

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: P960827

Luminaire Tested: **NAV-SB1D-727-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960827
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-727-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9565.3 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

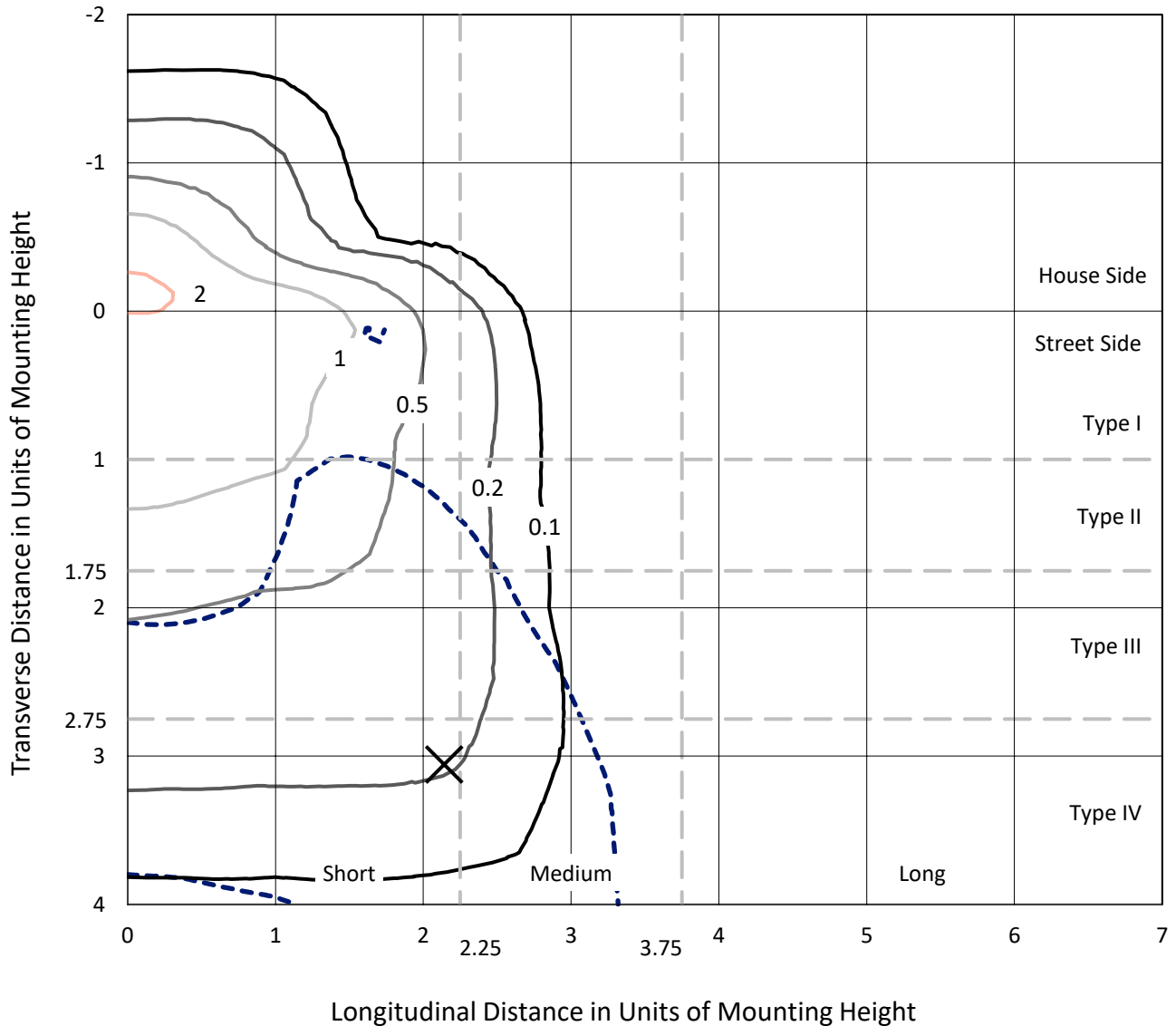
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

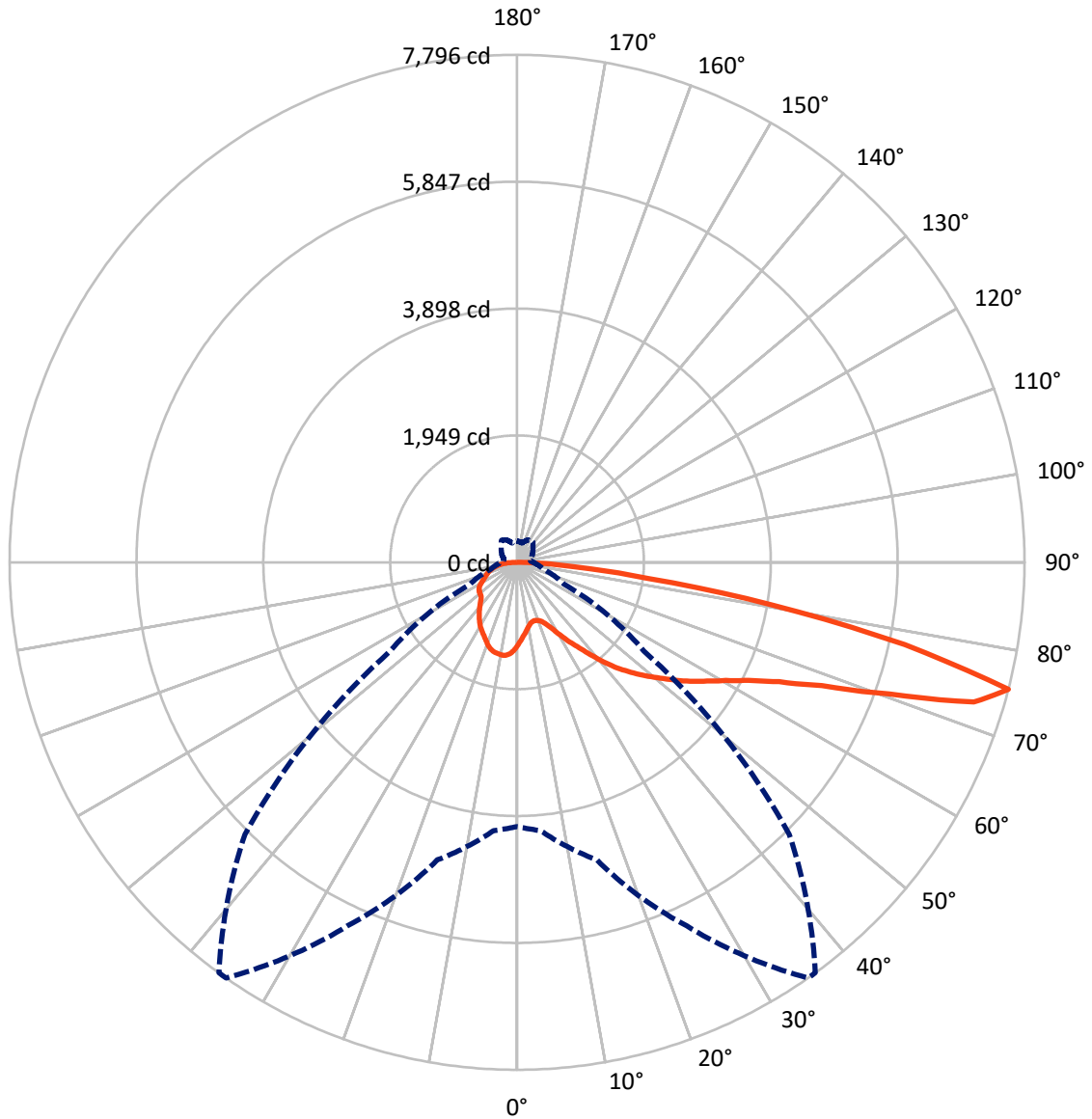
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2276.3	0.0	2276.3
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	7289.0	0.0	7289.0
	% Fixture	76.2	0.0	76.2
Total	Lumens	9565.3	0.0	9565.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	1.3
10°-20°	348.1	3.6
20°-30°	584.6	6.1
30°-40°	908.5	9.5
40°-50°	1348.4	14.1
50°-60°	1861.6	19.5
60°-70°	2258.5	23.6
70°-80°	1866.5	19.5
80°-90°	268.5	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°	9565.3	100.0
0°-180°	9565.3	100.0

Coefficient of Utilization



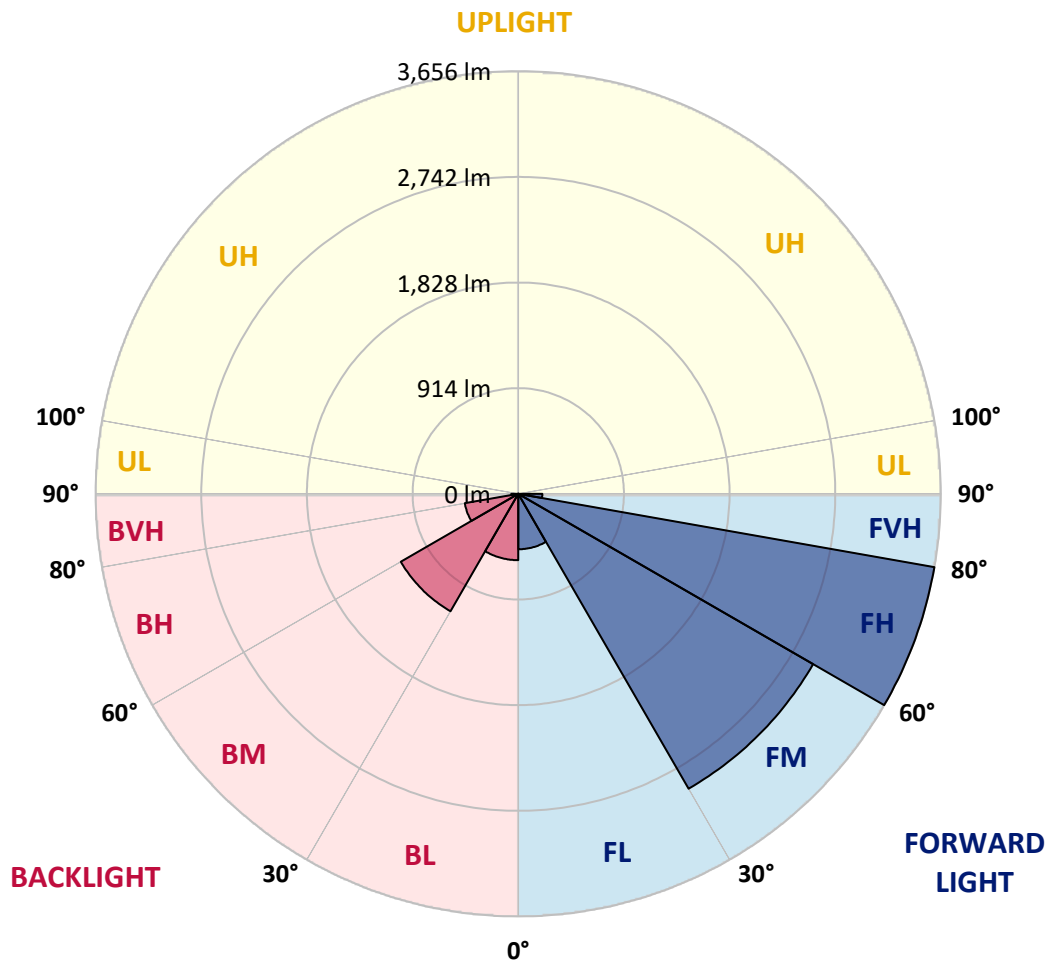
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	479.7	5.0			
FM (30°-60°)	2945.6	30.8			
FH (60°-80°)	3655.7	38.2			G2/5000
FVH (80°-90°)	208.0	2.2			G2/225
BL (0°-30°)	573.7	6.0	B2/1000		
BM (30°-60°)	1172.9	12.3	B2/2500		
BH (60°-80°)	469.3	4.9	B1/500		G1/500
BVH (80°-90°)	60.5	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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7
2.5°	1175.4	1182.6	1185.7	1184.2	1191.9	1190.8	1201.7	1215.1	1233.8	1251.9	1278.3
5°	1084.9	1092.6	1099.3	1105.6	1120.5	1125.2	1142.3	1168.1	1202.2	1236.9	1280.3
7.5°	1000.6	1007.3	1017.6	1029.0	1054.3	1059.0	1087.4	1127.8	1175.4	1226.0	1286.1
10°	931.8	938.5	949.4	962.3	993.8	999.6	1035.8	1089.5	1151.6	1215.6	1292.2
12.5°	902.3	904.4	910.6	923.5	950.9	954.6	994.4	1056.0	1128.3	1208.0	1301.5
15°	900.8	904.9	905.5	912.1	934.9	936.4	973.1	1034.2	1113.9	1206.4	1315.5
17.5°	916.2	919.4	914.7	918.9	938.0	940.6	969.5	1023.9	1109.2	1213.1	1339.3
20°	957.7	960.2	946.3	940.6	954.6	956.6	985.0	1030.5	1113.9	1227.0	1371.9
22.5°	1045.6	1047.1	1013.0	989.7	990.8	991.8	1016.6	1058.0	1131.9	1252.4	1413.3
25°	1182.6	1181.5	1127.3	1082.3	1056.5	1050.7	1067.3	1102.5	1162.5	1286.1	1466.5
27.5°	1342.9	1335.2	1280.8	1213.6	1157.2	1149.0	1145.3	1160.4	1205.9	1330.4	1531.7
30°	1523.9	1516.7	1458.2	1370.3	1292.2	1278.8	1244.7	1236.9	1270.5	1391.0	1622.2
32.5°	1722.4	1717.8	1648.0	1541.5	1437.0	1421.5	1364.1	1343.4	1369.8	1482.6	1748.3
35°	1889.0	1884.8	1826.9	1717.3	1589.6	1570.4	1512.0	1488.7	1502.1	1599.9	1913.3
37.5°	2039.4	2037.4	1987.7	1901.4	1769.5	1746.2	1680.6	1672.8	1670.2	1754.5	2113.3
40°	2179.0	2173.8	2122.2	2076.6	1979.0	1957.7	1899.8	1893.1	1873.4	1944.8	2339.9
42.5°	2333.6	2320.2	2245.3	2224.0	2197.7	2180.1	2145.4	2146.5	2103.0	2159.4	2579.8
45°	2459.8	2452.1	2375.0	2362.6	2391.0	2383.8	2413.8	2421.6	2337.3	2384.4	2829.0
47.5°	2595.3	2588.0	2522.9	2514.1	2591.2	2593.2	2699.2	2701.8	2565.8	2618.1	3078.8
50°	2762.4	2752.0	2687.3	2698.2	2784.5	2792.3	2986.2	2968.6	2776.3	2855.4	3326.4
52.5°	2872.5	2878.7	2864.7	2882.3	3000.2	3007.5	3268.5	3223.6	2984.7	3089.7	3569.6
55°	2953.6	2966.0	3009.5	3049.8	3227.7	3234.9	3534.9	3466.1	3157.4	3306.9	3798.0
57.5°	3058.1	3040.6	3121.7	3200.3	3443.9	3463.0	3793.9	3699.8	3310.4	3494.0	3954.8
60°	3208.0	3195.6	3258.8	3375.1	3685.9	3716.3	4068.0	3910.3	3422.7	3642.4	3985.3
62.5°	3512.2	3481.1	3490.9	3593.9	3990.9	4031.3	4377.3	4093.8	3478.5	3700.4	3821.8
65°	3966.6	3913.3	3863.7	3935.1	4420.6	4460.5	4726.3	4238.1	3457.8	3588.1	3388.0
67.5°	4539.1	4486.3	4425.3	4492.6	5053.6	5085.1	5157.0	4319.3	3295.0	3155.9	2621.1
70°	5011.2	4991.5	5064.4	5341.1	6064.5	6065.5	5709.2	4252.1	2848.7	2237.5	1516.7
72.5°	4948.6	4936.7	5320.9	6176.2	7338.6	7311.2	6232.0	3743.3	1918.9	1009.4	568.3
75°	4059.7	4136.8	4731.9	6161.2	7796.3	7792.7	5912.0	2379.6	793.8	418.3	293.7
77.5°	2177.0	2299.0	3072.0	4548.8	6086.2	6177.8	4156.4	832.5	340.8	267.8	203.3
80°	710.0	816.5	1224.5	2316.1	3954.8	3937.6	1781.3	326.8	233.2	189.7	140.6
82.5°	301.5	313.9	547.0	1093.7	2029.6	1998.0	567.2	187.7	163.9	129.8	86.9
85°	117.9	131.8	241.5	505.7	879.0	860.0	204.8	93.1	105.0	84.8	51.7
87.5°	38.7	47.0	86.3	173.2	273.6	263.7	50.1	32.1	45.5	38.7	18.7
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°	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7	1274.7
2.5°	1285.5	1293.8	1303.6	1318.0	1330.4	1340.8	1351.7	1358.4	1361.0	1368.8	1368.3
5°	1294.8	1312.9	1337.2	1361.0	1384.3	1398.2	1410.6	1416.9	1422.5	1426.7	1427.7
7.5°	1310.4	1333.6	1371.9	1402.9	1422.5	1433.9	1442.2	1440.1	1442.2	1443.2	1444.7
10°	1323.8	1356.4	1401.9	1431.3	1446.3	1446.8	1444.7	1437.6	1433.9	1434.4	1435.4
12.5°	1339.8	1376.0	1425.2	1450.0	1454.1	1442.7	1433.9	1421.5	1416.9	1414.8	1413.8
15°	1361.5	1402.9	1450.5	1459.8	1449.5	1434.9	1419.9	1399.7	1389.4	1381.2	1383.7
17.5°	1387.8	1433.4	1470.1	1463.4	1441.1	1417.4	1393.1	1362.5	1341.3	1332.6	1333.1
20°	1424.6	1465.4	1485.1	1455.6	1422.0	1385.8	1344.5	1307.2	1287.6	1278.8	1277.8
22.5°	1469.0	1508.4	1499.6	1442.2	1394.6	1336.7	1284.9	1257.6	1247.7	1241.6	1242.6
25°	1522.3	1555.9	1509.9	1422.5	1349.6	1271.5	1231.7	1222.9	1218.3	1213.6	1213.6
27.5°	1591.6	1609.8	1517.7	1393.6	1279.3	1202.2	1187.8	1189.3	1187.8	1180.0	1181.5
30°	1683.2	1679.6	1524.9	1346.5	1198.6	1139.7	1140.7	1147.4	1148.5	1143.3	1145.8
32.5°	1803.6	1766.9	1528.6	1285.5	1121.6	1084.9	1085.9	1093.2	1098.3	1089.5	1093.7
35°	1949.4	1868.8	1522.8	1209.0	1062.1	1032.7	1024.9	1026.9	1028.5	1020.2	1025.9
37.5°	2119.6	1983.1	1497.5	1124.1	1013.0	981.4	964.9	950.9	942.7	934.9	940.1
40°	2306.2	2107.7	1451.0	1041.4	958.2	927.1	902.3	876.0	848.1	837.7	842.3
42.5°	2501.7	2235.9	1394.6	962.3	895.1	869.7	843.4	805.1	763.2	742.0	744.7
45°	2704.4	2367.2	1339.3	884.3	830.5	819.6	789.0	743.0	697.5	670.7	668.6
47.5°	2903.0	2491.4	1258.1	805.6	770.0	781.9	758.1	715.7	665.0	622.6	618.0
50°	3092.7	2607.7	1125.2	726.0	720.9	770.5	747.7	686.7	628.8	574.5	569.8
52.5°	3280.9	2701.8	955.1	653.6	694.4	767.4	734.3	667.1	596.2	539.4	533.1
55°	3440.7	2750.4	791.2	591.5	656.2	741.0	718.2	643.8	550.2	489.6	484.5
57.5°	3531.7	2711.1	654.7	530.5	603.4	697.5	690.8	594.2	495.4	448.8	442.6
60°	3492.5	2551.8	542.9	477.2	553.3	650.5	643.3	545.0	453.5	409.6	403.3
62.5°	3275.8	2248.3	454.5	430.7	507.8	602.4	595.7	507.3	421.5	379.0	372.3
65°	2839.4	1829.0	385.7	392.0	461.8	544.5	554.3	475.7	396.1	354.8	348.0
67.5°	2165.6	1324.8	332.0	358.3	416.8	487.6	516.1	452.9	374.9	335.6	329.4
70°	1234.3	752.3	286.5	325.7	377.0	434.9	486.6	434.9	352.2	319.6	315.4
72.5°	468.0	345.4	247.6	293.2	338.7	390.4	454.0	406.4	325.7	301.5	297.4
75°	249.8	210.4	208.4	254.9	294.8	347.0	413.2	378.5	306.2	318.6	328.9
77.5°	170.1	148.9	174.2	218.2	246.6	298.9	369.7	336.1	265.3	264.2	243.5
80°	117.9	105.5	141.7	175.8	190.9	251.3	322.7	288.5	216.2	201.6	192.9
82.5°	70.8	68.8	106.0	131.3	135.0	193.9	267.3	242.0	176.8	154.1	155.1
85°	38.7	40.9	67.8	77.1	78.6	135.5	209.4	187.2	136.0	114.3	115.3
87.5°	10.9	13.9	24.8	30.5	37.7	70.3	124.6	111.2	68.3	47.6	47.6
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)