

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: P961350

Luminaire Tested: **NAV-SB2A-727-U-T3R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P961350  
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-SB2A-727-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 350mA 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: 7100.2 lumens  
Efficiency: N/A  
Efficacy: 123.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2

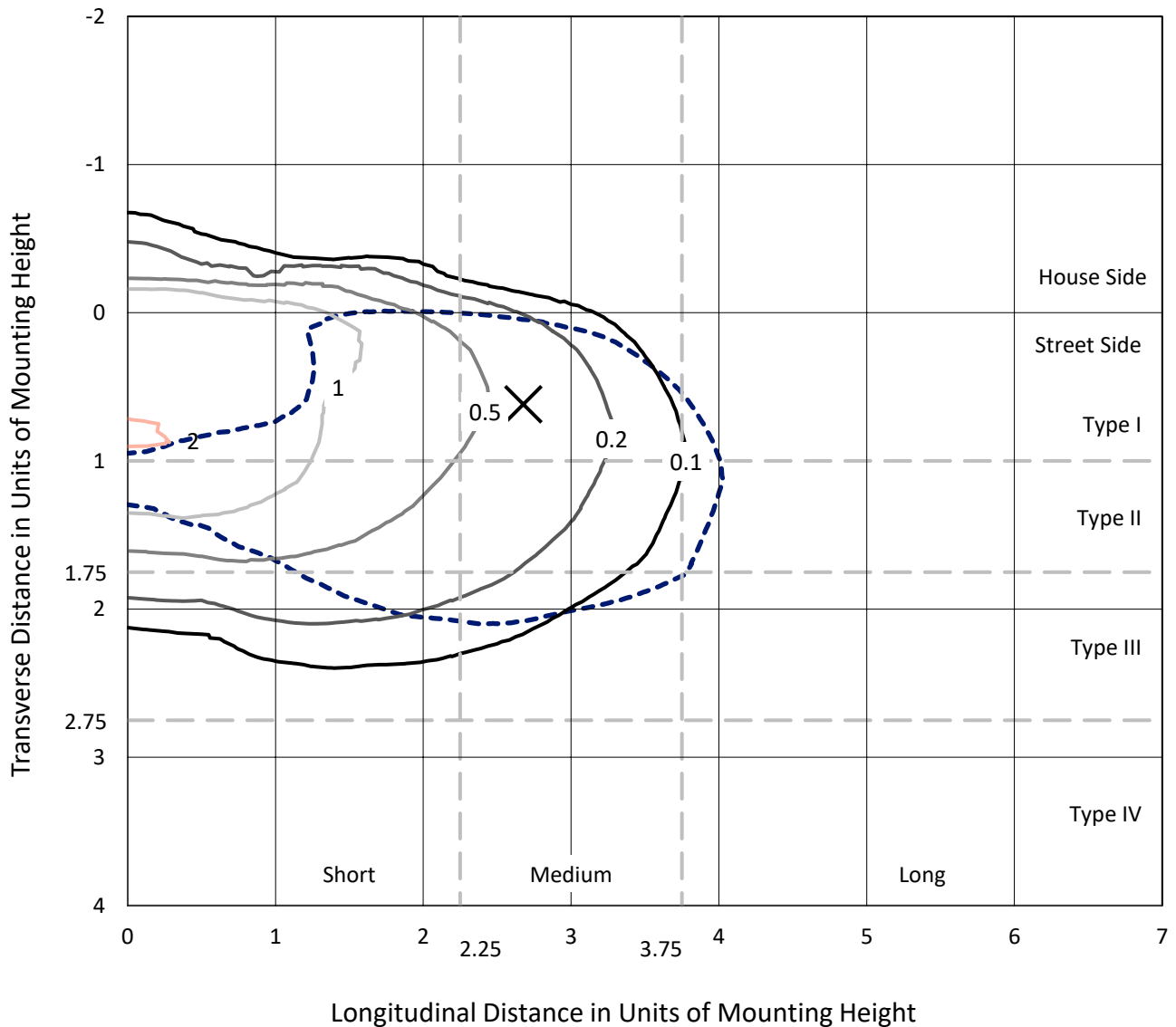
Input Watts (W): 57.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

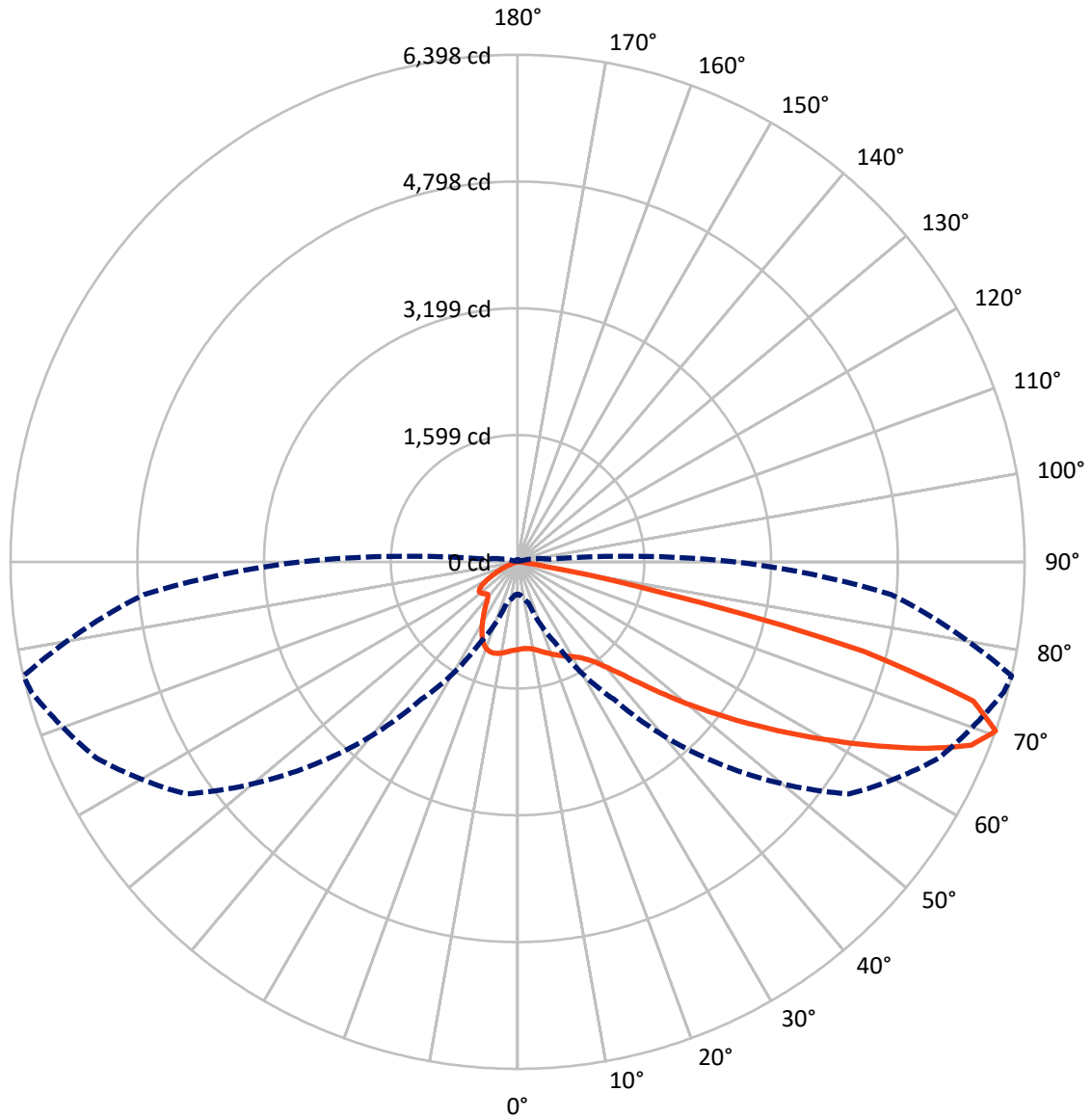
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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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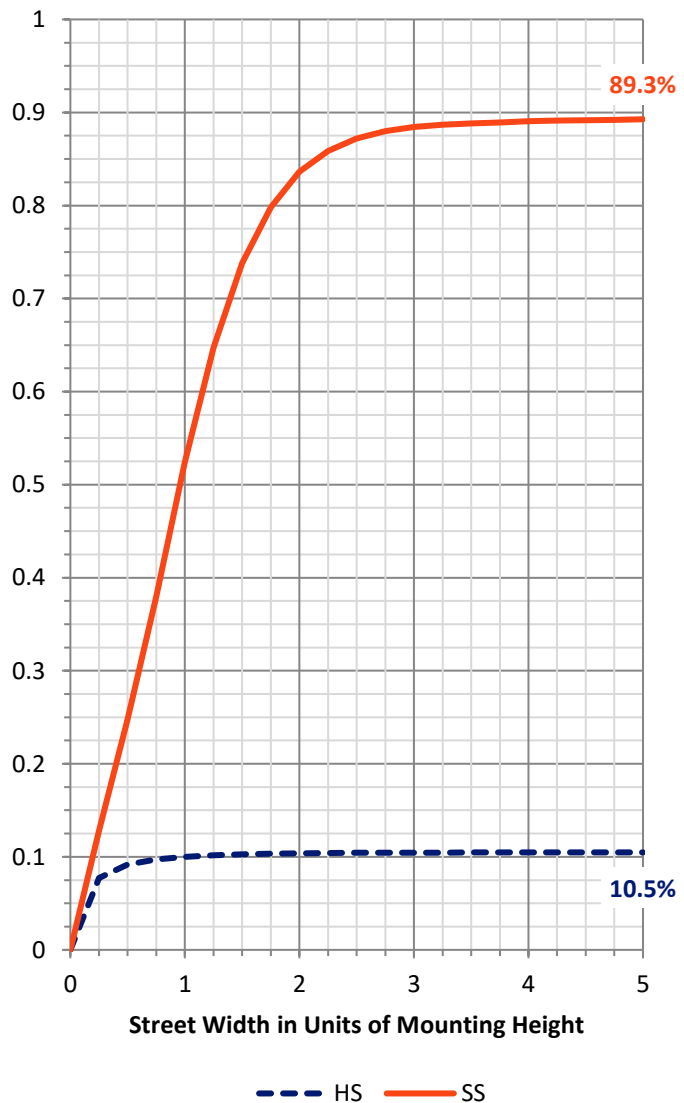
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	748.4	0.0	748.4
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	6351.7	0.0	6351.7
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	7100.2	0.0	7100.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.4	1.3
10°-20°	226.6	3.2
20°-30°	350.5	4.9
30°-40°	635.9	9.0
40°-50°	1200.4	16.9
50°-60°	1734.5	24.4
60°-70°	1846.3	26.0
70°-80°	978.4	13.8
80°-90°	32.1	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°	7100.2	100.0
0°-180°	7100.2	100.0

**Coefficient of Utilization**

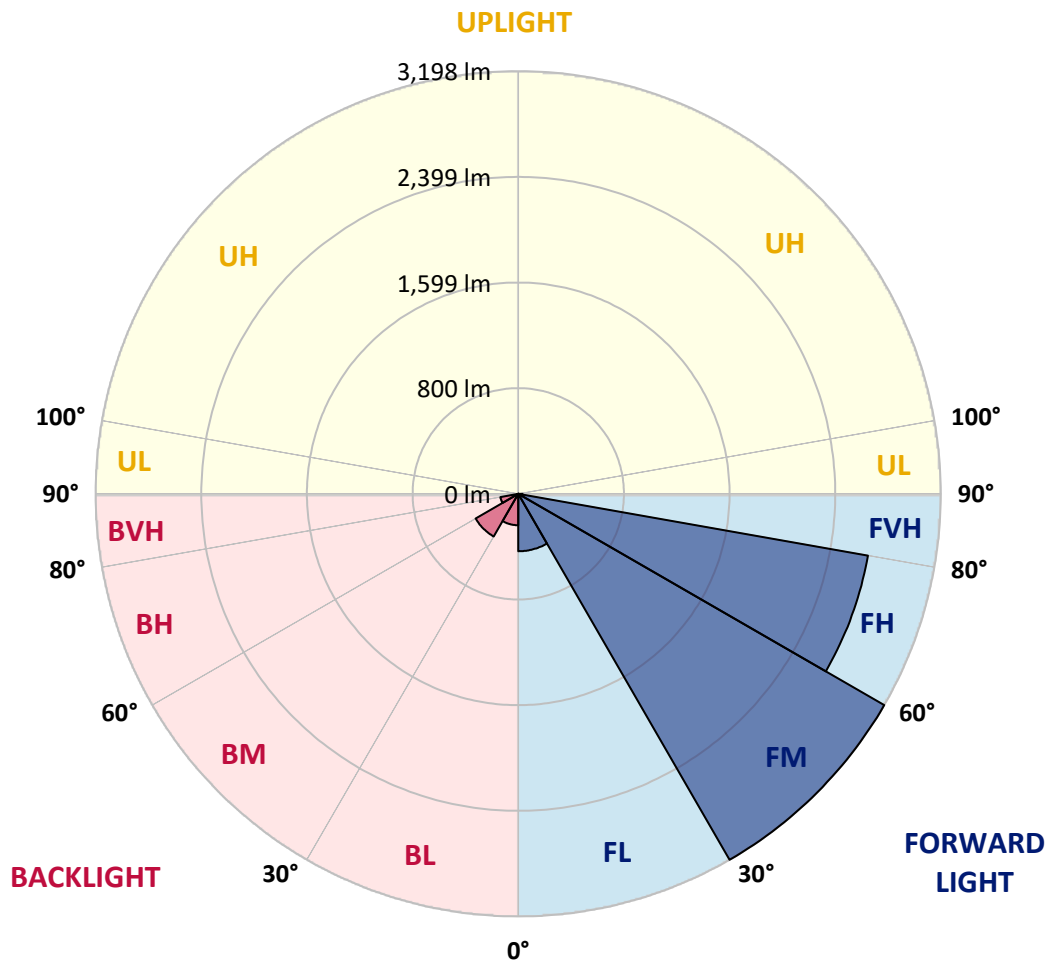


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	434.7	6.1			
FM (30°-60°)	3198.2	45.0			
FH (60°-80°)	2687.5	37.9			G2/5000
FVH (80°-90°)	31.3	0.4			G1/100
BL (0°-30°)	237.8	3.3	B1/500		
BM (30°-60°)	372.6	5.2	B1/1000		
BH (60°-80°)	137.2	1.9	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5
2.5°	1039.8	1049.2	1047.9	1054.1	1056.4	1065.4	1074.3	1086.4	1099.9	1099.4	1108.4
5°	981.0	990.5	992.7	1001.2	1012.0	1025.9	1044.3	1068.5	1093.6	1097.7	1115.6
7.5°	911.5	921.4	927.2	944.3	964.0	992.7	1022.7	1058.2	1099.9	1105.7	1140.2
10°	842.0	851.1	858.6	882.8	914.2	956.8	1005.7	1056.9	1112.8	1121.4	1170.2
12.5°	799.0	807.5	816.0	837.1	876.2	928.1	994.6	1063.1	1134.4	1146.5	1211.0
15°	783.8	791.4	798.2	816.9	853.3	912.5	992.3	1076.1	1161.7	1177.9	1260.4
17.5°	786.0	790.1	794.6	808.8	844.3	905.3	996.3	1098.5	1194.0	1208.4	1309.7
20°	799.0	801.2	801.8	811.6	843.0	904.4	1004.4	1120.0	1224.6	1243.8	1358.6
22.5°	815.6	816.5	815.6	822.4	851.5	911.1	1015.2	1146.1	1258.6	1276.5	1407.9
25°	893.2	876.2	854.6	841.6	865.8	924.1	1031.3	1181.0	1295.8	1313.3	1455.9
27.5°	1134.0	1085.1	1008.0	921.4	895.4	942.9	1053.7	1216.5	1333.5	1349.2	1507.5
30°	1524.9	1460.8	1329.9	1134.9	990.5	982.4	1082.8	1251.8	1373.4	1390.4	1562.6
32.5°	1916.9	1901.2	1750.0	1480.1	1204.4	1070.3	1131.3	1299.9	1426.3	1439.7	1637.0
35°	2313.2	2281.3	2157.6	1890.8	1533.9	1249.2	1212.0	1362.6	1495.8	1511.1	1745.6
37.5°	2616.7	2597.5	2520.8	2301.1	1924.8	1525.4	1350.0	1459.9	1596.6	1613.8	1884.6
40°	2884.9	2875.9	2849.9	2705.1	2362.1	1886.8	1564.9	1610.6	1736.6	1756.7	2054.9
42.5°	3095.6	3116.7	3131.5	3091.1	2812.7	2299.3	1853.6	1822.2	1931.6	1952.2	2271.9
45°	3311.3	3318.4	3378.1	3436.4	3260.2	2730.6	2179.1	2070.2	2174.2	2199.8	2532.0
47.5°	3449.8	3478.5	3583.5	3686.1	3636.4	3158.4	2528.9	2362.9	2455.3	2503.4	2823.5
50°	3460.2	3514.4	3658.7	3837.7	3910.3	3565.6	2909.1	2696.6	2794.8	2847.7	3134.7
52.5°	3288.4	3372.8	3596.4	3858.3	4058.3	3910.3	3302.3	3030.1	3156.2	3225.2	3457.4
55°	2521.2	2631.6	3362.0	3746.2	4064.1	4171.8	3685.3	3377.7	3558.8	3636.8	3806.3
57.5°	2196.6	2252.2	2643.2	3551.6	3956.1	4277.1	4031.4	3708.6	3996.9	4093.7	4135.9
60°	1827.6	1900.7	2216.8	3233.3	3809.4	4287.4	4337.2	4135.4	4471.7	4580.6	4438.0
62.5°	1242.0	1321.3	1635.7	2686.2	3609.0	4282.4	4587.8	4574.8	4999.4	5116.5	4694.1
65°	769.5	819.2	1026.3	2193.5	3328.8	4287.9	4850.1	5108.4	5556.3	5675.1	4892.3
67.5°	608.0	630.9	738.9	1684.1	2845.9	4166.8	5112.0	5610.1	6080.5	6174.6	4952.8
70°	408.5	422.4	537.6	1129.0	2117.2	3608.1	5107.1	5862.1	6350.4	6397.5	4732.2
72.5°	215.2	226.0	314.3	522.9	1278.8	2564.8	4304.9	5560.8	6081.8	6011.0	4044.9
75°	107.6	125.6	211.7	265.5	546.1	1430.3	2673.2	4384.2	4787.0	4512.5	2595.2
77.5°	81.6	98.6	174.9	174.9	190.1	481.5	1132.1	2391.2	2205.6	1836.6	761.8
80°	52.0	67.2	152.9	132.2	79.3	122.4	295.0	669.8	468.5	356.5	138.6
82.5°	30.4	44.0	127.3	87.4	44.4	45.3	83.4	142.6	121.5	94.6	42.6
85°	12.1	28.7	87.4	34.5	17.5	11.2	25.1	30.4	25.1	18.9	10.8
87.5°	0.0	6.8	15.3	0.0	1.3	0.9	1.7	2.3	2.3	1.7	3.6
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°	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5	1107.5
2.5°	1112.4	1113.4	1116.0	1116.4	1110.2	1102.1	1099.0	1097.7	1092.2	1091.8	1092.8
5°	1125.9	1130.0	1125.9	1114.2	1086.4	1047.4	1017.8	993.6	971.6	964.9	960.8
7.5°	1152.8	1156.8	1144.7	1099.0	1029.0	951.5	881.5	832.2	787.8	771.2	764.4
10°	1191.4	1196.7	1158.7	1066.2	942.5	817.8	699.5	616.0	551.0	524.6	513.4
12.5°	1239.7	1242.0	1166.2	1016.5	829.9	651.9	484.2	395.0	337.2	315.7	308.9
15°	1293.1	1290.0	1167.2	948.7	676.6	460.9	316.1	259.6	236.3	229.1	229.1
17.5°	1349.2	1336.2	1149.2	851.1	508.5	315.2	234.5	221.1	217.0	215.2	214.7
20°	1404.4	1375.1	1116.4	723.2	365.0	235.4	213.0	208.9	206.7	205.8	204.9
22.5°	1454.6	1404.8	1060.5	574.8	265.0	208.1	201.3	197.7	193.7	191.9	191.5
25°	1503.5	1421.8	981.5	436.2	212.1	194.6	189.2	182.4	177.1	174.9	173.9
27.5°	1550.9	1432.5	882.8	322.9	189.2	182.0	172.2	162.8	158.8	157.8	156.9
30°	1601.7	1436.1	770.8	240.8	175.3	166.4	152.0	141.2	139.0	139.4	139.4
32.5°	1663.5	1441.6	657.7	197.3	163.7	147.5	130.5	119.3	117.5	119.3	118.8
35°	1737.5	1452.3	548.8	181.6	153.3	128.2	109.9	100.4	98.6	100.0	99.5
37.5°	1837.9	1469.7	447.0	178.5	144.8	112.1	92.4	84.8	84.8	85.2	84.8
40°	1971.5	1516.4	356.0	176.2	140.3	100.0	78.0	74.9	76.3	77.1	77.1
42.5°	2134.3	1615.5	294.6	173.5	135.4	94.6	70.8	69.5	71.8	72.7	72.7
45°	2316.8	1741.1	273.1	169.0	130.9	98.2	67.8	65.9	68.6	69.1	69.5
47.5°	2505.5	1864.0	270.4	164.1	126.5	103.5	66.8	62.7	65.9	66.3	66.8
50°	2696.6	1944.2	273.1	156.5	119.3	103.5	67.2	59.7	62.3	63.7	64.2
52.5°	2889.0	1980.9	271.3	139.9	106.7	97.3	67.2	57.0	59.7	60.6	60.6
55°	3075.4	1973.7	244.0	115.2	90.6	86.1	65.5	54.7	56.5	57.0	57.0
57.5°	3222.9	1873.8	193.2	89.7	73.5	71.8	59.7	52.0	53.4	52.9	52.9
60°	3300.1	1654.0	138.1	69.1	57.8	56.5	52.5	48.4	49.3	47.0	46.6
62.5°	3301.0	1363.6	92.4	54.7	46.2	44.8	44.8	43.5	42.6	38.1	36.8
65°	3230.6	1041.1	61.4	43.5	37.2	35.0	37.6	37.2	34.0	27.8	26.9
67.5°	3071.0	682.4	46.6	34.0	28.7	27.4	30.0	31.4	29.1	23.3	22.9
70°	2742.7	397.3	38.5	26.4	21.5	20.2	24.2	26.9	24.2	18.9	17.9
72.5°	2278.3	214.3	31.4	19.7	14.8	13.4	19.3	21.9	19.3	13.9	13.4
75°	1478.4	114.8	24.2	13.0	7.6	8.5	14.3	16.1	13.4	8.9	8.1
77.5°	496.4	50.6	15.3	6.3	3.6	3.6	8.5	9.8	6.3	3.2	2.7
80°	110.7	21.1	6.3	2.7	1.3	1.3	1.7	1.7	0.9	0.0	0.0
82.5°	36.3	8.5	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.9	3.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.3	0.4	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)