

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: P963458

Luminaire Tested: **NAV-SB3A-727-U-T3R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P963458  
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-SB3A-727-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 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: 10652.8 lumens  
Efficiency: N/A  
Efficacy: 125.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2

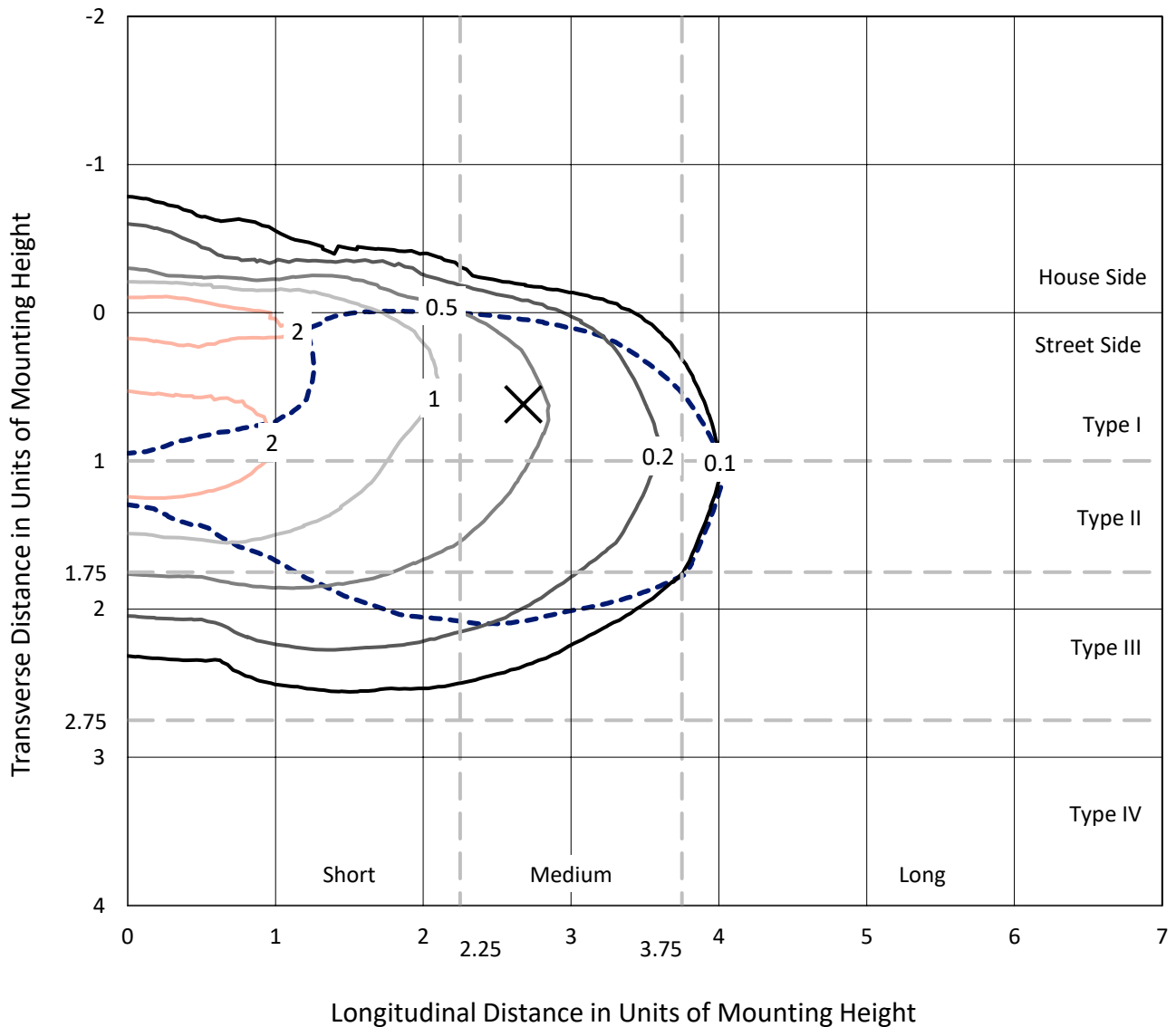
Input Watts (W): 84.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

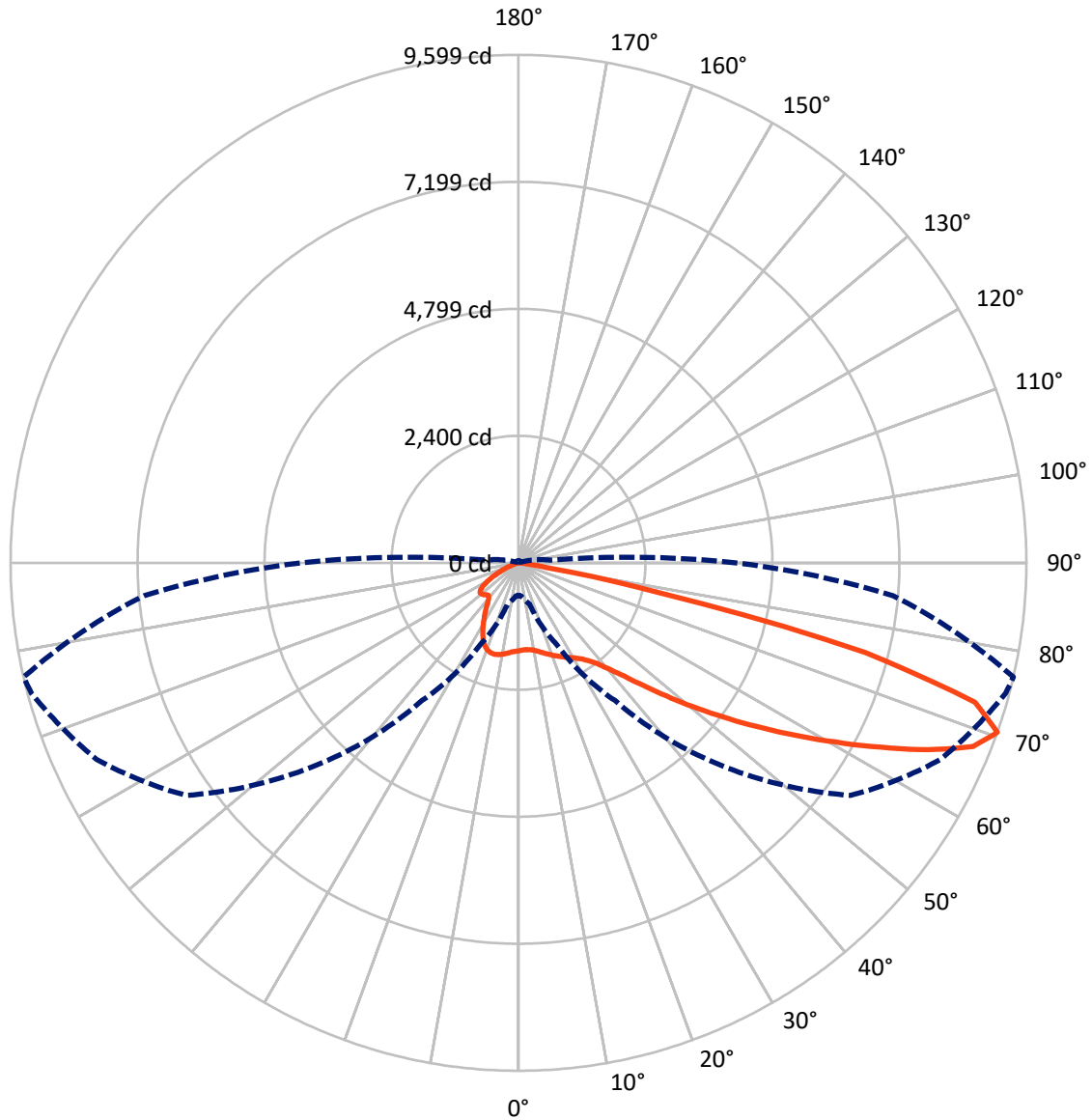
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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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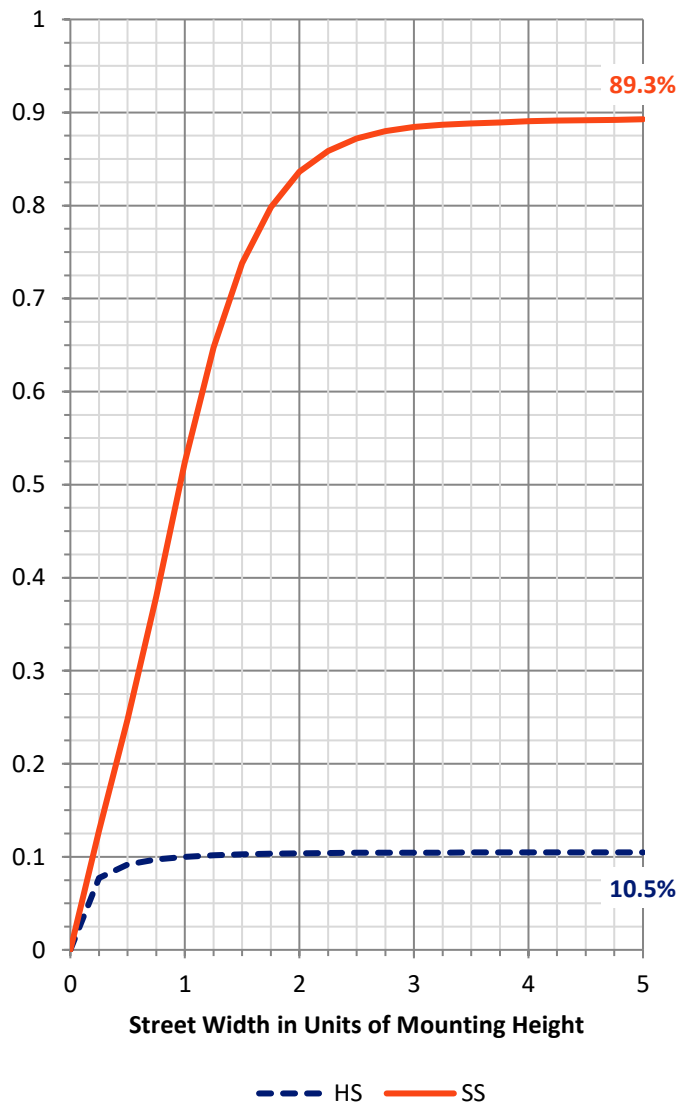
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1123.0	0.0	1123.0
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	9529.9	0.0	9529.9
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	10652.8	0.0	10652.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.2	1.3
10°-20°	340.0	3.2
20°-30°	525.8	4.9
30°-40°	954.1	9.0
40°-50°	1801.0	16.9
50°-60°	2602.3	24.4
60°-70°	2770.1	26.0
70°-80°	1468.0	13.8
80°-90°	48.2	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°	10652.8	100.0
0°-180°	10652.8	100.0

**Coefficient of Utilization**

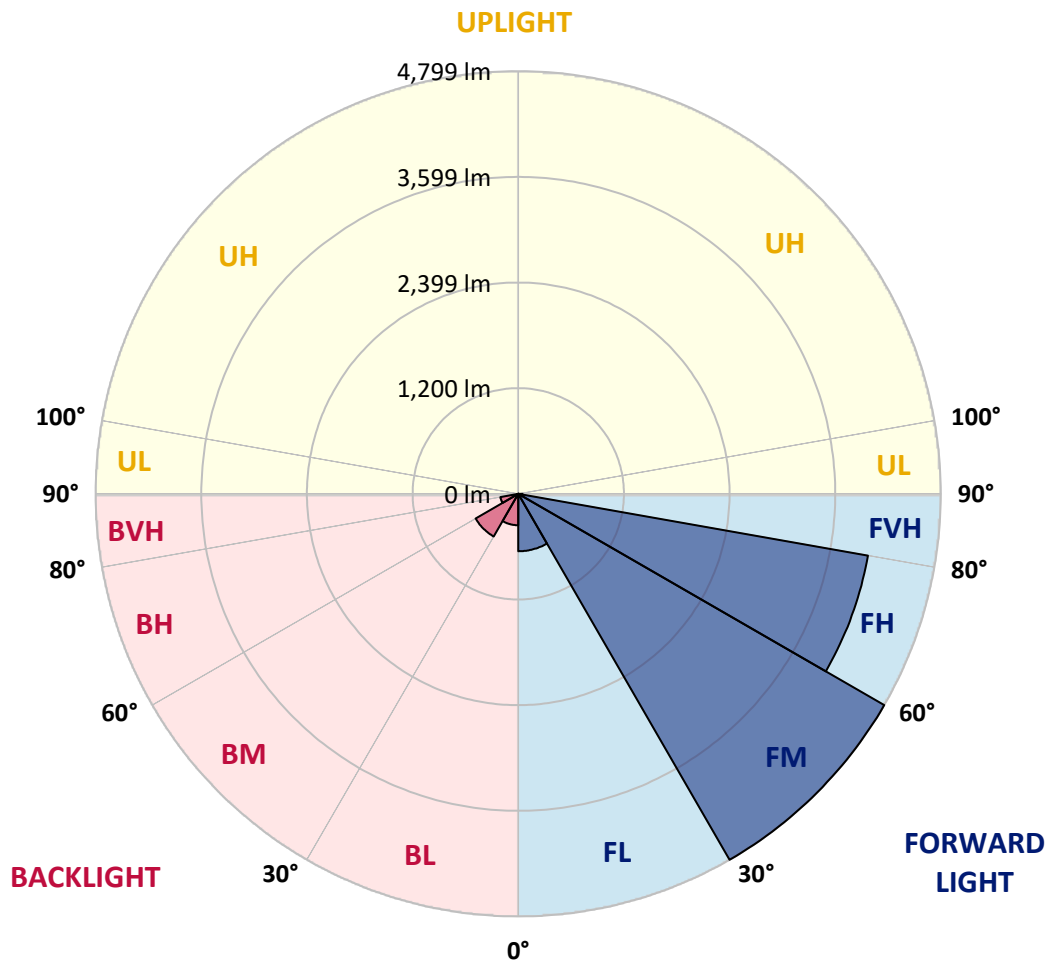


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	652.2	6.1			
FM (30°-60°)	4798.5	45.0			
FH (60°-80°)	4032.2	37.9			G2/5000
FVH (80°-90°)	46.9	0.4			G1/100
BL (0°-30°)	356.8	3.3	B1/500		
BM (30°-60°)	559.0	5.2	B1/1000		
BH (60°-80°)	205.9	1.9	B1/500		G1/500
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 III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6
2.5°	1560.0	1574.2	1572.1	1581.6	1585.0	1598.4	1611.9	1630.1	1650.2	1649.5	1663.0
5°	1471.9	1486.0	1489.4	1502.2	1518.3	1539.2	1566.8	1603.1	1640.8	1646.9	1673.7
7.5°	1367.7	1382.4	1391.2	1416.8	1446.4	1489.4	1534.5	1587.6	1650.2	1659.0	1710.7
10°	1263.4	1276.8	1288.3	1324.6	1371.7	1435.6	1508.9	1585.7	1669.7	1682.5	1755.8
12.5°	1198.8	1211.6	1224.4	1256.0	1314.6	1392.6	1492.1	1595.0	1702.0	1720.2	1817.0
15°	1176.0	1187.4	1197.5	1225.7	1280.2	1369.0	1488.7	1614.6	1743.0	1767.3	1891.0
17.5°	1179.3	1185.3	1192.1	1213.6	1266.8	1358.2	1494.9	1648.2	1791.5	1813.0	1965.0
20°	1198.8	1202.2	1202.8	1217.6	1264.7	1356.9	1507.0	1680.5	1837.2	1866.1	2038.4
22.5°	1223.7	1225.1	1223.7	1233.8	1277.6	1367.0	1523.0	1719.5	1888.4	1915.3	2112.4
25°	1340.1	1314.6	1282.3	1262.7	1299.1	1386.5	1547.2	1772.0	1944.2	1970.5	2184.4
27.5°	1701.3	1628.0	1512.3	1382.4	1343.5	1414.7	1581.0	1825.1	2000.7	2024.3	2261.8
30°	2288.0	2191.8	1995.4	1702.7	1486.0	1473.9	1624.6	1878.3	2060.6	2086.2	2344.5
32.5°	2875.9	2852.4	2625.6	2220.7	1807.0	1605.8	1697.3	1950.3	2140.0	2160.2	2456.1
35°	3470.6	3422.9	3237.2	2836.9	2301.4	1874.2	1818.4	2044.5	2244.2	2267.1	2619.0
37.5°	3926.1	3897.2	3782.1	3452.5	2888.0	2288.6	2025.6	2190.4	2395.6	2421.2	2827.5
40°	4328.4	4314.9	4275.9	4058.6	3543.9	2830.8	2347.9	2416.4	2605.4	2635.8	3083.1
42.5°	4644.6	4676.2	4698.4	4637.8	4220.0	3449.7	2781.0	2734.0	2898.1	2929.0	3408.7
45°	4968.2	4978.9	5068.3	5155.9	4891.4	4096.9	3269.4	3106.0	3262.1	3300.4	3799.0
47.5°	5176.0	5219.1	5376.4	5530.5	5455.9	4738.7	3794.2	3545.3	3683.8	3755.9	4236.2
50°	5191.5	5272.9	5489.5	5757.9	5866.9	5349.6	4364.7	4045.8	4193.2	4272.5	4703.1
52.5°	4933.8	5060.3	5396.0	5788.9	6088.9	5866.9	4954.6	4546.3	4735.4	4838.9	5187.4
55°	3782.8	3948.3	5044.1	5620.7	6097.6	6259.1	5529.2	5067.7	5339.4	5456.5	5710.8
57.5°	3295.7	3379.1	3965.7	5328.7	5935.5	6417.2	6048.5	5564.2	5996.8	6142.0	6205.2
60°	2742.1	2851.8	3326.0	4851.1	5715.5	6432.7	6507.3	6204.6	6709.1	6872.6	6658.7
62.5°	1863.4	1982.6	2454.2	4030.3	5414.9	6425.3	6883.4	6863.9	7500.9	7676.5	7042.9
65°	1154.5	1229.1	1539.9	3291.0	4994.3	6433.3	7277.0	7664.4	8336.5	8514.8	7340.2
67.5°	912.2	946.5	1108.6	2526.8	4269.8	6251.7	7669.9	8417.2	9122.9	9264.2	7431.0
70°	612.8	633.8	806.6	1693.9	3176.7	5413.4	7662.4	8795.3	9527.9	9598.5	7100.0
72.5°	322.9	339.1	471.6	784.4	1918.6	3848.1	6458.9	8343.2	9125.0	9018.7	6068.7
75°	161.4	188.4	317.5	398.2	819.4	2146.0	4010.8	6577.9	7182.1	6770.3	3893.8
77.5°	122.5	148.0	262.4	262.4	285.3	722.5	1698.6	3587.7	3309.2	2755.5	1143.0
80°	78.0	100.9	229.4	198.4	119.1	183.7	442.7	1005.0	703.0	534.8	207.9
82.5°	45.7	65.9	191.1	131.2	66.6	68.0	125.2	213.9	182.3	142.0	64.0
85°	18.1	43.0	131.2	51.8	26.2	16.8	37.7	45.7	37.7	28.3	16.2
87.5°	0.0	10.0	22.9	0.0	2.0	1.3	2.7	3.4	3.4	2.7	5.4
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°	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6
2.5°	1669.0	1670.4	1674.4	1675.1	1665.7	1653.5	1648.9	1646.9	1638.8	1638.1	1639.5
5°	1689.2	1695.2	1689.2	1671.8	1630.1	1571.5	1527.1	1490.8	1457.9	1447.7	1441.7
7.5°	1729.6	1735.6	1717.5	1648.9	1544.0	1427.5	1322.6	1248.6	1182.0	1157.1	1147.0
10°	1787.5	1795.5	1738.3	1599.7	1414.1	1227.0	1049.5	924.3	826.8	787.1	770.3
12.5°	1860.1	1863.4	1749.8	1525.1	1245.3	978.2	726.5	592.7	505.9	473.7	463.5
15°	1940.1	1935.4	1751.1	1423.5	1015.2	691.6	474.3	389.5	354.5	343.8	343.8
17.5°	2024.3	2004.7	1724.3	1276.8	762.9	472.9	351.9	331.7	325.6	322.9	322.3
20°	2107.0	2063.2	1675.1	1085.2	547.6	353.2	319.6	313.4	310.2	308.8	307.4
22.5°	2182.3	2107.7	1591.0	862.4	397.6	312.1	302.1	296.6	290.6	287.9	287.3
25°	2255.7	2133.2	1472.6	654.6	318.2	291.9	283.9	273.8	265.7	262.4	261.1
27.5°	2327.0	2149.4	1324.6	484.4	283.9	273.2	258.3	244.2	238.1	236.8	235.4
30°	2403.0	2154.8	1156.4	361.2	263.0	249.6	228.1	211.9	208.6	209.2	209.2
32.5°	2495.9	2162.9	986.9	296.0	245.6	221.3	195.8	179.0	176.3	179.0	178.2
35°	2606.9	2178.9	823.4	272.4	230.1	192.4	164.8	150.7	148.0	150.1	149.3
37.5°	2757.6	2205.2	670.8	267.7	217.3	168.2	138.6	127.1	127.1	127.8	127.1
40°	2958.0	2275.2	534.1	264.3	210.5	150.1	117.1	112.3	114.4	115.7	115.7
42.5°	3202.2	2423.8	442.0	260.3	203.2	142.0	106.3	104.2	107.6	109.0	109.0
45°	3476.0	2612.2	409.7	253.6	196.4	147.3	101.6	98.9	102.9	103.6	104.2
47.5°	3759.2	2796.5	405.7	246.2	189.7	155.4	100.2	94.2	98.9	99.5	100.2
50°	4045.8	2916.9	409.7	234.8	179.0	155.4	100.9	89.5	93.5	95.5	96.2
52.5°	4334.4	2972.1	407.0	209.9	160.1	146.0	100.9	85.5	89.5	90.8	90.8
55°	4614.2	2961.3	365.9	172.9	135.9	129.1	98.2	82.1	84.8	85.5	85.5
57.5°	4835.6	2811.4	290.0	134.6	110.3	107.6	89.5	78.0	80.1	79.3	79.3
60°	4951.3	2481.7	207.2	103.6	86.8	84.8	78.7	72.7	74.0	70.6	70.0
62.5°	4952.7	2045.8	138.6	82.1	69.3	67.2	67.2	65.3	64.0	57.2	55.1
65°	4847.0	1562.1	92.1	65.3	55.9	52.5	56.5	55.9	51.1	41.7	40.4
67.5°	4607.6	1023.9	70.0	51.1	43.0	41.0	45.1	47.0	43.8	35.0	34.3
70°	4115.1	596.0	57.8	39.7	32.3	30.2	36.3	40.4	36.3	28.3	27.0
72.5°	3418.2	321.5	47.0	29.6	22.2	20.2	28.9	33.0	28.9	20.8	20.2
75°	2218.0	172.2	36.3	19.5	11.5	12.8	21.5	24.2	20.2	13.4	12.1
77.5°	744.8	76.1	22.9	9.4	5.4	5.4	12.8	14.8	9.4	4.7	4.0
80°	166.2	31.6	9.4	4.0	2.0	2.0	2.7	2.7	1.3	0.0	0.0
82.5°	54.5	12.8	4.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.8	4.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.1	0.7	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)