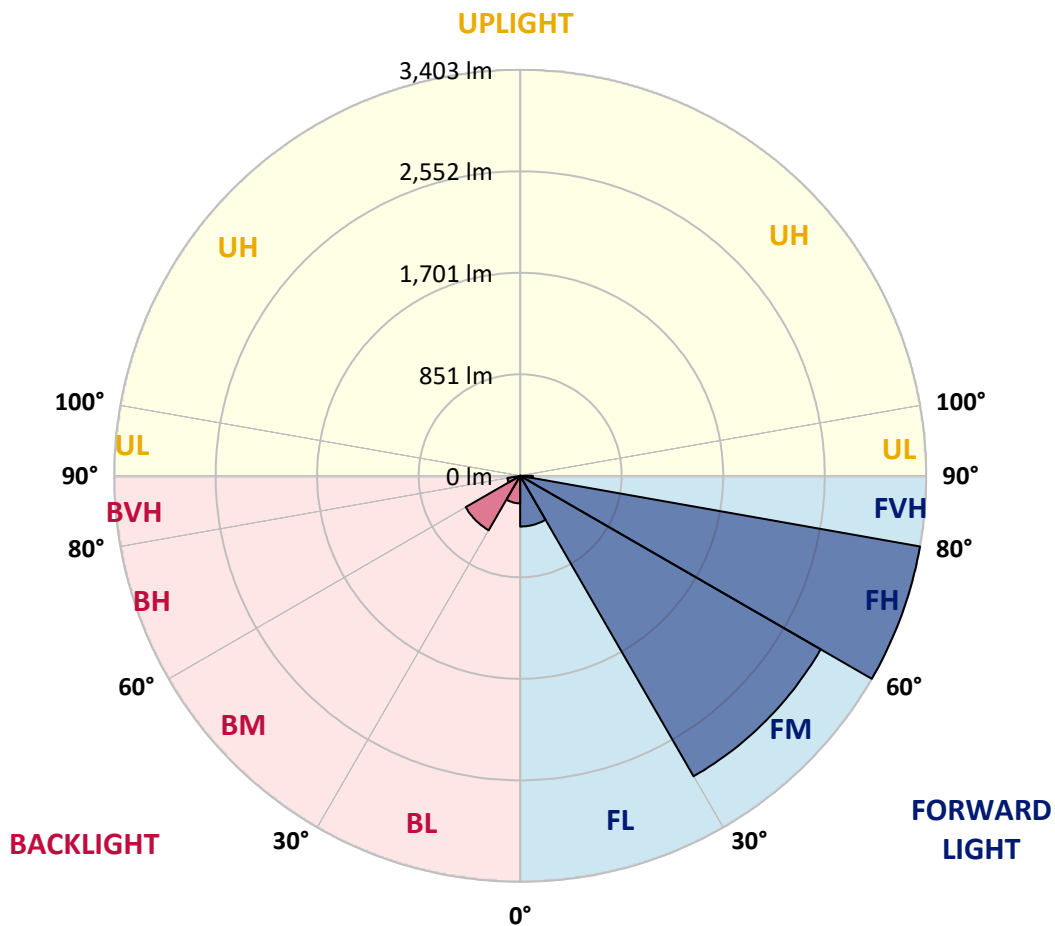
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	425.1	5.5			
FM (30°-60°)	2907.8	37.7			
FH (60°-80°)	3403.0	44.1			G2/5000
FVH (80°-90°)	107.3	1.4			G2/225
BL (0°-30°)	230.6	3.0	B1/500		
BM (30°-60°)	526.9	6.8	B1/1000		
BH (60°-80°)	108.9	1.4	B0/110		G0/110
BVH (80°-90°)	1.5	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°	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6
2.5°	1067.9	1076.9	1078.6	1081.4	1081.4	1084.8	1090.5	1098.4	1111.4	1118.1	1122.7
5°	984.2	991.0	999.5	1006.3	1019.3	1021.0	1043.0	1064.5	1094.4	1117.0	1132.8
7.5°	900.1	908.0	919.3	935.7	952.6	957.7	991.0	1027.2	1074.6	1117.0	1143.6
10°	840.7	841.3	851.5	867.8	895.0	901.2	941.9	993.3	1052.6	1110.2	1153.7
12.5°	807.4	811.3	815.9	828.3	854.3	858.2	901.8	962.2	1030.6	1106.3	1165.6
15°	807.4	810.2	813.0	819.3	840.2	843.6	882.0	942.4	1019.3	1108.0	1184.8
17.5°	815.9	820.4	818.1	825.5	847.5	849.8	883.7	936.8	1018.7	1118.7	1214.2
20°	836.2	839.6	835.1	839.6	861.6	866.2	901.2	947.5	1028.3	1137.4	1250.9
22.5°	868.4	870.1	859.4	862.8	885.4	891.0	931.7	978.0	1051.5	1167.3	1300.1
25°	909.1	912.5	896.1	900.1	921.5	928.3	975.2	1023.8	1088.2	1208.5	1362.8
27.5°	956.0	957.7	943.6	943.0	970.7	980.3	1027.7	1080.3	1137.4	1260.5	1441.9
30°	1009.7	1014.8	1001.2	998.9	1034.0	1041.9	1088.8	1149.8	1209.7	1338.5	1554.3
32.5°	1052.0	1056.0	1048.1	1053.7	1089.3	1095.5	1162.8	1248.1	1323.2	1449.2	1707.4
35°	1113.1	1115.3	1097.2	1107.4	1148.1	1163.9	1263.9	1386.0	1466.2	1588.2	1907.5
37.5°	1334.0	1334.0	1257.1	1206.9	1245.8	1260.0	1402.3	1559.4	1642.5	1774.7	2159.5
40°	1639.6	1634.6	1522.1	1419.3	1414.2	1441.9	1599.5	1778.1	1870.2	1998.4	2443.1
42.5°	1965.7	1957.7	1804.6	1702.9	1686.0	1695.6	1827.2	2047.6	2141.4	2271.3	2748.2
45°	2254.9	2252.7	2112.6	1975.8	1945.3	1975.8	2111.4	2362.9	2430.1	2566.8	3052.7
47.5°	2497.3	2497.3	2395.1	2305.8	2290.0	2308.1	2496.2	2712.6	2706.4	2881.5	3349.4
50°	2776.4	2774.2	2677.0	2638.6	2655.0	2680.4	2939.2	3081.0	2992.3	3190.6	3614.3
52.5°	2971.9	2985.5	2952.2	2945.9	3029.6	3073.6	3388.9	3441.5	3248.2	3483.8	3812.7
55°	3126.7	3142.6	3181.0	3224.5	3385.5	3443.1	3824.5	3783.3	3462.4	3738.1	3926.8
57.5°	3346.0	3323.4	3382.7	3468.6	3729.0	3798.5	4246.6	4105.9	3634.7	3944.3	3939.2
60°	3612.1	3615.5	3625.6	3734.1	4072.0	4161.3	4662.4	4411.0	3745.4	4070.9	3801.4
62.5°	3931.9	3937.0	3957.9	4124.5	4532.5	4616.7	5105.4	4660.7	3796.3	4035.3	3445.4
65°	3909.8	3931.3	4164.7	4734.8	5232.5	5315.6	5622.4	4835.9	3719.4	3709.8	2805.3
67.5°	3561.8	3596.8	3987.2	5463.6	6288.0	6380.6	6247.3	4870.4	3387.8	2884.9	1830.1
70°	3105.3	3117.7	3587.2	6119.0	7510.1	7603.9	6806.6	4491.2	2570.8	1609.1	819.8
72.5°	2425.0	2427.8	2978.7	6271.0	8173.4	8178.5	6367.6	3334.1	1382.6	618.1	284.8
75°	1732.3	1715.4	1995.0	5085.6	7190.8	7248.5	4773.7	1563.9	528.3	292.1	141.8
77.5°	928.9	947.5	1128.9	3016.0	4967.5	5065.8	2604.7	450.9	268.9	198.9	93.8
80°	287.0	302.8	462.7	1380.9	2813.7	2873.1	965.6	200.6	187.6	141.8	61.6
82.5°	90.4	93.8	215.8	580.3	1167.9	1195.0	279.7	113.6	128.3	93.8	36.2
85°	26.0	26.6	96.1	216.4	288.7	294.4	78.5	44.1	73.5	58.2	18.6
87.5°	2.8	9.0	36.2	36.2	25.4	24.9	8.5	9.6	20.9	7.3	3.4
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°	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6	1117.6
2.5°	1119.8	1120.4	1113.1	1100.6	1087.1	1075.8	1061.6	1050.3	1042.4	1040.2	1044.1
5°	1127.8	1123.8	1102.9	1065.0	1019.8	980.9	937.3	902.9	880.3	870.7	874.1
7.5°	1139.6	1128.3	1082.6	1008.0	921.5	844.7	766.7	706.3	667.8	648.6	651.5
10°	1149.8	1127.2	1048.7	925.5	793.3	676.9	571.8	498.9	458.2	439.0	439.6
12.5°	1159.4	1126.6	1004.6	827.7	648.6	506.2	408.5	372.3	361.0	357.1	356.0
15°	1177.5	1128.3	949.2	715.9	504.6	382.5	346.9	346.3	348.6	347.5	346.9
17.5°	1202.3	1130.0	886.5	597.2	389.3	337.3	335.6	340.7	344.1	342.4	341.8
20°	1234.5	1136.8	819.8	479.7	334.5	326.0	330.0	334.5	337.3	334.5	333.9
22.5°	1279.7	1148.7	746.9	385.3	317.0	319.2	322.6	327.7	330.5	326.6	326.0
25°	1335.1	1167.3	675.2	335.0	308.5	311.3	316.4	322.1	325.4	321.5	320.9
27.5°	1406.9	1197.2	609.1	323.7	300.0	301.7	309.1	317.5	322.1	317.0	317.0
30°	1510.8	1246.4	552.0	328.8	294.9	291.0	301.1	313.0	318.1	313.6	313.0
32.5°	1648.7	1315.9	517.0	336.7	292.7	278.5	288.2	303.4	311.9	309.1	309.1
35°	1829.5	1421.6	503.4	345.8	291.0	265.6	272.3	288.7	303.4	306.2	306.2
37.5°	2048.7	1568.5	507.4	349.7	285.9	254.8	258.2	272.3	291.5	300.6	302.8
40°	2297.9	1739.7	530.0	345.8	280.2	245.8	246.3	257.1	274.0	287.6	292.1
42.5°	2555.0	1939.7	571.8	331.1	275.2	237.9	236.2	243.5	254.8	264.4	268.4
45°	2799.6	2145.3	613.0	310.8	268.9	230.0	226.0	228.8	231.1	235.0	237.3
47.5°	3013.2	2290.0	601.2	292.1	260.5	220.9	214.1	213.0	206.2	205.7	205.1
50°	3160.6	2321.6	533.9	273.5	248.0	210.7	200.0	193.2	181.4	175.7	176.3
52.5°	3207.5	2196.7	436.2	254.8	227.7	197.2	181.9	171.2	156.5	151.4	150.9
55°	3145.4	1952.1	348.6	232.2	199.4	179.1	162.2	148.0	136.2	130.0	130.0
57.5°	2993.4	1640.8	275.7	205.7	169.5	158.8	141.8	127.7	117.5	111.3	110.2
60°	2741.4	1302.9	218.1	174.0	144.6	136.7	119.2	110.2	101.1	93.8	92.1
62.5°	2358.9	930.0	171.2	137.9	120.9	111.9	101.7	94.9	84.2	74.0	72.3
65°	1840.8	569.0	132.2	101.1	97.2	92.7	86.4	80.2	67.2	57.1	55.4
67.5°	1161.1	269.5	94.4	76.3	76.8	74.6	71.8	66.7	57.1	48.0	46.9
70°	511.3	130.5	62.2	58.2	57.1	57.1	59.3	57.6	48.6	40.1	38.4
72.5°	174.0	70.1	46.3	44.1	41.2	40.7	49.7	48.0	39.0	31.1	29.4
75°	91.0	46.9	33.9	31.6	24.9	29.9	39.6	37.3	27.7	20.3	18.6
77.5°	59.3	33.3	23.2	20.3	14.1	19.8	29.4	26.0	16.4	10.2	9.0
80°	37.3	22.0	13.6	9.6	6.8	10.7	15.8	11.3	6.2	2.3	1.7
82.5°	19.8	11.3	5.1	3.4	2.8	3.4	4.0	2.8	1.1	0.0	0.0
85°	7.9	4.0	1.7	1.1	0.6	0.0	1.1	0.6	0.0	0.0	0.0
87.5°	2.8	0.6	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)