

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: P961573

Luminaire Tested: **NAV-SB2A-830-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-830-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8246.1 lumens
Efficiency: N/A
Efficacy: 143.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 57.3
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

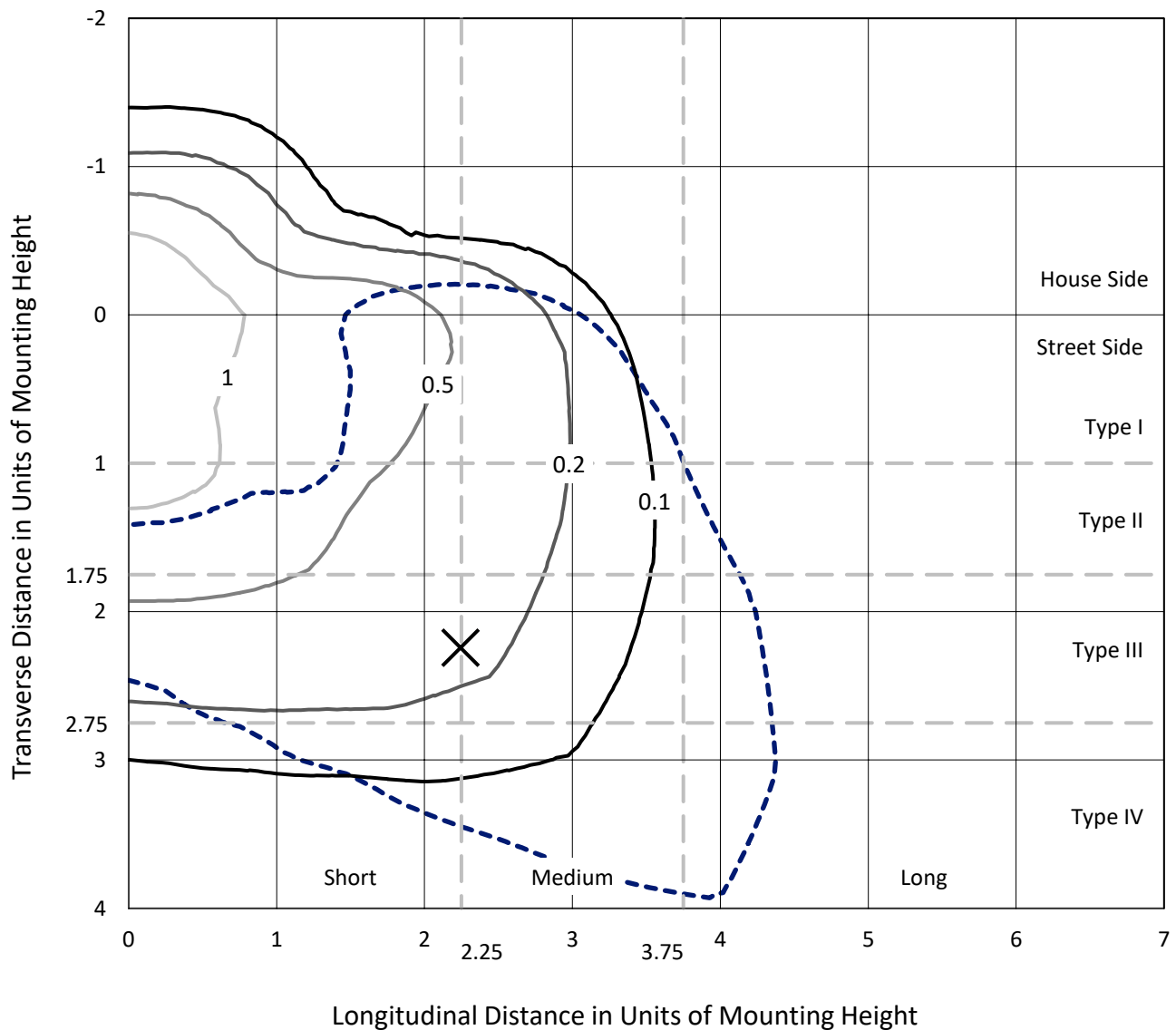


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

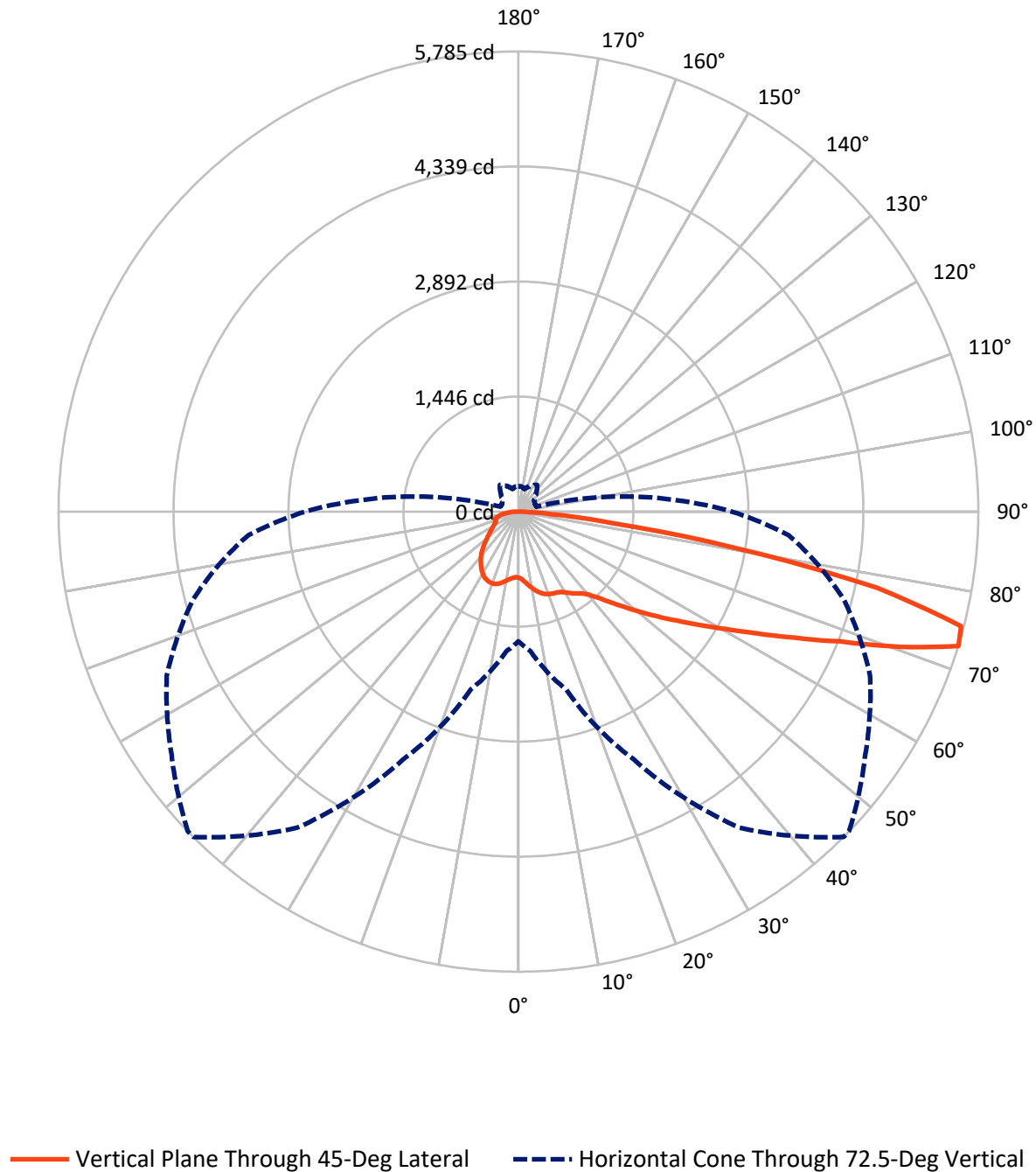


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1864.2	0.0	1864.2
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	6382.0	0.0	6382.0
	% Fixture	77.4	0.0	77.4
Total	Lumens	8246.1	0.0	8246.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.7	1.0
10°-20°	282.3	3.4
20°-30°	491.1	6.0
30°-40°	704.0	8.5
40°-50°	991.2	12.0
50°-60°	1518.3	18.4
60°-70°	2199.5	26.7
70°-80°	1756.4	21.3
80°-90°	218.8	2.7
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°	8246.1	100.0
0°-180°	8246.1	100.0

Coefficient of Utilization



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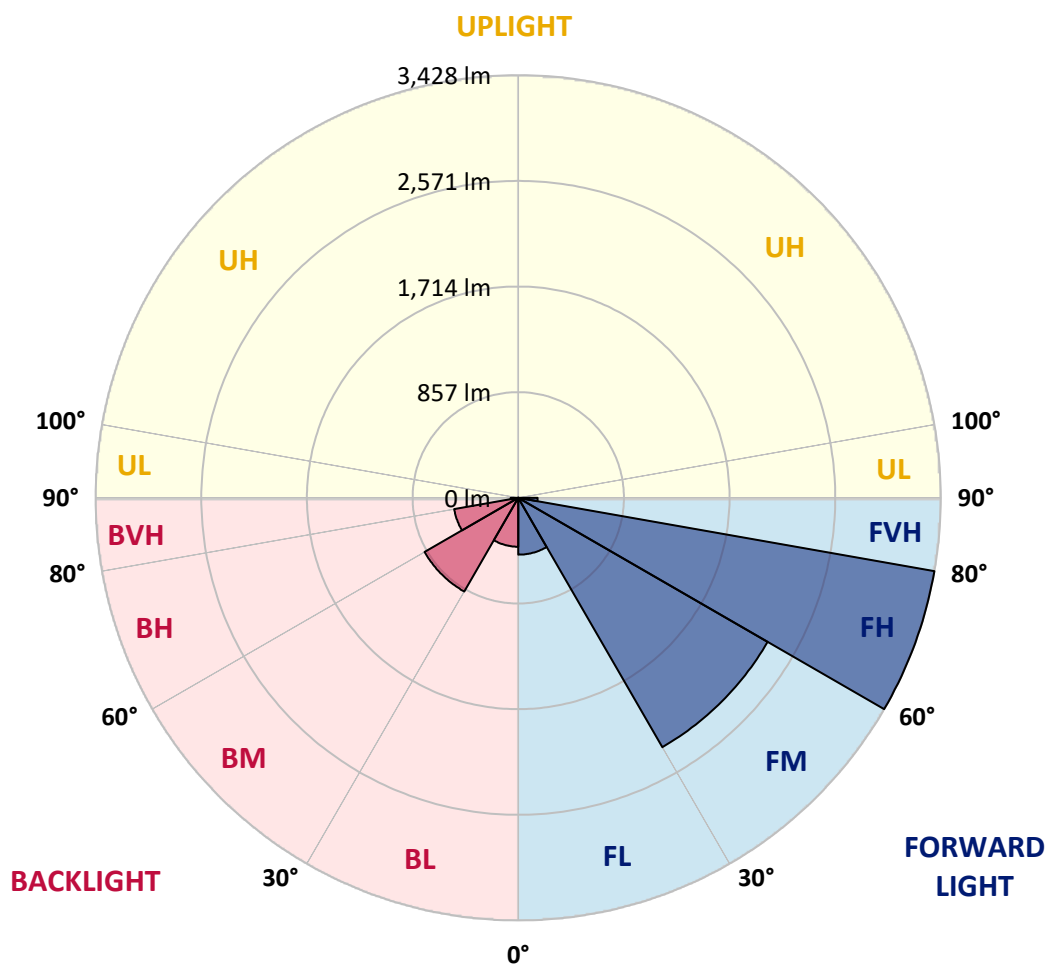
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	461.1	5.6			
FM	(30°-60°)	2335.7	28.3			
FH	(60°-80°)	3428.2	41.6			G2/5000
FVH	(80°-90°)	156.9	1.9			G2/225
BL	(0°-30°)	396.9	4.8	B1/500		
BM	(30°-60°)	877.8	10.6	B1/1000		
BH	(60°-80°)	527.7	6.4	B2/1000		G2/1000
BVH	(80°-90°)	61.8	0.7			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°	45°	46°	55°	65°	75°	85°
0°	831.9	831.9	831.9	831.9	831.9	831.9	831.9	831.9	831.9	831.9	831.9
2.5°	864.5	870.1	864.9	860.1	857.9	852.3	851.9	848.4	846.2	840.1	838.3
5°	924.9	932.2	923.5	914.0	905.3	891.3	889.6	879.7	868.4	855.4	848.0
7.5°	993.0	999.6	989.5	975.2	960.0	937.0	936.5	918.3	900.5	878.3	865.7
10°	1052.6	1061.3	1047.8	1028.2	1009.1	983.1	980.0	959.2	936.5	907.8	888.8
12.5°	1105.2	1111.2	1098.2	1074.3	1052.2	1026.0	1022.1	999.1	974.0	941.4	917.0
15°	1146.8	1154.7	1137.2	1111.6	1088.1	1062.5	1059.0	1038.2	1013.0	978.7	947.4
17.5°	1174.1	1180.7	1162.9	1134.3	1111.6	1090.3	1087.7	1070.4	1048.2	1013.4	980.0
20°	1184.6	1191.6	1172.9	1143.8	1122.9	1106.4	1105.2	1092.5	1077.3	1045.6	1011.7
22.5°	1195.0	1201.5	1177.2	1146.8	1128.5	1118.2	1117.7	1109.5	1103.4	1077.3	1044.3
25°	1237.2	1238.9	1206.3	1162.5	1136.4	1127.3	1126.8	1126.4	1129.0	1108.5	1079.5
27.5°	1273.7	1273.3	1245.4	1204.2	1163.8	1144.6	1144.2	1148.5	1156.8	1139.9	1116.0
30°	1327.1	1322.4	1289.2	1246.3	1209.4	1179.9	1177.2	1173.3	1179.9	1166.3	1152.5
32.5°	1440.4	1425.3	1371.9	1295.4	1247.1	1224.6	1221.1	1196.8	1199.4	1191.2	1184.2
35°	1602.9	1582.9	1511.7	1388.4	1294.1	1261.9	1260.2	1229.4	1224.2	1216.8	1219.3
37.5°	1796.2	1771.5	1688.5	1523.0	1374.8	1305.3	1302.8	1275.0	1253.7	1245.9	1260.6
40°	1990.4	1959.2	1890.5	1687.3	1493.9	1377.9	1369.7	1327.5	1303.2	1290.2	1321.4
42.5°	2178.9	2152.9	2094.3	1871.3	1640.7	1483.9	1465.6	1393.6	1375.3	1363.1	1419.6
45°	2345.7	2322.3	2279.3	2068.1	1812.7	1628.1	1610.3	1492.6	1487.0	1487.0	1568.7
47.5°	2481.3	2476.1	2430.5	2268.8	2015.6	1792.3	1761.5	1630.3	1645.5	1669.0	1780.1
50°	2631.6	2617.2	2568.6	2466.6	2254.1	1980.4	1955.2	1799.3	1856.2	1920.4	2086.0
52.5°	2769.8	2777.5	2723.2	2672.4	2523.4	2190.2	2145.9	1998.6	2121.6	2228.0	2444.3
55°	2911.8	2912.2	2897.0	2890.1	2805.7	2422.2	2373.6	2238.5	2434.0	2566.0	2862.2
57.5°	3045.2	3046.0	3068.5	3129.8	3133.3	2689.8	2634.7	2533.0	2781.0	2915.7	3293.2
60°	3164.2	3170.2	3231.9	3375.3	3421.3	2996.5	2944.3	2881.0	3139.9	3275.4	3746.3
62.5°	3204.1	3226.3	3363.5	3567.3	3705.9	3372.7	3321.4	3283.6	3516.9	3642.8	4125.0
65°	3136.4	3187.1	3452.6	3725.9	3998.6	3819.7	3768.8	3727.6	3908.7	4027.3	4436.1
67.5°	2969.9	3035.5	3447.4	3892.2	4354.0	4357.5	4310.1	4213.3	4328.8	4374.4	4537.3
70°	2531.6	2629.8	3143.8	3954.3	4761.8	5092.9	5047.3	4797.9	4748.0	4527.3	4252.3
72.5°	1631.2	1763.2	2314.9	3443.1	4852.7	5784.9	5782.2	5325.7	4880.4	4230.2	3410.5
75°	595.1	675.9	1075.5	2161.1	4073.3	5749.7	5766.6	5235.4	4455.2	3267.6	2124.6
77.5°	216.8	237.2	351.0	830.6	2505.2	4613.3	4648.5	4185.4	3171.1	1639.9	841.8
80°	113.8	125.2	179.9	322.4	1073.4	2739.7	2795.0	2487.4	1490.5	493.9	252.4
82.5°	63.0	68.2	100.8	175.1	483.5	1171.6	1204.6	982.6	524.3	209.4	104.2
85°	33.9	36.1	47.4	95.5	236.3	406.2	415.3	293.7	208.9	122.9	50.4
87.5°	9.9	12.2	15.7	30.4	92.6	91.2	93.4	58.2	82.5	62.1	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°	831.9	831.9	831.9	831.9	831.9	831.9	831.9	831.9	831.9	831.9	831.9
2.5°	835.8	834.5	829.7	827.5	824.9	824.5	826.7	827.1	827.5	828.0	829.7
5°	843.6	839.3	835.0	832.3	833.2	833.6	837.9	841.0	843.2	844.9	845.7
7.5°	858.8	855.4	848.0	847.5	848.8	852.7	858.3	865.3	869.2	872.3	873.1
10°	881.4	874.8	866.2	867.5	870.1	875.8	887.4	893.1	899.6	905.3	903.9
12.5°	904.5	898.7	888.8	889.6	894.0	903.9	915.3	922.2	926.6	930.9	932.6
15°	934.4	924.4	913.6	913.6	921.4	932.2	937.5	943.1	945.7	950.5	952.2
17.5°	965.2	952.2	937.9	937.0	946.6	951.8	954.8	955.7	956.5	961.8	963.5
20°	996.1	981.7	961.3	959.6	961.8	960.9	960.4	959.6	960.9	967.4	970.1
22.5°	1026.4	1009.9	981.7	974.0	967.8	959.6	959.2	958.7	959.6	966.1	970.5
25°	1062.1	1042.1	1004.3	980.8	960.4	949.1	950.5	950.9	951.8	956.9	963.9
27.5°	1100.7	1078.6	1025.2	978.7	941.8	934.0	931.8	933.1	936.1	944.3	952.6
30°	1139.4	1113.4	1044.3	970.1	918.3	907.4	900.5	903.5	913.1	921.4	930.5
32.5°	1174.6	1148.5	1059.5	950.9	888.4	871.5	862.3	866.2	875.8	878.8	889.6
35°	1215.9	1186.3	1066.0	920.4	855.8	829.7	817.5	811.9	816.7	813.6	823.2
37.5°	1261.9	1231.1	1065.2	880.5	817.5	787.6	770.6	749.4	739.3	728.9	735.4
40°	1330.1	1285.9	1054.7	832.3	770.2	742.8	712.4	676.4	653.7	633.3	634.7
42.5°	1423.1	1361.8	1035.6	779.3	716.8	691.2	649.8	607.7	572.1	538.2	535.2
45°	1561.7	1461.3	1011.7	722.8	659.0	633.8	589.1	541.7	501.3	457.9	452.6
47.5°	1761.5	1595.1	989.1	658.6	598.2	575.1	534.7	490.9	443.1	401.0	396.2
50°	2036.1	1787.1	968.3	596.0	538.2	520.8	488.7	443.9	395.8	361.8	359.7
52.5°	2385.3	2048.2	959.6	535.6	482.2	475.7	450.1	408.4	362.7	334.0	331.9
55°	2786.3	2360.5	959.6	477.9	433.1	435.3	417.5	378.8	339.3	313.6	311.0
57.5°	3195.4	2676.8	942.2	424.5	391.3	400.5	389.2	355.4	319.7	293.3	288.8
60°	3572.5	2941.7	871.9	375.8	354.4	368.8	361.4	332.3	288.8	266.7	263.2
62.5°	3862.2	3091.2	736.3	337.1	324.1	340.6	336.6	301.9	283.2	274.1	271.1
65°	4007.3	3066.9	562.9	302.8	298.5	324.1	315.8	314.5	299.7	289.4	285.9
67.5°	3918.3	2857.5	408.4	277.6	283.6	308.8	340.6	345.7	318.4	298.0	294.5
70°	3527.7	2478.7	304.1	253.7	265.0	309.2	388.4	361.8	312.3	288.4	284.5
72.5°	2683.8	1848.4	235.9	228.5	240.7	311.5	409.6	354.4	295.0	318.9	316.2
75°	1534.7	1014.7	189.4	197.6	210.2	291.0	398.8	335.4	281.5	292.7	292.7
77.5°	585.2	390.1	156.4	167.3	169.0	254.1	381.4	334.0	268.0	261.5	238.5
80°	202.8	152.5	129.5	132.9	130.8	225.9	365.7	290.6	219.4	196.4	189.8
82.5°	82.9	76.1	102.5	98.2	93.0	175.5	295.4	237.6	179.4	158.6	156.8
85°	36.1	48.2	67.8	59.6	53.9	121.7	236.8	201.1	151.6	130.8	130.3
87.5°	7.4	18.2	28.7	27.0	27.8	81.3	168.1	142.9	107.3	80.4	63.0
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)