

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: P882971

Luminaire Tested: **NAV-SB3A-830-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882971
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11636 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

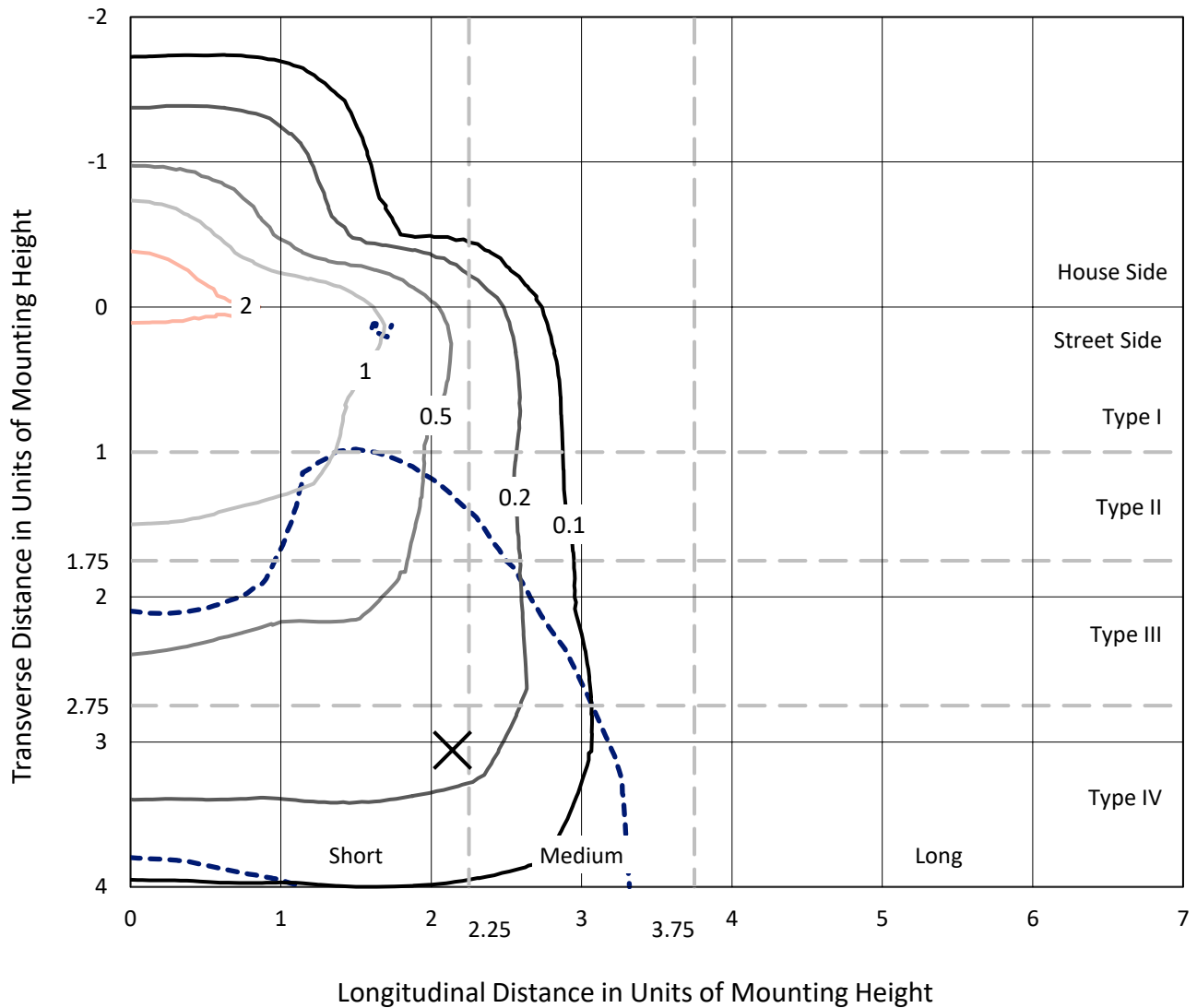
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882971
 CATALOG NUMBER: NAV-SB3A-830-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

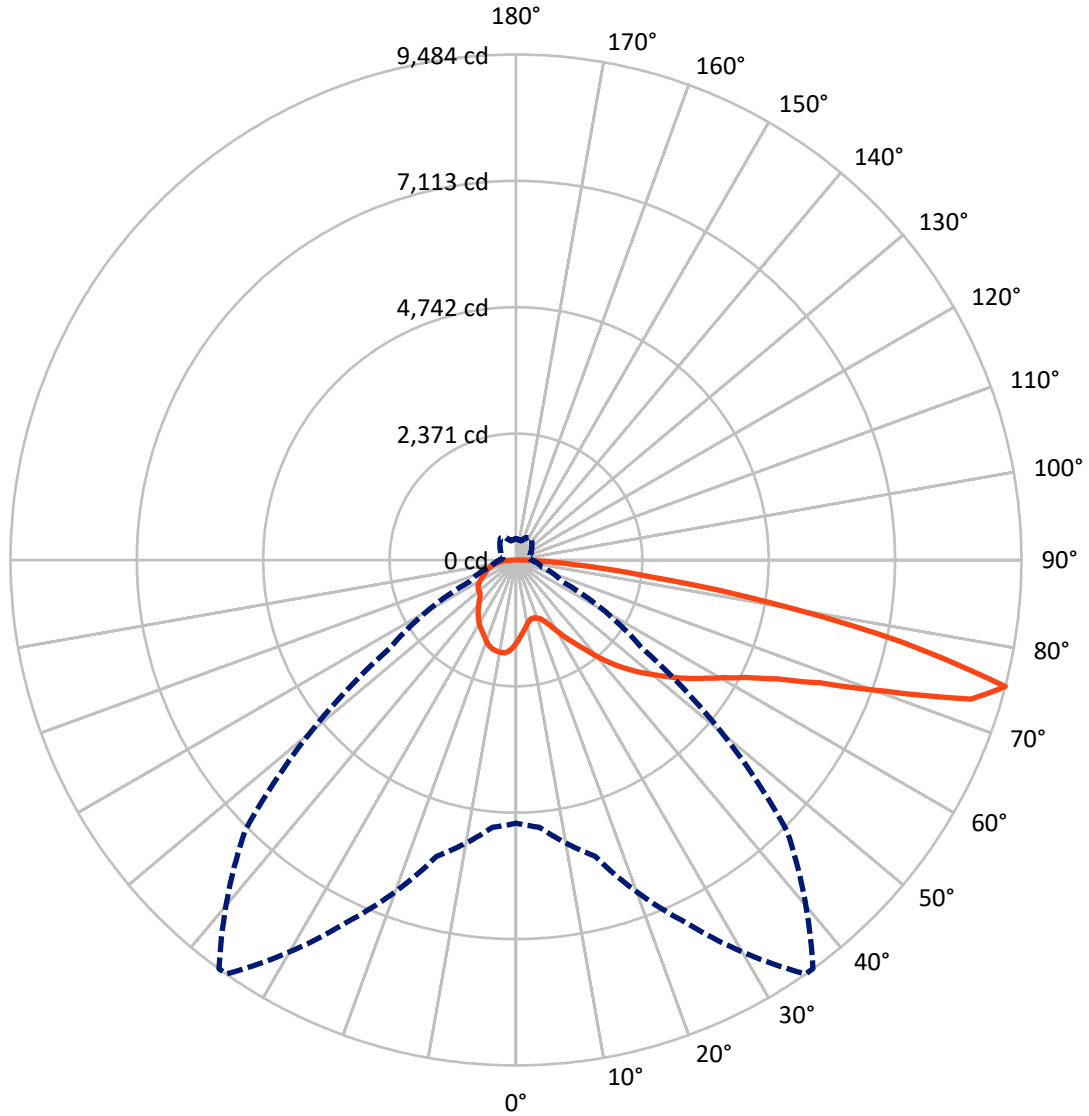
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P882971
CATALOG NUMBER: NAV-SB3A-830-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P882971

CATALOG NUMBER: NAV-SB3A-830-U-T4FT

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2769.1	0.0	2769.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	8866.9	0.0	8866.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	11636.0	0.0	11636.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	1.3
10°-20°	423.5	3.6
20°-30°	711.1	6.1
30°-40°	1105.1	9.5
40°-50°	1640.3	14.1
50°-60°	2264.6	19.5
60°-70°	2747.4	23.6
70°-80°	2270.6	19.5
80°-90°	326.6	2.8
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°	11636.0	100.0
0°-180°	11636.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882971

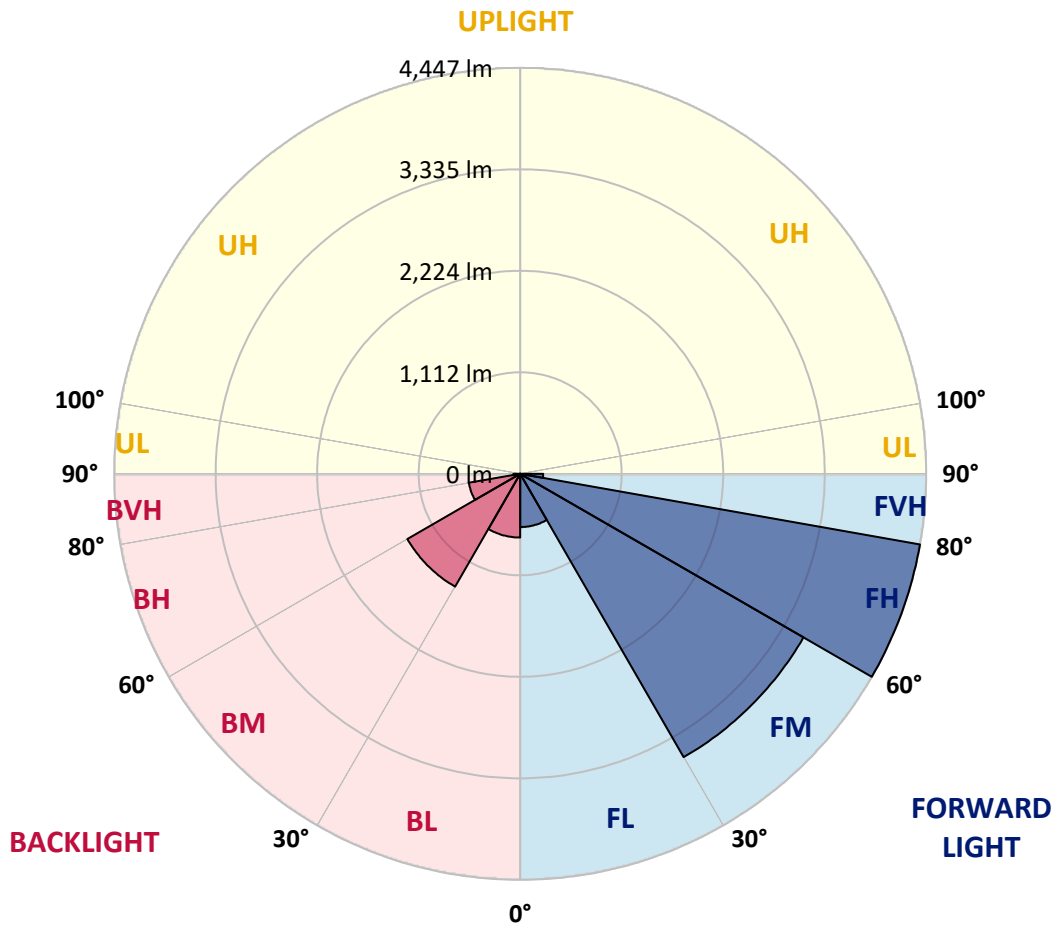
CATALOG NUMBER: NAV-SB3A-830-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	583.5	5.0			
FM (30°-60°)	3583.3	30.8			
FH (60°-80°)	4447.1	38.2			G2/5000
FVH (80°-90°)	253.0	2.2			G3/500
BL (0°-30°)	697.8	6.0	B2/1000		
BM (30°-60°)	1426.8	12.3	B2/2500		
BH (60°-80°)	570.9	4.9	B2/1000		G2/1000
BVH (80°-90°)	73.5	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



REPORT NUMBER: P882971
 CATALOG NUMBER: NAV-SB3A-830-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6
2.5°	1429.8	1438.6	1442.4	1440.5	1449.9	1448.7	1461.9	1478.2	1500.9	1522.9	1555.0
5°	1319.7	1329.2	1337.3	1344.9	1363.1	1368.8	1389.5	1421.0	1462.5	1504.7	1557.5
7.5°	1217.2	1225.4	1237.9	1251.8	1282.6	1288.3	1322.9	1371.9	1429.8	1491.4	1564.4
10°	1133.5	1141.7	1154.9	1170.6	1209.0	1215.9	1260.0	1325.4	1400.9	1478.9	1572.0
12.5°	1097.7	1100.2	1107.7	1123.5	1156.8	1161.2	1209.6	1284.5	1372.6	1469.4	1583.3
15°	1095.8	1100.8	1101.4	1109.6	1137.3	1139.2	1183.8	1258.1	1354.9	1467.5	1600.3
17.5°	1114.7	1118.4	1112.8	1117.8	1141.1	1144.2	1179.4	1245.5	1349.3	1475.7	1629.2
20°	1165.0	1168.1	1151.1	1144.2	1161.2	1163.7	1198.3	1253.7	1354.9	1492.7	1668.8
22.5°	1271.9	1273.8	1232.3	1204.0	1205.2	1206.5	1236.7	1287.0	1377.0	1523.5	1719.2
25°	1438.6	1437.3	1371.3	1316.6	1285.1	1278.2	1298.3	1341.1	1414.1	1564.4	1783.9
27.5°	1633.6	1624.2	1558.1	1476.3	1407.8	1397.7	1393.3	1411.6	1466.9	1618.5	1863.2
30°	1853.8	1845.0	1773.9	1666.9	1572.0	1555.6	1514.1	1504.7	1545.5	1692.1	1973.3
32.5°	2095.3	2089.7	2004.7	1875.2	1748.1	1729.2	1659.4	1634.2	1666.3	1803.4	2126.8
35°	2297.9	2292.8	2222.4	2089.0	1933.7	1910.4	1839.3	1811.0	1827.4	1946.2	2327.4
37.5°	2480.9	2478.4	2418.0	2313.0	2152.6	2124.3	2044.4	2034.9	2031.8	2134.3	2570.9
40°	2650.8	2644.5	2581.6	2526.2	2407.3	2381.5	2311.1	2302.9	2279.0	2365.8	2846.4
42.5°	2838.8	2822.5	2731.3	2705.5	2673.4	2652.0	2609.9	2611.1	2558.3	2626.9	3138.3
45°	2992.3	2982.9	2889.2	2874.1	2908.7	2899.9	2936.3	2945.8	2843.2	2900.5	3441.5
47.5°	3157.1	3148.3	3069.1	3058.4	3152.1	3154.6	3283.6	3286.7	3121.3	3184.8	3745.3
50°	3360.3	3347.7	3269.1	3282.3	3387.4	3396.8	3632.7	3611.3	3377.3	3473.5	4046.6
52.5°	3494.3	3501.8	3484.9	3506.3	3649.7	3658.5	3976.1	3921.4	3630.8	3758.5	4342.2
55°	3593.1	3608.2	3661.0	3710.1	3926.4	3935.3	4300.1	4216.4	3840.9	4022.7	4620.3
57.5°	3720.1	3698.7	3797.5	3893.1	4189.4	4212.7	4615.2	4500.8	4027.1	4250.4	4810.9
60°	3902.5	3887.4	3964.2	4105.7	4483.8	4520.9	4948.6	4756.8	4163.6	4430.9	4848.0
62.5°	4272.4	4234.7	4246.6	4371.8	4854.9	4904.0	5324.8	4980.1	4231.5	4501.4	4649.2
65°	4825.3	4760.6	4700.2	4787.0	5377.6	5426.1	5749.4	5155.6	4206.4	4364.9	4121.4
67.5°	5521.7	5457.5	5383.3	5465.1	6147.6	6185.9	6273.4	5254.3	4008.2	3839.0	3188.6
70°	6096.0	6072.1	6160.8	6497.3	7377.3	7378.6	6945.2	5172.6	3465.4	2721.8	1845.0
72.5°	6019.9	6005.4	6472.8	7513.2	8927.3	8894.0	7581.2	4553.6	2334.4	1227.9	691.3
75°	4938.6	5032.3	5756.3	7495.0	9484.0	9479.6	7191.8	2894.8	965.6	508.9	357.3
77.5°	2648.2	2796.7	3737.1	5533.6	7403.8	7515.1	5056.2	1012.7	414.5	325.8	247.2
80°	863.7	993.2	1489.6	2817.5	4810.9	4790.1	2167.0	397.6	283.7	230.9	171.1
82.5°	366.7	381.8	665.5	1330.4	2469.0	2430.6	690.1	228.3	199.4	157.9	105.7
85°	143.4	160.4	293.8	615.2	1069.4	1046.1	249.1	113.2	127.7	103.2	62.9
87.5°	47.2	57.2	105.0	210.7	332.8	320.8	61.0	39.0	55.4	47.2	22.6
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: P882971
 CATALOG NUMBER: NAV-SB3A-830-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6	1550.6
2.5°	1563.8	1573.9	1585.8	1603.4	1618.5	1631.1	1644.3	1652.5	1655.6	1665.1	1664.4
5°	1575.1	1597.1	1626.7	1655.6	1683.9	1700.9	1716.0	1723.6	1730.5	1735.5	1736.8
7.5°	1594.0	1622.3	1668.8	1706.6	1730.5	1744.3	1754.4	1751.9	1754.4	1755.6	1757.5
10°	1610.3	1650.0	1705.3	1741.2	1759.4	1760.0	1757.5	1748.7	1744.3	1744.9	1746.2
12.5°	1629.8	1673.9	1733.6	1763.8	1768.9	1755.0	1744.3	1729.2	1723.6	1721.0	1719.8
15°	1656.3	1706.6	1764.4	1775.8	1763.2	1745.6	1727.3	1702.8	1690.2	1680.2	1683.3
17.5°	1688.3	1743.7	1788.4	1780.2	1753.1	1724.2	1694.6	1657.5	1631.7	1621.0	1621.7
20°	1733.0	1782.7	1806.6	1770.7	1729.9	1685.8	1635.5	1590.2	1566.3	1555.6	1554.3
22.5°	1787.1	1834.9	1824.2	1754.4	1696.5	1626.1	1563.2	1529.8	1517.9	1510.3	1511.6
25°	1851.9	1892.8	1836.8	1730.5	1641.8	1546.8	1498.4	1487.7	1482.0	1476.3	1476.3
27.5°	1936.2	1958.2	1846.2	1695.3	1556.2	1462.5	1444.9	1446.8	1444.9	1435.5	1437.3
30°	2047.5	2043.1	1855.0	1638.0	1458.1	1386.4	1387.7	1395.8	1397.1	1390.8	1393.9
32.5°	2194.1	2149.4	1859.4	1563.8	1364.4	1319.7	1321.0	1329.8	1336.1	1325.4	1330.4
35°	2371.5	2273.3	1852.5	1470.7	1292.0	1256.2	1246.8	1249.3	1251.2	1241.1	1248.0
37.5°	2578.4	2412.4	1821.7	1367.5	1232.3	1193.9	1173.8	1156.8	1146.7	1137.3	1143.6
40°	2805.5	2564.0	1765.1	1266.9	1165.6	1127.9	1097.7	1065.6	1031.6	1019.0	1024.7
42.5°	3043.3	2720.0	1696.5	1170.6	1088.9	1058.0	1026.0	979.4	928.5	902.7	905.8
45°	3289.9	2879.7	1629.2	1075.7	1010.2	997.0	959.9	903.9	848.6	815.9	813.3
47.5°	3531.4	3030.7	1530.4	980.0	936.6	951.1	922.2	870.6	808.9	757.4	751.7
50°	3762.3	3172.2	1368.8	883.2	876.9	937.3	909.6	835.4	764.9	698.9	693.2
52.5°	3991.2	3286.7	1161.8	795.1	844.8	933.5	893.2	811.5	725.3	656.1	648.5
55°	4185.6	3345.8	962.4	719.6	798.2	901.4	873.7	783.2	669.3	595.7	589.4
57.5°	4296.3	3298.0	796.4	645.4	734.1	848.6	840.4	722.8	602.6	546.0	538.5
60°	4248.5	3104.3	660.5	580.6	673.1	791.3	782.5	663.0	551.7	498.2	490.6
62.5°	3984.9	2735.1	552.9	524.0	617.7	732.8	724.7	617.1	512.7	461.1	452.9
65°	3454.0	2224.9	469.3	476.8	561.7	662.4	674.3	578.7	481.8	431.5	423.3
67.5°	2634.4	1611.6	403.8	435.9	507.0	593.2	627.8	551.0	456.1	408.2	400.7
70°	1501.5	915.2	348.5	396.3	458.6	529.0	591.9	529.0	428.4	388.7	383.7
72.5°	569.3	420.2	301.3	356.7	412.0	474.9	552.3	494.4	396.3	366.7	361.7
75°	303.8	256.0	253.5	310.1	358.6	422.1	502.6	460.5	372.4	387.5	400.1
77.5°	207.0	181.2	212.0	265.5	300.1	363.6	449.8	408.9	322.7	321.4	296.3
80°	143.4	128.3	172.4	213.9	232.1	305.7	392.5	351.0	262.9	245.3	234.6
82.5°	86.2	83.7	129.0	159.8	164.2	235.9	325.2	294.4	215.1	187.5	188.7
85°	47.2	49.7	82.4	93.7	95.6	164.8	254.8	227.7	165.4	139.0	140.3
87.5°	13.2	17.0	30.2	37.1	45.9	85.5	151.6	135.2	83.0	57.9	57.9
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)