

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: P882131

Luminaire Tested: **NAV-SB1D-835-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882131
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-SB1D-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8493 lumens
Efficiency: N/A
Efficacy: 106.7 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

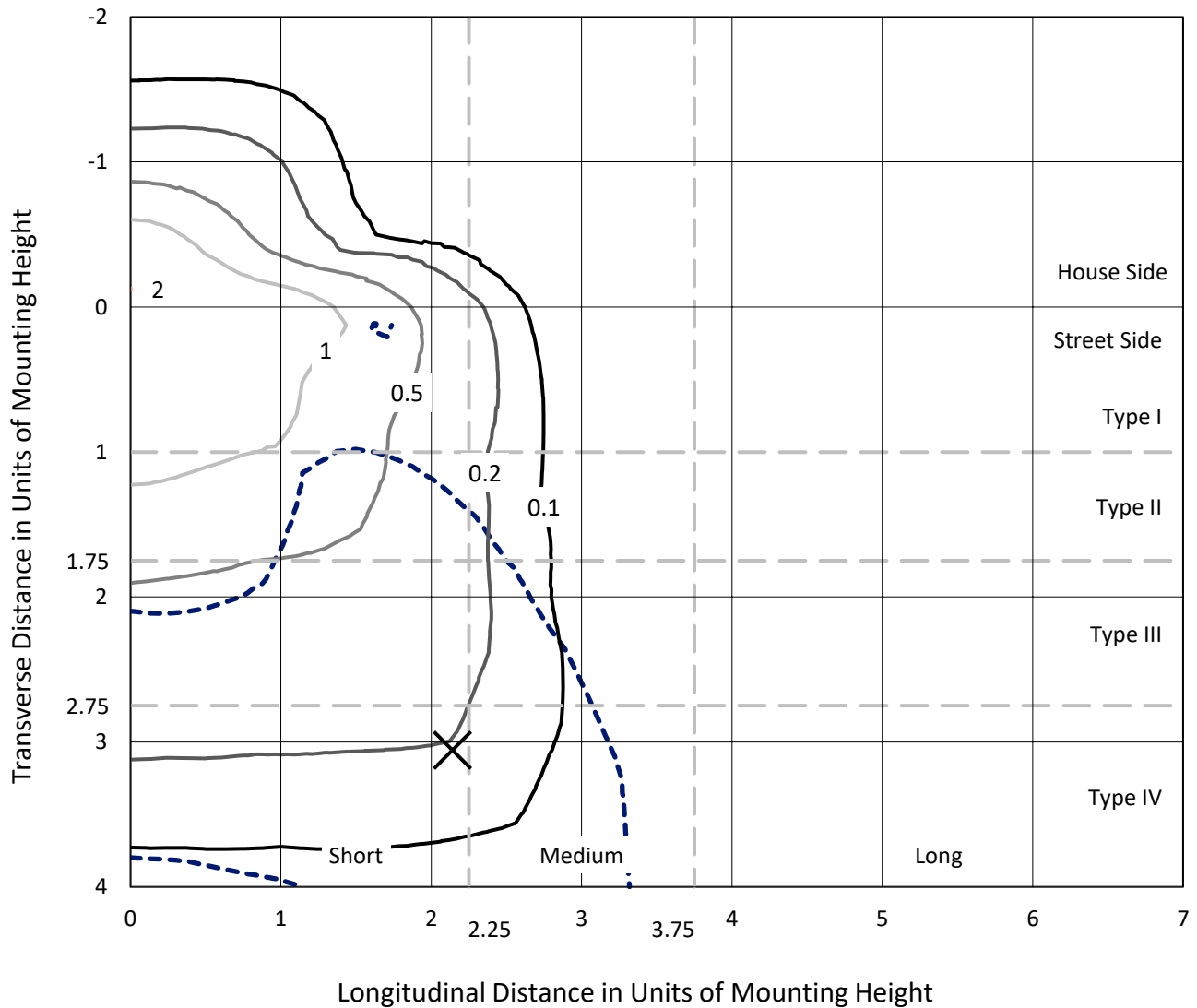
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

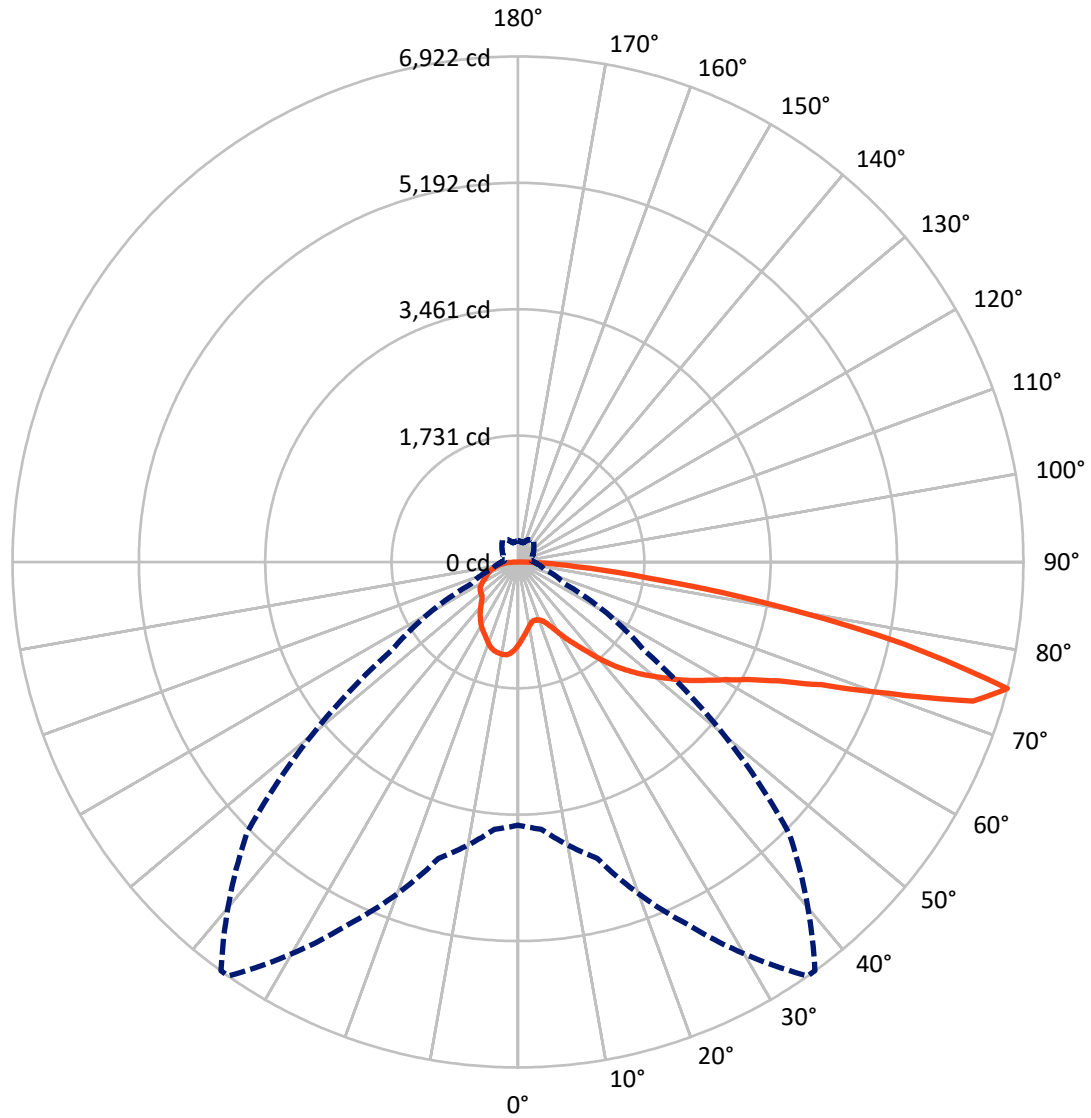
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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	2021.1	0.0	2021.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	6471.9	0.0	6471.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	8493.0	0.0	8493.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	1.3
10°-20°	309.1	3.6
20°-30°	519.0	6.1
30°-40°	806.6	9.5
40°-50°	1197.3	14.1
50°-60°	1652.9	19.5
60°-70°	2005.3	23.6
70°-80°	1657.3	19.5
80°-90°	238.4	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°	8493.0	100.0
0°-180°	8493.0	100.0

Coefficient of Utilization



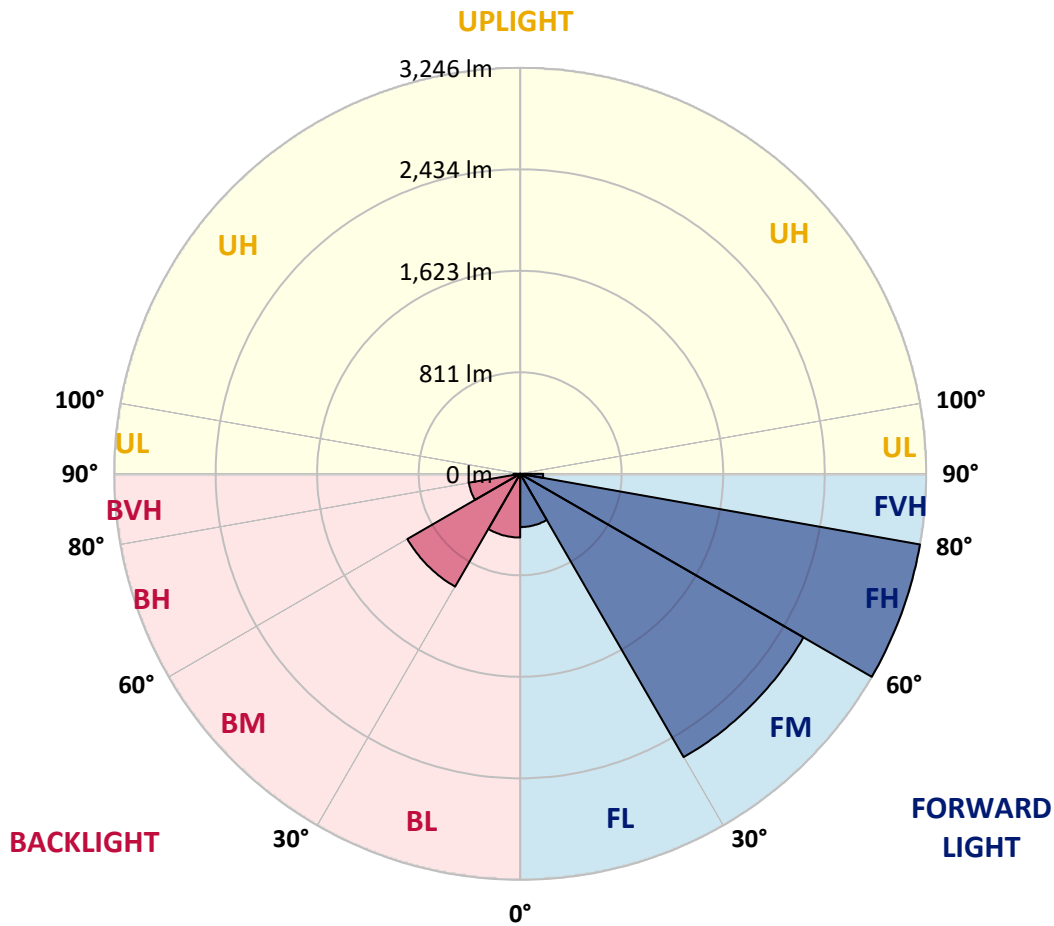
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	425.9	5.0			
FM (30°-60°)	2615.4	30.8			
FH (60°-80°)	3245.9	38.2			G2/5000
FVH (80°-90°)	184.7	2.2			G2/225
BL (0°-30°)	509.4	6.0	B2/1000		
BM (30°-60°)	1041.4	12.3	B2/2500		
BH (60°-80°)	416.7	4.9	B1/500		G1/500
BVH (80°-90°)	53.7	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°	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7
2.5°	1043.6	1050.0	1052.8	1051.4	1058.3	1057.4	1067.0	1079.0	1095.5	1111.5	1135.0
5°	963.2	970.1	976.1	981.6	994.9	999.1	1014.2	1037.2	1067.5	1098.2	1136.8
7.5°	888.4	894.4	903.6	913.7	936.2	940.3	965.5	1001.4	1043.6	1088.6	1141.9
10°	827.3	833.3	843.0	854.4	882.4	887.5	919.6	967.4	1022.5	1079.4	1147.4
12.5°	801.2	803.0	808.5	820.0	844.3	847.5	882.9	937.5	1001.8	1072.5	1155.6
15°	799.8	803.5	803.9	809.9	830.1	831.5	864.1	918.3	989.0	1071.1	1168.0
17.5°	813.6	816.3	812.2	815.9	832.9	835.2	860.9	909.1	984.8	1077.1	1189.1
20°	850.3	852.6	840.2	835.2	847.5	849.4	874.6	915.0	989.0	1089.5	1218.1
22.5°	928.4	929.7	899.4	878.8	879.7	880.6	902.6	939.4	1005.0	1112.0	1254.8
25°	1050.0	1049.1	1000.9	961.0	938.0	932.9	947.6	978.9	1032.1	1141.9	1302.1
27.5°	1192.4	1185.5	1137.3	1077.6	1027.5	1020.2	1017.0	1030.3	1070.7	1181.3	1359.9
30°	1353.0	1346.6	1294.7	1216.7	1147.4	1135.4	1105.1	1098.2	1128.1	1235.1	1440.3
32.5°	1529.4	1525.2	1463.2	1368.7	1275.9	1262.1	1211.2	1192.8	1216.2	1316.3	1552.3
35°	1677.2	1673.5	1622.1	1524.8	1411.4	1394.4	1342.5	1321.8	1333.8	1420.5	1698.8
37.5°	1810.8	1809.0	1764.9	1688.2	1571.1	1550.5	1492.2	1485.3	1483.0	1557.8	1876.5
40°	1934.8	1930.2	1884.3	1843.9	1757.1	1738.3	1686.8	1680.9	1663.4	1726.8	2077.6
42.5°	2072.0	2060.1	1993.5	1974.7	1951.3	1935.7	1904.9	1905.8	1867.3	1917.3	2290.6
45°	2184.1	2177.2	2108.8	2097.8	2123.0	2116.6	2143.2	2150.1	2075.3	2117.0	2511.9
47.5°	2304.4	2297.9	2240.1	2232.3	2300.7	2302.5	2396.6	2398.9	2278.2	2324.6	2733.6
50°	2452.7	2443.5	2386.1	2395.7	2472.4	2479.3	2651.5	2635.9	2465.1	2535.3	2953.6
52.5°	2550.5	2556.0	2543.6	2559.2	2663.9	2670.3	2902.1	2862.2	2650.1	2743.3	3169.4
55°	2622.5	2633.6	2672.1	2707.9	2865.9	2872.3	3138.6	3077.5	2803.4	2936.1	3372.3
57.5°	2715.3	2699.7	2771.8	2841.5	3057.8	3074.8	3368.6	3285.1	2939.3	3102.3	3511.4
60°	2848.4	2837.4	2893.4	2996.7	3272.7	3299.8	3612.0	3471.9	3039.0	3234.1	3538.5
62.5°	3118.4	3090.8	3099.6	3190.9	3543.5	3579.4	3886.5	3634.9	3088.6	3285.5	3393.4
65°	3522.0	3474.7	3430.6	3494.0	3925.1	3960.4	4196.4	3763.0	3070.2	3185.9	3008.2
67.5°	4030.2	3983.4	3929.2	3988.9	4487.1	4515.1	4578.9	3835.1	2925.6	2802.1	2327.3
70°	4449.4	4432.0	4496.7	4742.3	5384.6	5385.6	5069.2	3775.4	2529.3	1986.6	1346.6
72.5°	4393.9	4383.3	4724.4	5483.8	6515.9	6491.6	5533.4	3323.6	1703.8	896.2	504.6
75°	3604.6	3673.0	4201.5	5470.5	6922.3	6919.1	5249.2	2112.9	704.8	371.4	260.8
77.5°	1932.9	2041.3	2727.7	4038.9	5403.9	5485.2	3690.5	739.2	302.6	237.8	180.4
80°	630.4	725.0	1087.2	2056.4	3511.4	3496.3	1581.7	290.2	207.1	168.5	124.9
82.5°	267.7	278.7	485.8	971.1	1802.1	1774.1	503.7	166.7	145.5	115.2	77.1
85°	104.7	117.1	214.4	449.0	780.5	763.5	181.8	82.6	93.2	75.3	45.9
87.5°	34.4	41.8	76.7	153.8	242.9	234.2	44.5	28.5	40.4	34.4	16.5
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°	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7	1131.7
2.5°	1141.4	1148.7	1157.5	1170.3	1181.3	1190.5	1200.2	1206.1	1208.4	1215.3	1214.9
5°	1149.7	1165.7	1187.3	1208.4	1229.1	1241.5	1252.5	1258.0	1263.1	1266.7	1267.7
7.5°	1163.4	1184.1	1218.1	1245.6	1263.1	1273.2	1280.5	1278.7	1280.5	1281.4	1282.8
10°	1175.4	1204.3	1244.7	1270.9	1284.2	1284.6	1282.8	1276.4	1273.2	1273.6	1274.5
12.5°	1189.6	1221.7	1265.4	1287.4	1291.1	1281.0	1273.2	1262.1	1258.0	1256.2	1255.3
15°	1208.9	1245.6	1287.9	1296.1	1286.9	1274.1	1260.8	1242.9	1233.7	1226.3	1228.6
17.5°	1232.3	1272.7	1305.3	1299.3	1279.6	1258.5	1236.9	1209.8	1191.0	1183.2	1183.6
20°	1264.9	1301.2	1318.6	1292.4	1262.6	1230.5	1193.7	1160.7	1143.2	1135.4	1134.5
22.5°	1304.4	1339.3	1331.5	1280.5	1238.3	1186.8	1140.9	1116.6	1107.9	1102.4	1103.3
25°	1351.7	1381.5	1340.7	1263.1	1198.3	1129.0	1093.6	1085.8	1081.7	1077.6	1077.6
27.5°	1413.2	1429.3	1347.5	1237.3	1135.9	1067.5	1054.6	1056.0	1054.6	1047.7	1049.1
30°	1494.5	1491.2	1354.0	1195.6	1064.3	1011.9	1012.8	1018.8	1019.7	1015.1	1017.4
32.5°	1601.4	1568.8	1357.2	1141.4	995.8	963.2	964.2	970.6	975.2	967.4	971.1
35°	1730.9	1659.3	1352.1	1073.4	943.0	916.9	910.0	911.8	913.2	905.9	910.9
37.5°	1882.0	1760.8	1329.6	998.1	899.4	871.4	856.7	844.3	837.0	830.1	834.7
40°	2047.7	1871.4	1288.3	924.7	850.8	823.2	801.2	777.8	753.0	743.8	747.9
42.5°	2221.3	1985.3	1238.3	854.4	794.7	772.3	748.8	714.9	677.7	658.8	661.1
45°	2401.2	2101.9	1189.1	785.1	737.4	727.7	700.6	659.8	619.4	595.5	593.7
47.5°	2577.5	2212.1	1117.1	715.3	683.6	694.2	673.1	635.4	590.4	552.8	548.7
50°	2746.0	2315.4	999.1	644.6	640.0	684.1	663.9	609.7	558.3	510.1	506.0
52.5°	2913.2	2398.9	848.0	580.3	616.6	681.3	652.0	592.3	529.4	478.9	473.4
55°	3055.0	2442.1	702.5	525.2	582.6	657.9	637.7	571.6	488.5	434.8	430.2
57.5°	3135.8	2407.2	581.3	471.1	535.8	619.4	613.4	527.5	439.8	398.5	393.0
60°	3100.9	2265.8	482.1	423.8	491.3	577.6	571.2	483.9	402.7	363.6	358.1
62.5°	2908.6	1996.3	403.6	382.5	450.9	534.9	528.9	450.4	374.2	336.5	330.6
65°	2521.1	1623.9	342.5	348.0	410.0	483.5	492.2	422.4	351.7	315.0	309.0
67.5°	1922.8	1176.3	294.8	318.2	370.1	433.0	458.2	402.2	332.9	298.0	292.5
70°	1095.9	668.0	254.4	289.3	334.7	386.1	432.0	386.1	312.7	283.7	280.1
72.5°	415.5	306.7	219.9	260.3	300.7	346.6	403.1	360.9	289.3	267.7	264.0
75°	221.8	186.9	185.0	226.3	261.7	308.1	366.8	336.1	271.8	282.8	292.0
77.5°	151.1	132.2	154.7	193.8	219.0	265.4	328.3	298.4	235.5	234.6	216.2
80°	104.7	93.7	125.8	156.1	169.4	223.1	286.5	256.2	191.9	179.1	171.3
82.5°	62.9	61.1	94.1	116.6	119.8	172.2	237.4	214.9	157.0	136.8	137.7
85°	34.4	36.3	60.1	68.4	69.8	120.3	185.9	166.2	120.8	101.5	102.4
87.5°	9.6	12.4	22.0	27.1	33.5	62.4	110.6	98.7	60.6	42.2	42.2
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)