

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: P963520

Luminaire Tested: **NAV-SB3A-735-U-T3R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P963520  
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-735-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

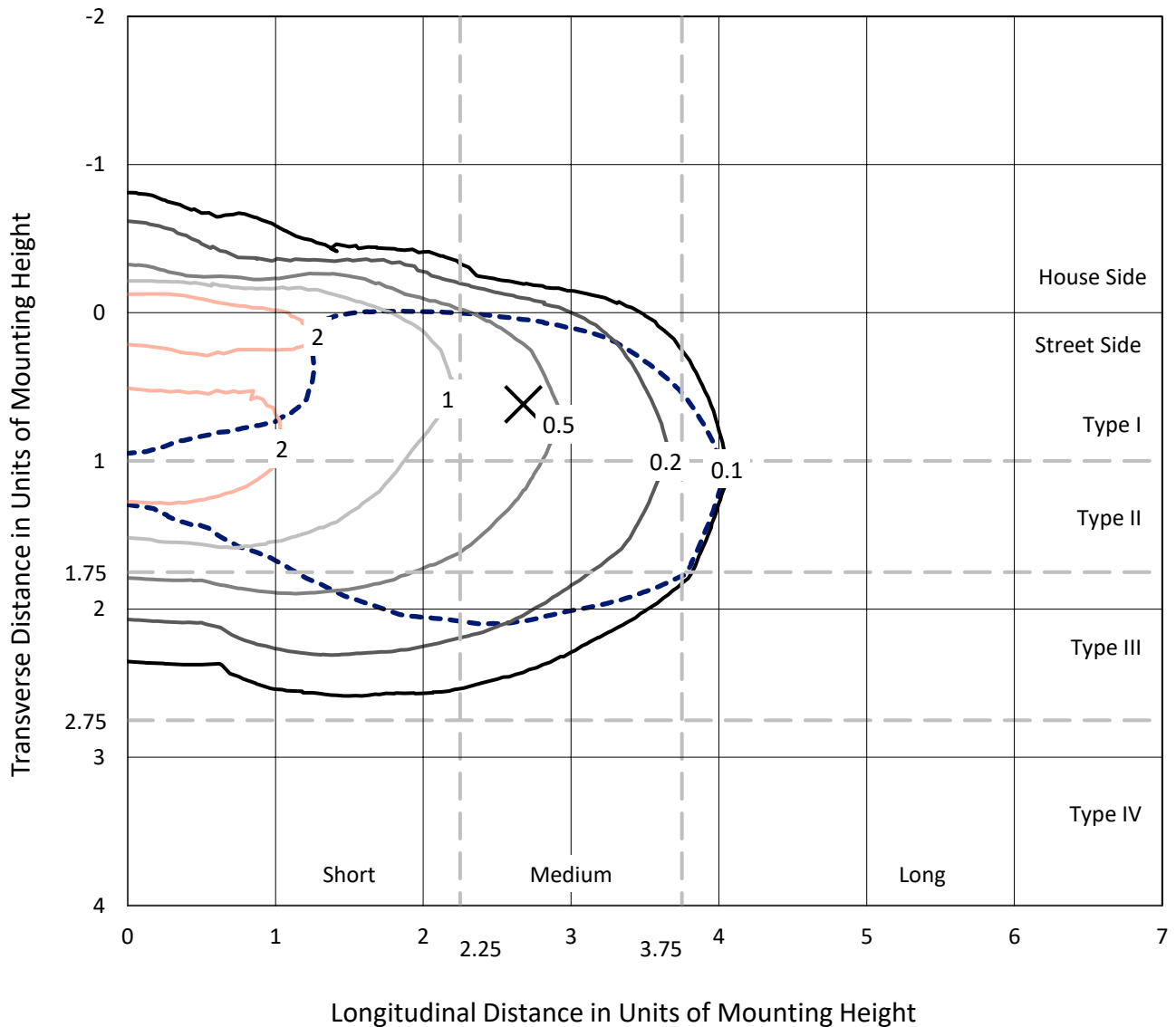
Lumens per Lamp: N/A  
Luminaire Lumens: 11485.1 lumens  
Efficiency: N/A  
Efficacy: 135.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



REPORT NUMBER: P963520  
 CATALOG NUMBER: NAV-SB3A-735-U-T3R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

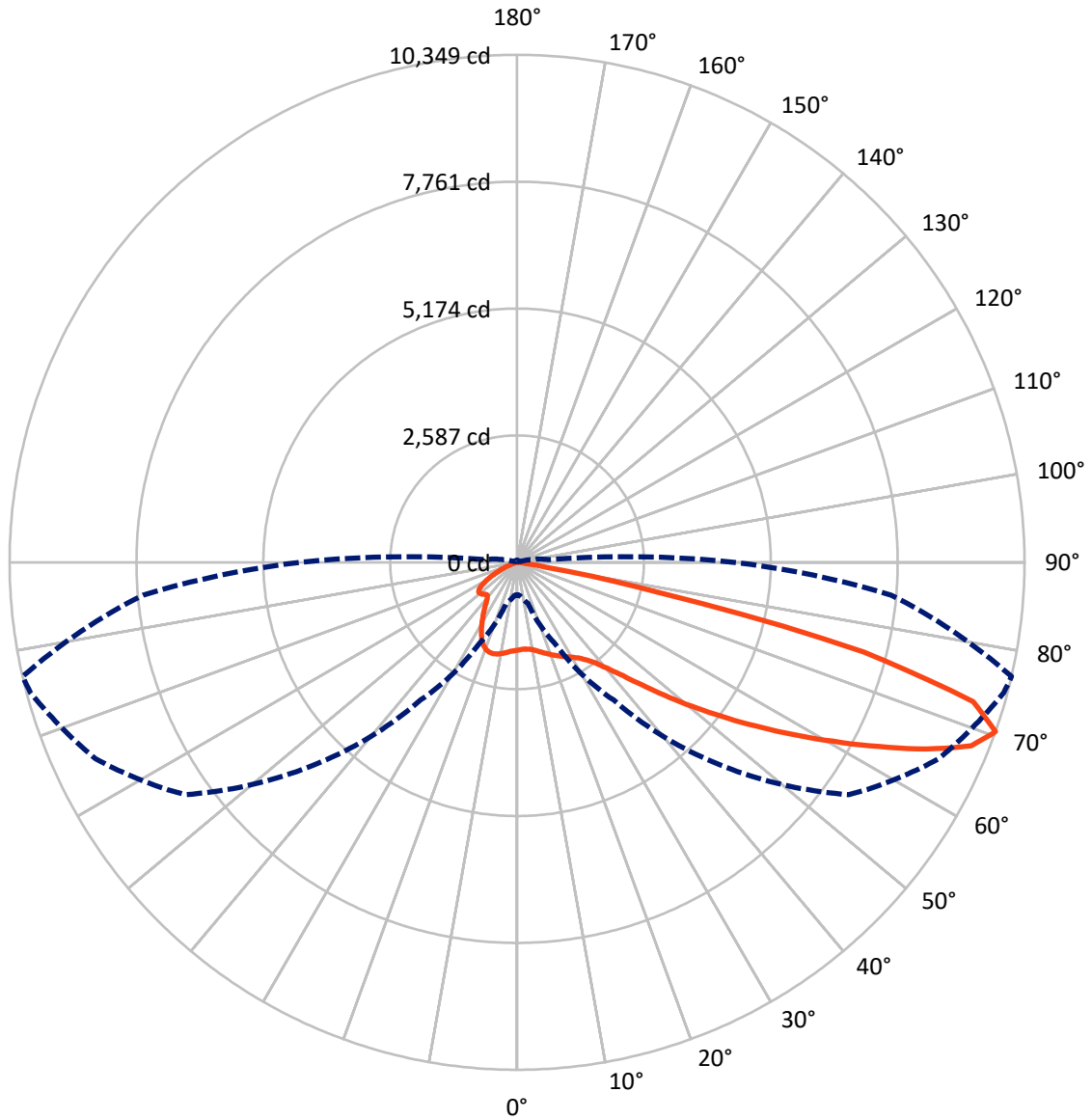
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type III - Medium - N/A

REPORT NUMBER: P963520  
CATALOG NUMBER: NAV-SB3A-735-U-T3R-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P963520  
 CATALOG NUMBER: NAV-SB3A-735-U-T3R-HSS

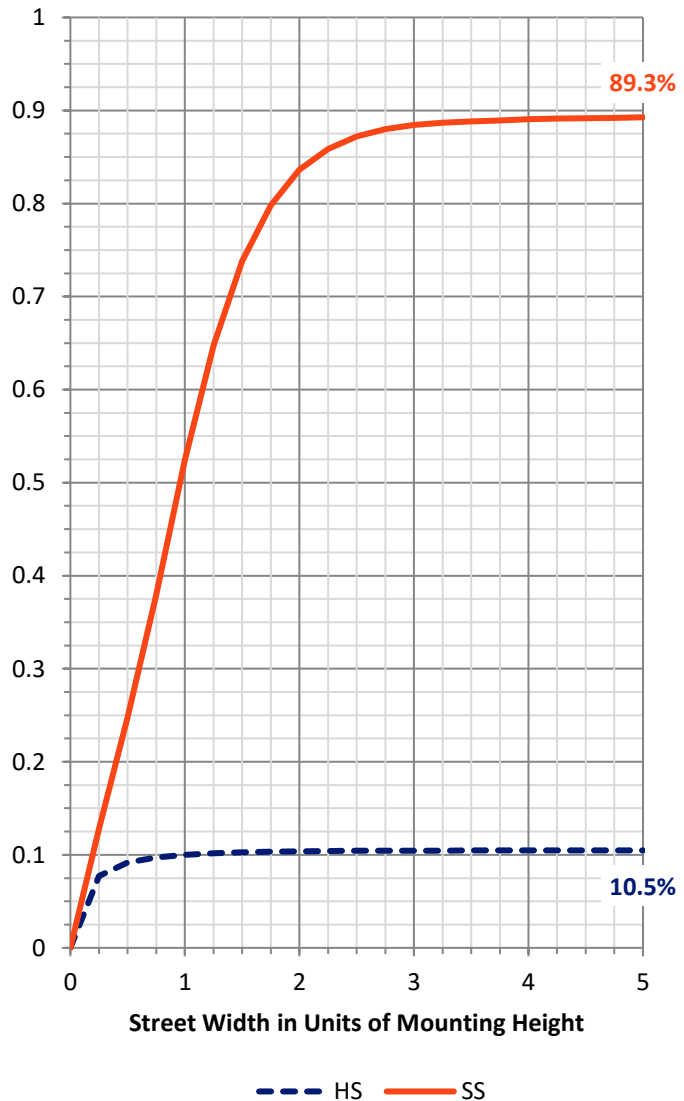
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1210.7	0.0	1210.7
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	10274.4	0.0	10274.4
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	11485.1	0.0	11485.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.4	1.3
10°-20°	366.5	3.2
20°-30°	566.9	4.9
30°-40°	1028.7	9.0
40°-50°	1941.8	16.9
50°-60°	2805.7	24.4
60°-70°	2986.6	26.0
70°-80°	1582.7	13.8
80°-90°	52.0	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°	11485.1	100.0
0°-180°	11485.1	100.0

**Coefficient of Utilization**

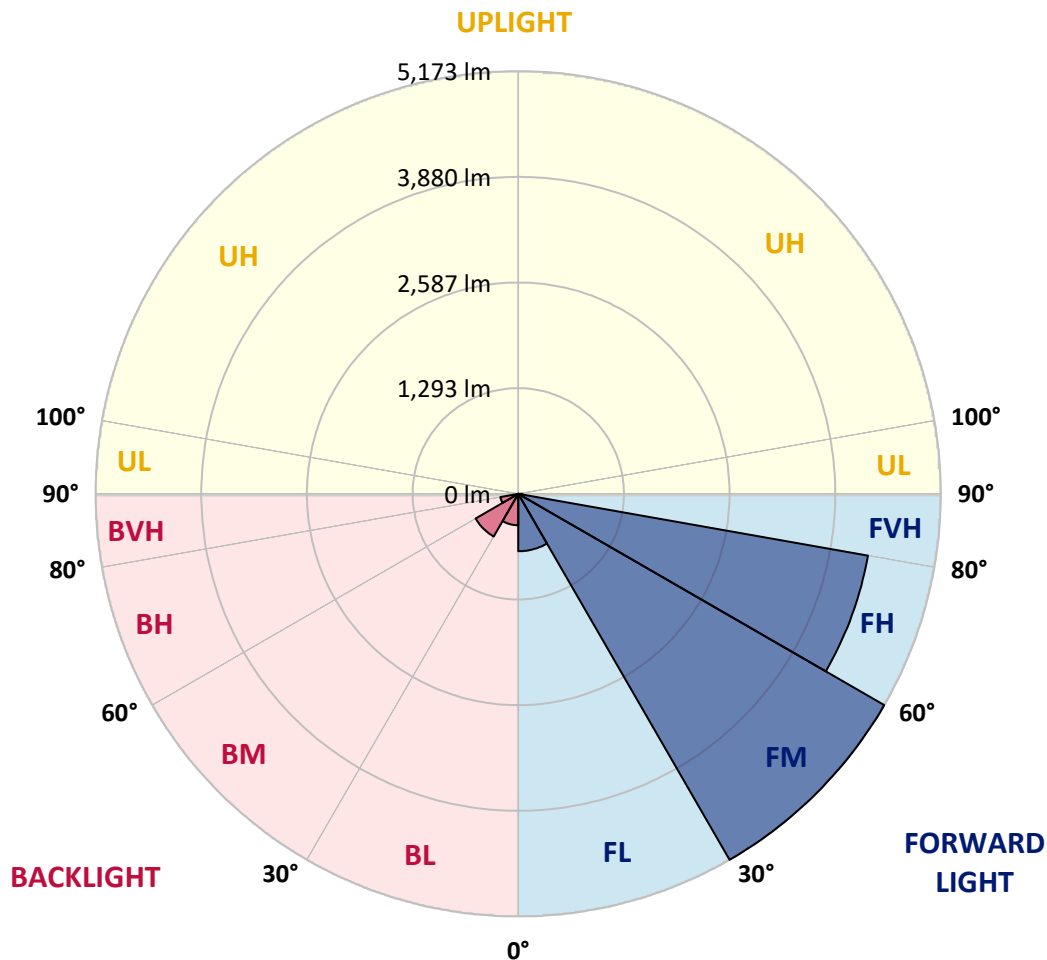


REPORT NUMBER: P963520  
 CATALOG NUMBER: NAV-SB3A-735-U-T3R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	703.2	6.1			
FM (30°-60°)	5173.4	45.0			
FH (60°-80°)	4347.3	37.9			G2/5000
FVH (80°-90°)	50.6	0.4			G1/100
BL (0°-30°)	384.7	3.3	B1/500		
BM (30°-60°)	602.7	5.2	B1/1000		
BH (60°-80°)	221.9	1.9	B1/500		G1/500
BVH (80°-90°)	1.4	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



REPORT NUMBER: P963520  
 CATALOG NUMBER: NAV-SB3A-735-U-T3R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5
2.5°	1681.9	1697.2	1695.0	1705.2	1708.8	1723.3	1737.8	1757.4	1779.1	1778.4	1792.9
5°	1586.9	1602.2	1605.8	1619.6	1637.0	1659.5	1689.2	1728.4	1768.9	1775.5	1804.5
7.5°	1474.6	1490.5	1499.9	1527.5	1559.3	1605.8	1654.4	1711.6	1779.1	1788.5	1844.4
10°	1362.1	1376.6	1389.0	1428.1	1478.9	1547.7	1626.9	1709.5	1800.2	1813.9	1893.0
12.5°	1292.4	1306.3	1320.0	1354.1	1417.3	1501.3	1608.7	1719.6	1835.0	1854.5	1959.0
15°	1267.8	1280.1	1291.0	1321.5	1380.3	1476.0	1605.0	1740.7	1879.2	1905.4	2038.8
17.5°	1271.4	1278.0	1285.2	1308.4	1365.7	1464.3	1611.6	1776.9	1931.4	1954.7	2118.6
20°	1292.4	1296.1	1296.8	1312.8	1363.6	1462.9	1624.6	1811.8	1980.8	2012.0	2197.6
22.5°	1319.3	1320.7	1319.3	1330.1	1377.3	1473.7	1642.0	1853.8	2035.9	2064.9	2277.4
25°	1444.7	1417.3	1382.4	1361.4	1400.6	1494.9	1668.2	1910.4	2096.1	2124.4	2355.0
27.5°	1834.2	1755.2	1630.5	1490.5	1448.4	1525.3	1704.5	1967.7	2157.0	2182.4	2438.5
30°	2466.8	2363.0	2151.2	1835.7	1602.2	1589.2	1751.6	2025.0	2221.6	2249.2	2527.6
32.5°	3100.6	3075.2	2830.8	2394.2	1948.1	1731.2	1829.9	2102.6	2307.2	2328.9	2648.1
35°	3741.8	3690.3	3490.1	3058.6	2481.2	2020.7	1960.4	2204.2	2419.6	2444.2	2823.6
37.5°	4232.8	4201.6	4077.6	3722.2	3113.6	2467.5	2183.9	2361.6	2582.8	2610.4	3048.5
40°	4666.5	4652.1	4609.9	4375.7	3820.8	3052.0	2531.2	2605.2	2809.0	2841.7	3324.0
42.5°	5007.4	5041.5	5065.4	5000.2	4549.8	3719.3	2998.3	2947.6	3124.6	3157.9	3675.0
45°	5356.2	5367.9	5464.4	5558.7	5273.6	4417.0	3524.9	3348.7	3517.0	3558.3	4095.7
47.5°	5580.4	5626.8	5796.6	5962.6	5882.2	5109.0	4090.7	3822.3	3971.7	4049.3	4567.2
50°	5597.1	5684.9	5918.3	6207.8	6325.3	5767.6	4705.7	4361.9	4520.8	4606.3	5070.5
52.5°	5319.3	5455.7	5817.6	6241.1	6564.6	6325.3	5341.8	4901.5	5105.3	5217.0	5592.7
55°	4078.3	4256.7	5438.2	6059.8	6574.0	6748.1	5961.2	5463.7	5756.6	5882.9	6157.0
57.5°	3553.2	3643.2	4275.6	5745.0	6399.3	6918.5	6521.2	5998.9	6465.3	6621.9	6690.1
60°	2956.3	3074.5	3585.9	5230.1	6162.1	6935.3	7015.7	6689.4	7233.3	7409.6	7178.9
62.5°	2009.1	2137.4	2645.8	4345.2	5837.9	6927.3	7421.2	7400.2	8087.0	8276.3	7593.1
65°	1244.6	1325.1	1660.2	3548.1	5384.5	6936.0	7845.5	8263.2	8987.8	9180.0	7913.6
67.5°	983.5	1020.5	1195.3	2724.2	4603.5	6740.1	8269.1	9074.8	9835.7	9988.0	8011.6
70°	660.7	683.3	869.6	1826.2	3424.8	5836.5	8261.1	9482.5	10272.3	10348.5	7654.7
72.5°	348.1	365.5	508.4	845.7	2068.6	4148.7	6963.5	8995.1	9837.8	9723.3	6542.9
75°	174.0	203.1	342.3	429.4	883.4	2313.7	4324.2	7091.9	7743.3	7299.3	4198.0
77.5°	132.0	159.6	282.9	282.9	307.5	779.0	1831.4	3867.9	3567.7	2970.8	1232.3
80°	84.2	108.8	247.3	213.9	128.3	198.0	477.2	1083.6	757.9	576.6	224.1
82.5°	49.3	71.0	206.0	141.4	71.9	73.3	134.9	230.6	196.6	153.0	68.9
85°	19.6	46.4	141.4	55.9	28.3	18.1	40.6	49.3	40.6	30.4	17.4
87.5°	0.0	10.9	24.7	0.0	2.2	1.4	2.9	3.6	3.6	2.9	5.8
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: P963520  
 CATALOG NUMBER: NAV-SB3A-735-U-T3R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5
2.5°	1799.5	1800.9	1805.2	1805.9	1795.8	1782.8	1777.7	1775.5	1766.8	1766.1	1767.5
5°	1821.2	1827.8	1821.2	1802.4	1757.4	1694.3	1646.5	1607.2	1571.7	1560.9	1554.3
7.5°	1864.7	1871.2	1851.7	1777.7	1664.5	1539.0	1425.9	1346.1	1274.4	1247.5	1236.7
10°	1927.1	1935.8	1874.1	1724.8	1524.6	1323.0	1131.5	996.5	891.3	848.6	830.5
12.5°	2005.4	2009.1	1886.5	1644.2	1342.5	1054.6	783.3	639.0	545.4	510.7	499.7
15°	2091.7	2086.7	1887.9	1534.7	1094.5	745.6	511.4	419.9	382.2	370.6	370.6
17.5°	2182.4	2161.4	1858.9	1376.6	822.5	509.8	379.4	357.5	351.1	348.1	347.4
20°	2271.6	2224.5	1805.9	1169.9	590.4	380.8	344.5	337.9	334.4	332.9	331.5
22.5°	2352.9	2272.3	1715.3	929.8	428.7	336.5	325.6	319.9	313.3	310.5	309.7
25°	2431.9	2299.9	1587.6	705.7	343.1	314.8	306.1	295.2	286.5	282.9	281.4
27.5°	2508.8	2317.3	1428.1	522.2	306.1	294.5	278.5	263.3	256.8	255.3	253.9
30°	2590.8	2323.2	1246.8	389.5	283.6	269.1	245.9	228.5	224.9	225.6	225.6
32.5°	2690.8	2331.8	1064.1	319.1	264.8	238.6	211.0	192.9	190.0	192.9	192.2
35°	2810.5	2349.2	887.8	293.8	248.0	207.5	177.7	162.5	159.6	161.7	161.0
37.5°	2973.0	2377.5	723.1	288.6	234.3	181.3	149.4	137.0	137.0	137.8	137.0
40°	3189.1	2452.9	575.8	285.1	227.0	161.7	126.2	121.2	123.3	124.7	124.7
42.5°	3452.4	2613.2	476.5	280.6	219.0	153.0	114.6	112.4	116.0	117.5	117.5
45°	3747.6	2816.3	441.7	273.5	211.8	158.9	109.5	106.6	111.0	111.7	112.4
47.5°	4053.0	3015.0	437.4	265.5	204.5	167.6	108.0	101.6	106.6	107.3	108.0
50°	4361.9	3144.9	441.7	253.2	192.9	167.6	108.8	96.5	100.9	103.0	103.7
52.5°	4673.1	3204.4	438.8	226.3	172.6	157.3	108.8	92.1	96.5	97.9	97.9
55°	4974.7	3192.8	394.5	186.4	146.5	139.3	105.9	88.5	91.4	92.1	92.1
57.5°	5213.4	3031.0	312.6	145.0	118.9	116.0	96.5	84.2	86.3	85.6	85.6
60°	5338.2	2675.6	223.3	111.7	93.6	91.4	84.9	78.3	79.7	76.2	75.4
62.5°	5339.6	2205.6	149.4	88.5	74.7	72.6	72.6	70.3	68.9	61.6	59.4
65°	5225.8	1684.2	99.3	70.3	60.2	56.6	60.9	60.2	55.1	45.0	43.6
67.5°	4967.6	1103.9	75.4	55.1	46.4	44.3	48.6	50.7	47.2	37.7	37.0
70°	4436.6	642.6	62.4	42.7	34.8	32.6	39.2	43.6	39.2	30.4	29.0
72.5°	3685.2	346.7	50.7	31.9	24.0	21.7	31.2	35.6	31.2	22.4	21.7
75°	2391.3	185.6	39.2	21.0	12.3	13.7	23.2	26.1	21.7	14.6	13.0
77.5°	802.9	82.0	24.7	10.1	5.8	5.8	13.7	16.0	10.1	5.1	4.3
80°	179.2	34.1	10.1	4.3	2.2	2.2	2.9	2.9	1.4	0.0	0.0
82.5°	58.7	13.7	4.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	22.4	5.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.7	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)