

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: P961068

Luminaire Tested: **NAV-SB1D-835-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961068
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-835-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9807.2 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 79.6
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

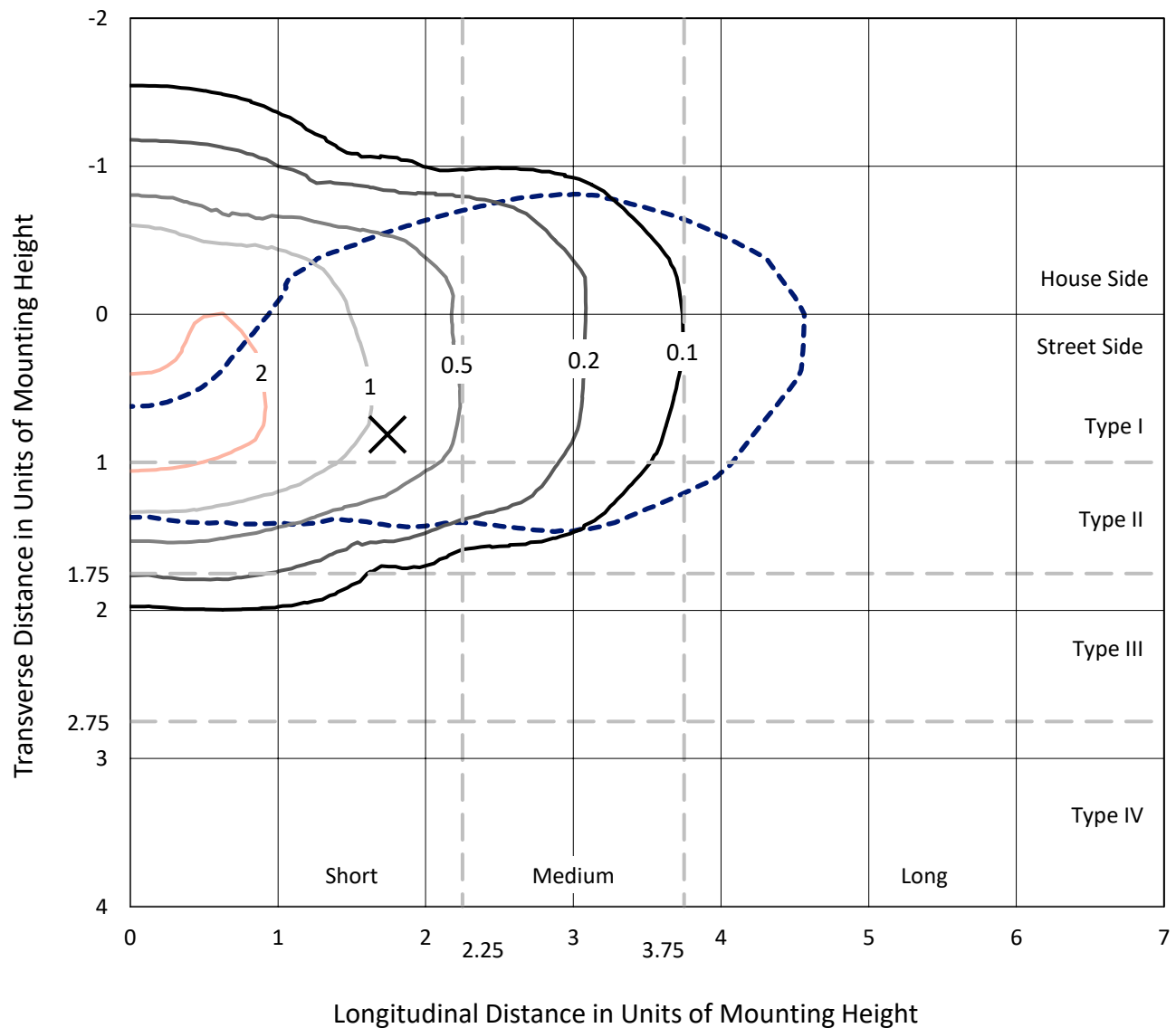


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Iso-Footcandle Lines of Horizontal Illumination

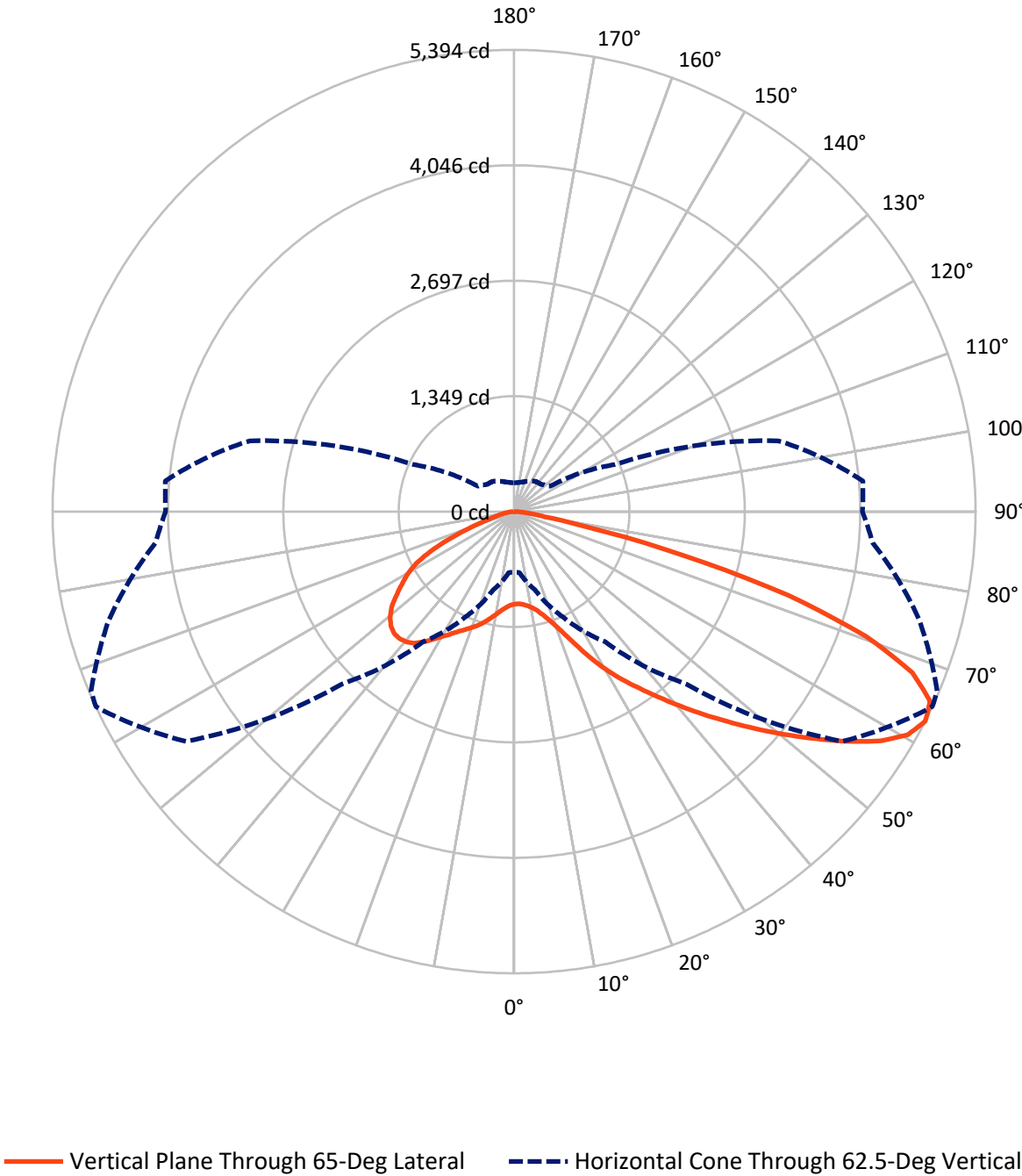
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3094.7	0.0	3094.7
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	6712.5	0.0	6712.5
	% Fixture	68.4	0.0	68.4
Total	Lumens	9807.2	0.0	9807.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.7	1.1
10°-20°	365.4	3.7
20°-30°	740.8	7.6
30°-40°	1282.0	13.1
40°-50°	1940.1	19.8
50°-60°	2274.6	23.2
60°-70°	1907.0	19.4
70°-80°	1052.8	10.7
80°-90°	136.8	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°	9807.2	100.0
0°-180°	9807.2	100.0

Coefficient of Utilization



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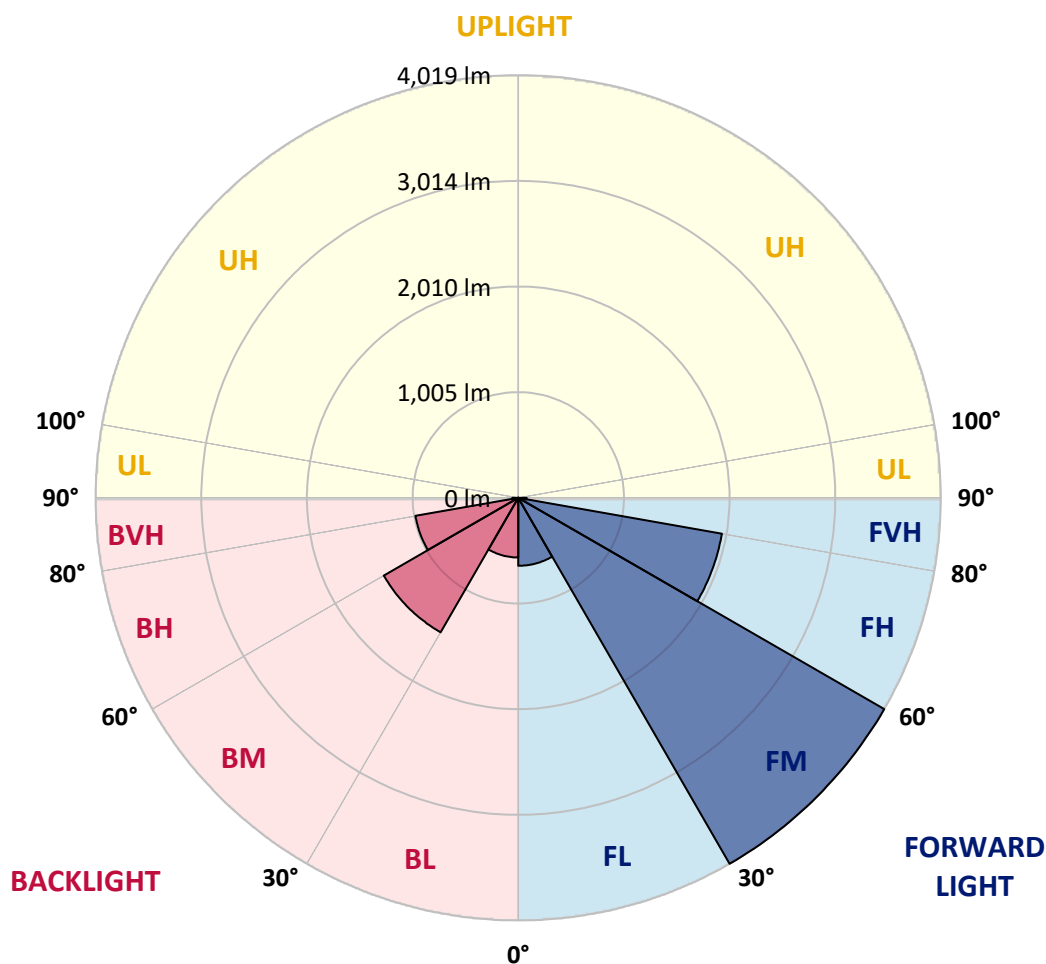
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	646.4	6.6			
FM	(30°-60°)	4019.3	41.0			
FH	(60°-80°)	1967.0	20.1			G2/5000
FVH	(80°-90°)	79.7	0.8			G1/100
BL	(0°-30°)	567.5	5.8	B2/1000		
BM	(30°-60°)	1477.4	15.1	B2/2500		
BH	(60°-80°)	992.8	10.1	B2/1000		G2/1000
BVH	(80°-90°)	57.1	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8
2.5°	1073.6	1070.5	1073.1	1073.1	1074.1	1073.6	1077.2	1078.2	1079.7	1082.7	1082.7
5°	1062.9	1062.4	1066.9	1071.0	1075.1	1078.7	1083.2	1089.9	1090.9	1094.5	1099.0
7.5°	1059.3	1056.3	1063.4	1068.5	1078.2	1086.8	1099.0	1110.2	1114.8	1116.3	1124.9
10°	1086.8	1081.7	1088.3	1091.4	1099.5	1108.2	1122.5	1140.2	1145.3	1151.5	1161.1
12.5°	1133.6	1128.0	1137.6	1142.3	1149.9	1157.5	1167.2	1184.5	1187.1	1198.2	1207.4
15°	1197.7	1191.2	1197.2	1202.8	1215.5	1222.6	1232.4	1249.2	1249.2	1257.8	1264.4
17.5°	1284.7	1276.1	1280.6	1282.7	1290.9	1301.5	1317.8	1332.6	1340.2	1337.1	1328.0
20°	1414.5	1403.8	1403.8	1393.6	1390.6	1399.2	1420.5	1440.9	1449.0	1433.4	1410.9
22.5°	1609.4	1594.1	1585.5	1550.8	1537.1	1538.1	1559.5	1584.4	1591.0	1563.0	1512.7
25°	1857.2	1833.2	1821.5	1770.7	1739.6	1712.7	1729.5	1761.5	1770.7	1736.0	1654.7
27.5°	2104.9	2106.5	2095.3	2034.2	1982.9	1933.5	1924.8	1958.4	1968.1	1928.8	1828.2
30°	2452.4	2416.3	2395.0	2321.7	2248.4	2179.3	2143.6	2157.3	2159.9	2113.0	1996.1
32.5°	2752.1	2743.0	2697.2	2633.1	2538.9	2430.6	2371.0	2349.2	2345.1	2278.5	2139.6
35°	3093.6	3088.4	3040.1	2963.8	2862.0	2711.4	2604.1	2541.5	2536.5	2442.8	2281.5
37.5°	3440.6	3440.6	3393.3	3309.8	3204.5	3016.3	2852.9	2753.7	2737.4	2615.3	2426.0
40°	3717.4	3700.6	3709.3	3674.1	3553.6	3353.6	3129.2	2985.2	2963.3	2816.8	2579.6
42.5°	3874.6	3869.0	3920.9	3960.1	3910.7	3751.0	3433.4	3236.0	3205.5	3038.6	2756.7
45°	3909.7	3903.6	3996.2	4139.7	4208.9	4143.3	3764.2	3500.1	3463.0	3270.7	2946.5
47.5°	3828.8	3816.6	3952.4	4178.8	4400.7	4516.2	4122.3	3786.6	3732.6	3496.6	3141.4
50°	3585.6	3573.9	3779.5	4080.1	4465.3	4769.5	4511.1	4090.4	4007.9	3738.7	3338.3
52.5°	3057.0	3062.5	3384.6	3797.7	4380.3	4927.3	4845.9	4410.4	4311.2	3986.5	3523.0
55°	2381.2	2393.5	2789.3	3244.1	4040.4	4903.4	5074.4	4740.1	4641.4	4219.5	3713.8
57.5°	1705.0	1759.0	2129.8	2580.1	3387.6	4524.3	5124.2	5053.5	4957.8	4473.9	3900.5
60°	1105.2	1114.8	1496.4	1950.3	2579.6	3850.6	5023.0	5291.2	5216.3	4733.4	4056.7
62.5°	708.3	714.8	947.4	1364.1	1856.7	2848.8	4682.1	5394.4	5371.5	4904.9	4206.8
65°	520.5	515.5	636.5	901.6	1250.6	1757.0	4020.2	5344.6	5389.9	5012.2	4331.0
67.5°	434.5	427.4	487.0	624.3	921.5	997.7	2974.5	5020.4	5186.3	5000.1	4422.1
70°	395.9	389.7	425.9	463.5	718.9	668.1	1499.5	4364.6	4620.0	4861.2	4407.3
72.5°	335.3	324.6	374.0	411.6	559.1	512.4	619.7	3352.6	3664.0	4415.9	4199.7
75°	260.0	252.9	295.1	362.2	420.2	400.0	391.8	2035.8	2375.6	3415.1	3674.1
77.5°	206.0	196.4	235.0	282.4	378.0	301.8	285.5	876.7	1213.5	2180.3	2749.0
80°	155.2	146.6	178.6	223.3	290.5	227.4	184.7	357.7	457.5	1104.6	1382.4
82.5°	110.4	102.8	124.6	163.8	195.4	204.1	113.5	200.5	225.4	425.9	308.8
85°	70.7	66.1	83.4	102.8	124.1	131.3	69.2	104.9	115.0	175.6	128.7
87.5°	38.6	31.6	44.8	47.9	57.5	52.4	33.1	38.1	41.2	63.6	54.4
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°	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8
2.5°	1084.8	1086.3	1091.4	1093.0	1096.4	1101.1	1104.1	1107.2	1107.2	1110.2	1110.2
5°	1099.5	1103.1	1113.8	1119.4	1128.5	1137.6	1143.3	1149.9	1153.9	1156.0	1157.0
7.5°	1128.0	1133.6	1148.9	1158.6	1174.3	1187.1	1195.7	1204.9	1206.9	1212.5	1210.4
10°	1166.7	1173.3	1190.6	1208.9	1227.7	1243.5	1251.6	1258.3	1260.9	1261.9	1259.3
12.5°	1210.9	1220.7	1243.0	1265.4	1285.2	1299.0	1301.0	1299.5	1292.4	1286.3	1286.3
15°	1265.4	1274.1	1299.0	1323.4	1342.7	1345.3	1332.6	1324.4	1315.8	1314.3	1314.3
17.5°	1330.6	1335.2	1358.0	1381.9	1383.4	1374.8	1356.0	1348.4	1340.2	1334.7	1335.2
20°	1406.3	1404.9	1421.1	1431.3	1420.5	1394.1	1365.6	1352.9	1344.8	1338.1	1338.6
22.5°	1496.9	1485.2	1483.2	1480.6	1452.1	1396.7	1358.0	1341.7	1329.0	1319.9	1322.9
25°	1628.7	1583.9	1552.9	1535.6	1471.5	1382.9	1333.6	1297.4	1273.6	1257.8	1263.9
27.5°	1793.5	1718.2	1639.9	1597.7	1471.5	1354.9	1274.6	1216.1	1176.9	1160.6	1168.7
30°	1950.8	1872.0	1756.4	1672.5	1467.9	1309.1	1179.5	1098.0	1052.3	1036.0	1045.6
32.5°	2085.1	1999.2	1880.1	1754.4	1459.3	1234.9	1061.4	971.3	927.0	907.7	917.4
35°	2209.8	2118.2	2004.2	1844.4	1436.3	1126.0	931.6	862.9	813.5	782.6	792.7
37.5°	2337.5	2228.6	2121.8	1925.9	1395.1	998.8	831.9	773.4	715.3	673.6	684.9
40°	2476.4	2346.1	2247.4	1974.2	1327.5	877.7	754.6	701.1	639.6	595.3	603.9
42.5°	2638.7	2487.1	2387.3	1999.2	1234.9	791.7	704.2	651.8	593.8	557.7	564.8
45°	2808.1	2642.2	2515.0	1998.6	1131.6	751.5	687.9	636.0	571.9	534.2	540.4
47.5°	2985.7	2804.6	2625.4	1966.1	1042.0	757.1	678.8	601.9	531.2	494.6	499.7
50°	3163.8	2982.1	2732.3	1905.0	1003.9	744.9	644.6	554.1	470.7	437.6	439.6
52.5°	3340.4	3170.9	2824.4	1817.9	965.2	699.6	600.9	492.0	445.7	422.8	422.8
55°	3517.9	3357.6	2924.6	1691.2	868.6	646.7	527.7	468.6	425.9	405.0	402.9
57.5°	3695.9	3573.4	3019.8	1564.6	746.9	581.6	487.5	440.1	406.0	388.3	385.2
60°	3881.2	3820.2	3117.9	1448.1	626.9	498.2	458.0	417.2	382.6	362.7	361.2
62.5°	4072.0	4091.8	3194.8	1298.0	516.4	447.2	431.4	389.7	356.2	337.3	336.8
65°	4264.3	4353.9	3245.1	1089.9	418.7	398.9	402.9	359.8	325.6	309.3	308.8
67.5°	4409.3	4542.7	3230.9	824.8	343.5	353.1	367.4	328.2	296.1	283.4	283.9
70°	4425.6	4520.2	3090.5	564.8	287.5	308.3	327.7	297.1	264.0	254.9	255.4
72.5°	4208.9	4215.0	2699.2	368.9	243.2	270.7	286.0	265.6	233.5	224.4	223.9
75°	3640.5	3485.8	1981.8	243.2	203.6	232.6	246.8	232.6	201.5	203.6	196.4
77.5°	2758.3	2468.7	1203.4	173.0	169.9	195.4	214.7	204.6	178.0	200.0	176.1
80°	1421.1	1335.6	536.8	129.3	134.3	156.2	176.6	163.3	140.9	134.3	122.6
82.5°	325.6	378.5	211.7	92.6	97.2	112.4	134.8	122.6	101.3	85.5	84.5
85°	114.0	124.6	93.6	58.0	57.0	70.2	91.6	81.9	68.7	54.9	58.0
87.5°	36.1	47.4	35.2	23.4	24.4	31.6	42.2	38.6	32.1	20.9	21.8
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)