

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: P959971

Luminaire Tested: **NAV-SB1B-830-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959971
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5070.7 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 39.8
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



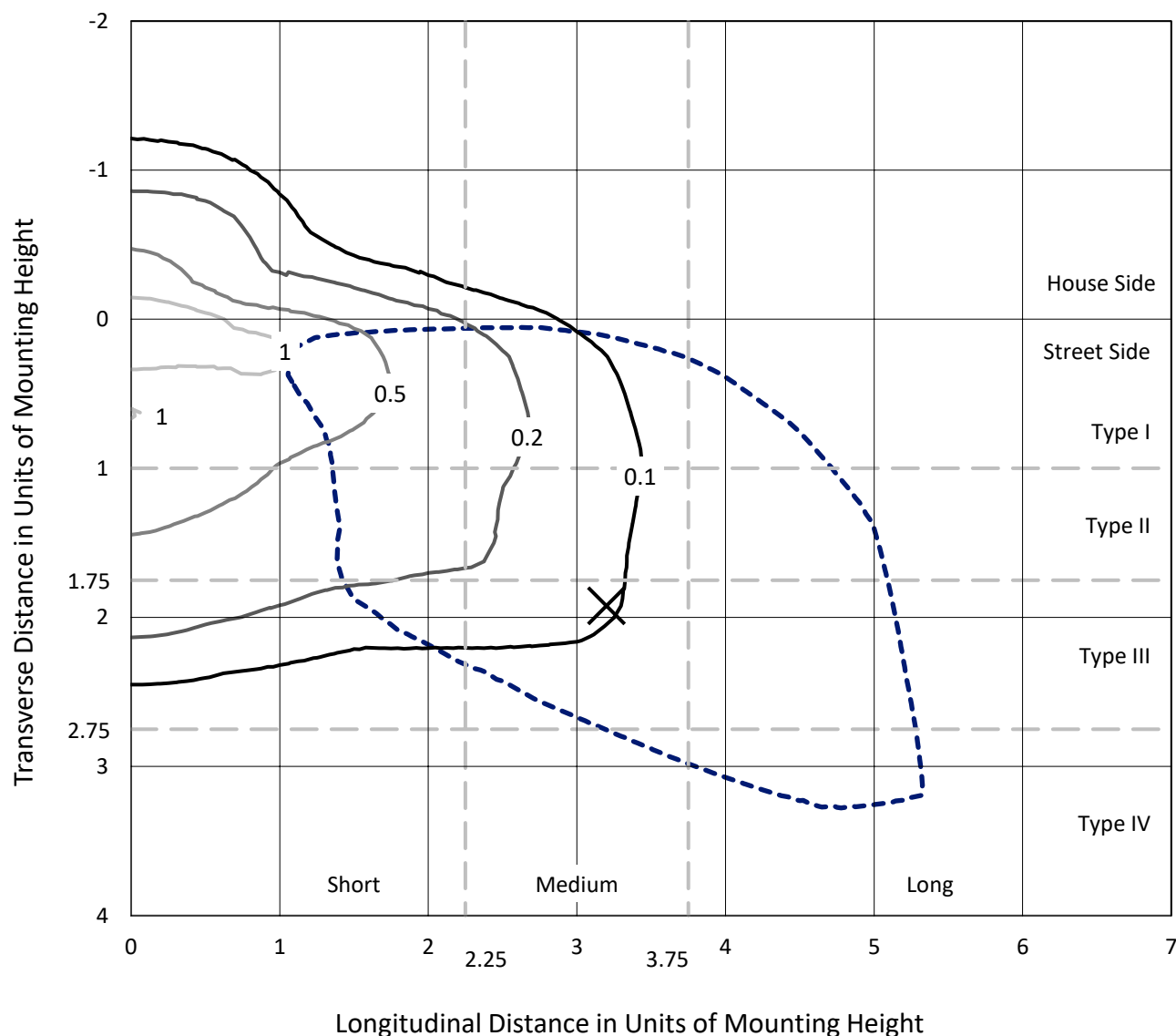
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

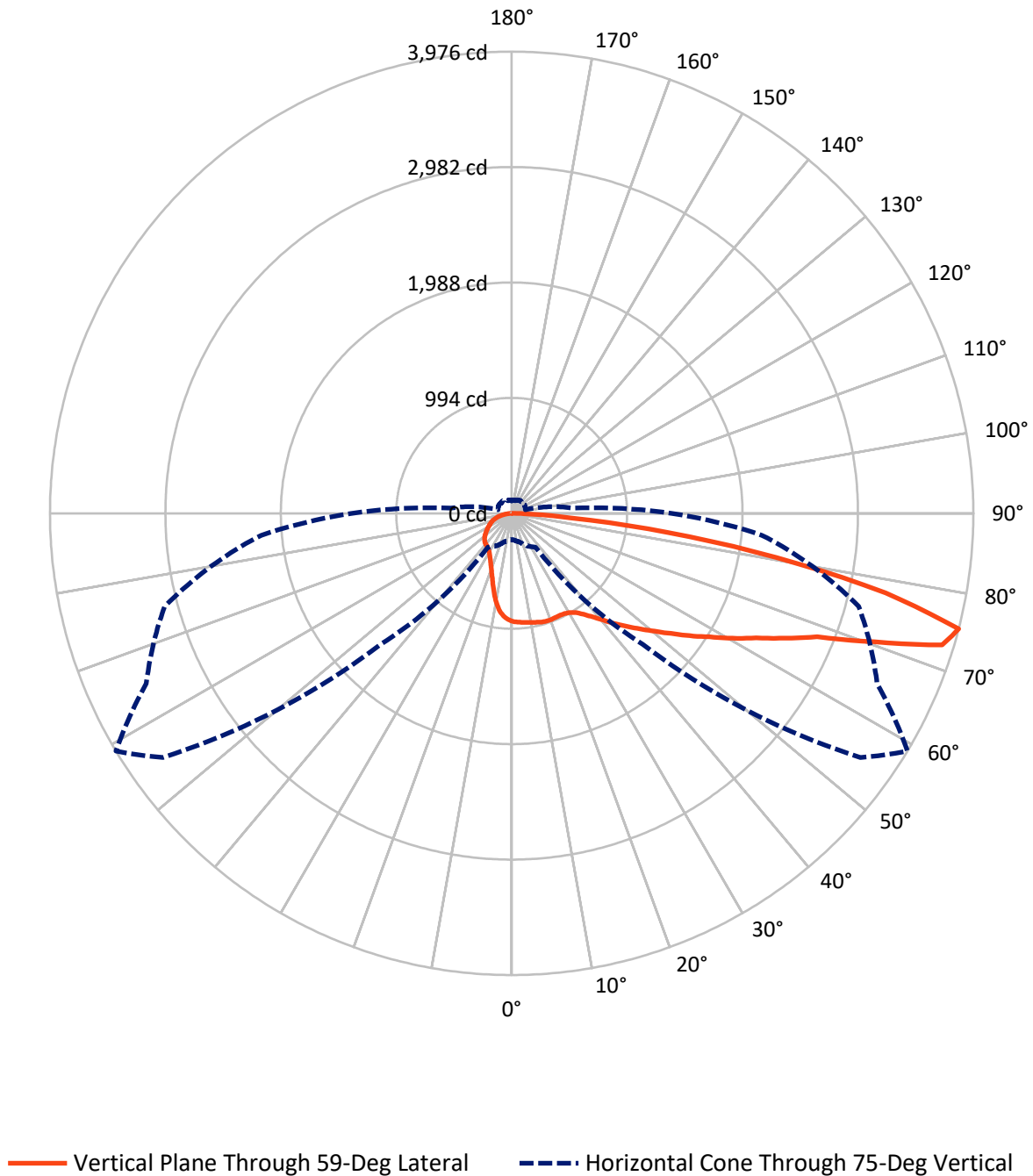


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc

Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	951.0	0.0	951.0
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	4119.6	0.0	4119.6
	% Fixture	81.2	0.0	81.2
Total	Lumens	5070.7	0.0	5070.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	1.6
10°-20°	213.3	4.2
20°-30°	324.0	6.4
30°-40°	481.6	9.5
40°-50°	716.3	14.1
50°-60°	972.2	19.2
60°-70°	1186.9	23.4
70°-80°	931.5	18.4
80°-90°	161.4	3.2
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°	5070.7	100.0
0°-180°	5070.7	100.0

Coefficient of Utilization



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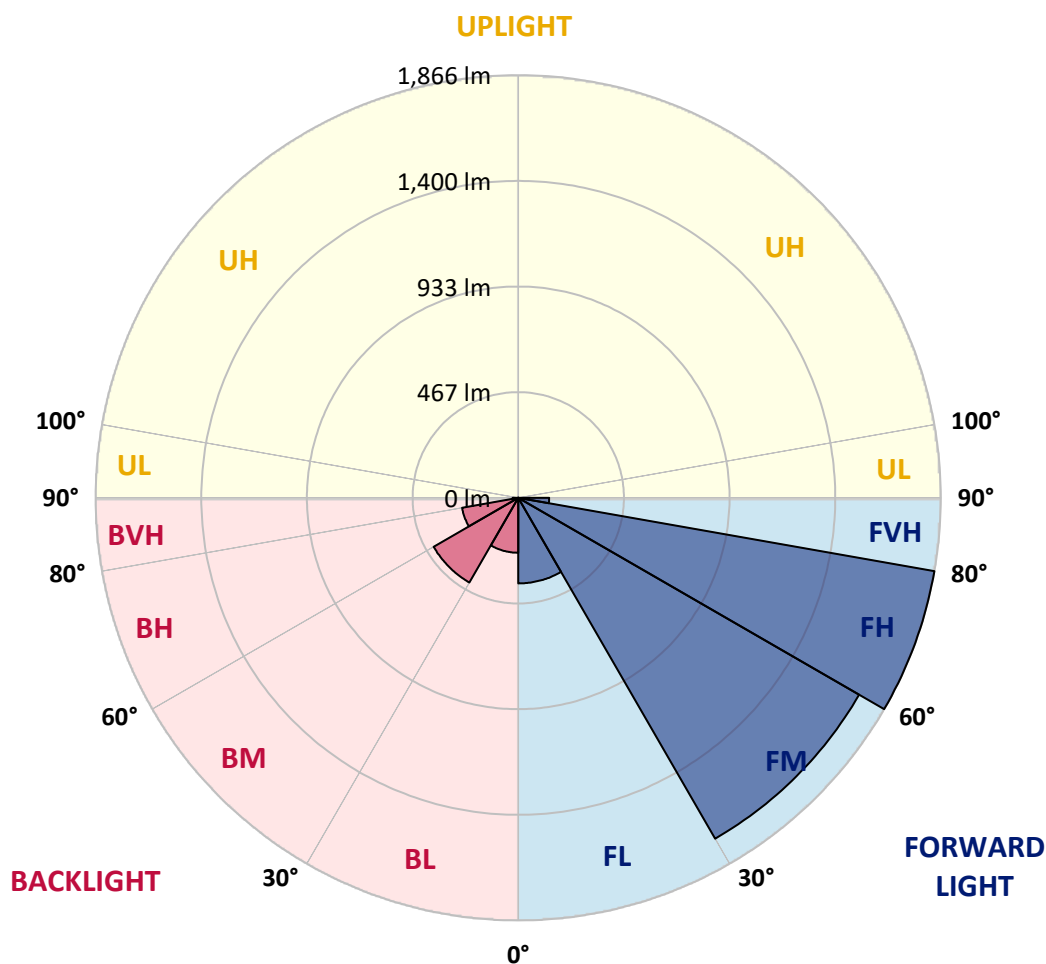
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	378.1	7.5			
FM	(30°-60°)	1738.4	34.3			
FH	(60°-80°)	1866.5	36.8			G2/5000
FVH	(80°-90°)	136.7	2.7			G2/225
BL	(0°-30°)	242.7	4.8	B1/500		
BM	(30°-60°)	431.7	8.5	B1/1000		
BH	(60°-80°)	252.0	5.0	B1/500		G1/500
BVH	(80°-90°)	24.7	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	930.7	930.7	930.7	930.7	930.7	930.7	930.7	930.7	930.7	930.7	930.7
2.5°	938.6	935.3	938.6	937.3	936.7	935.6	935.9	937.8	936.7	938.1	933.5
5°	932.3	930.4	933.7	932.9	936.4	937.0	940.5	942.7	944.1	944.3	940.8
7.5°	922.0	920.0	924.8	928.5	936.1	938.4	945.7	949.3	951.2	954.5	949.3
10°	884.1	883.2	894.7	909.2	927.2	938.4	949.6	955.5	958.6	967.3	961.2
12.5°	816.9	818.1	833.0	860.9	896.9	932.9	953.9	962.6	967.3	978.2	975.5
15°	752.9	752.6	769.0	798.7	849.1	908.9	956.1	971.1	979.0	995.1	992.9
17.5°	715.8	714.6	726.1	748.8	795.7	872.1	950.6	975.7	992.6	1012.8	1011.0
20°	709.0	706.7	712.8	724.0	757.3	831.7	936.4	975.7	1003.6	1029.7	1028.6
22.5°	733.8	730.2	727.7	726.4	741.2	798.4	920.3	972.4	1019.7	1054.0	1052.1
25°	783.7	778.2	765.7	753.4	749.1	783.4	906.2	971.6	1043.7	1086.7	1079.6
27.5°	864.4	857.6	832.2	802.8	776.3	791.1	899.8	976.5	1070.1	1121.4	1107.2
30°	964.5	957.1	925.3	880.0	832.5	819.4	907.8	991.0	1103.9	1167.5	1139.7
32.5°	1054.3	1046.1	1018.8	972.7	908.7	868.5	932.9	1018.5	1157.1	1231.5	1188.5
35°	1134.0	1124.4	1099.8	1057.3	1001.9	937.6	978.2	1067.3	1232.7	1335.8	1254.8
37.5°	1212.0	1200.8	1174.0	1129.0	1090.3	1029.4	1040.7	1130.1	1333.0	1462.4	1342.6
40°	1299.2	1283.1	1250.7	1206.2	1168.6	1137.2	1122.8	1207.0	1435.1	1603.6	1452.2
42.5°	1383.7	1368.5	1329.7	1291.9	1244.7	1235.6	1217.9	1297.0	1546.6	1758.9	1563.5
45°	1474.9	1456.6	1409.7	1361.7	1332.0	1301.1	1310.2	1387.0	1656.0	1917.1	1680.3
47.5°	1560.3	1539.9	1484.4	1431.0	1414.6	1356.3	1394.7	1486.0	1769.8	2077.5	1796.0
50°	1606.4	1586.2	1540.1	1491.8	1479.0	1424.1	1486.4	1594.9	1889.0	2237.3	1907.0
52.5°	1644.8	1623.0	1562.7	1536.0	1532.2	1498.0	1599.3	1719.3	2008.2	2378.6	2014.2
55°	1685.7	1661.5	1584.5	1560.6	1578.0	1581.0	1733.2	1860.4	2134.2	2516.4	2115.4
57.5°	1733.0	1702.1	1605.6	1581.3	1622.8	1678.1	1887.0	2006.5	2258.1	2644.0	2205.4
60°	1777.5	1746.3	1645.9	1614.3	1671.1	1790.8	2063.5	2183.6	2398.3	2757.8	2290.5
62.5°	1786.2	1760.5	1678.1	1677.8	1736.5	1922.3	2272.5	2362.2	2520.7	2870.1	2366.8
65°	1635.0	1618.9	1570.1	1675.4	1830.3	2111.6	2505.2	2590.8	2676.5	2968.3	2434.0
67.5°	1244.5	1246.6	1243.0	1446.3	1754.5	2383.5	2842.0	2835.5	2868.8	3078.6	2511.1
70°	569.0	581.8	665.3	998.4	1405.6	2414.9	3399.1	3314.2	3110.2	3221.2	2578.0
72.5°	307.4	317.2	351.4	483.6	845.0	2147.1	3815.4	3875.6	3431.3	3317.2	2504.6
75°	225.6	231.0	254.8	307.4	354.9	1595.7	3666.1	3975.5	3471.4	3093.2	2162.9
77.5°	168.8	171.3	190.6	243.5	181.6	841.2	2929.3	3292.4	2971.6	2541.5	1597.7
80°	122.5	125.3	139.7	182.8	127.4	307.7	2011.5	2311.0	2035.1	1620.0	796.2
82.5°	84.6	85.7	91.9	124.4	89.0	119.5	1141.3	1355.2	1136.1	568.5	214.9
85°	51.0	52.4	55.1	72.6	50.4	56.8	492.6	509.5	339.6	135.8	66.8
87.5°	21.0	22.3	24.6	30.5	19.9	15.8	81.3	102.0	63.6	39.9	20.7
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°	930.7	930.7	930.7	930.7	930.7	930.7	930.7	930.7	930.7	930.7	930.7
2.5°	932.0	930.2	925.0	917.9	911.3	903.1	899.6	896.6	893.9	888.7	886.2
5°	937.8	932.6	918.7	900.7	880.3	857.9	836.1	821.0	808.2	798.7	790.8
7.5°	946.5	936.7	911.3	874.5	827.6	779.6	736.3	705.4	682.2	673.7	659.1
10°	955.5	943.8	899.6	834.7	753.7	679.8	622.2	590.6	572.1	566.0	556.8
12.5°	966.2	948.9	881.3	779.3	671.1	590.0	539.9	521.3	511.7	508.5	509.3
15°	981.7	953.4	853.8	710.0	592.2	524.6	492.1	479.3	474.4	474.1	475.2
17.5°	993.4	954.2	811.0	635.8	531.7	485.0	458.3	453.4	456.6	461.6	463.4
20°	1006.6	946.8	754.8	568.2	489.1	450.4	439.2	442.5	450.4	457.5	459.9
22.5°	1015.8	933.5	686.9	515.6	452.2	430.4	429.9	436.8	441.1	444.6	446.5
25°	1024.0	910.8	614.8	471.4	422.0	418.4	424.5	422.3	419.2	422.3	424.1
27.5°	1030.0	875.0	550.4	432.7	400.7	410.2	406.7	401.8	401.5	403.1	405.9
30°	1028.1	827.4	497.5	395.8	385.7	394.9	386.5	385.7	384.9	385.7	388.7
32.5°	1028.1	773.1	456.9	370.4	376.2	372.6	371.8	369.9	366.6	366.3	369.9
35°	1033.8	718.7	422.0	356.8	368.3	359.8	360.3	355.7	348.9	345.6	348.9
37.5°	1045.5	675.2	387.3	350.2	354.3	354.0	351.9	344.0	332.0	321.6	325.1
40°	1073.9	662.3	363.6	347.3	347.8	351.1	345.3	330.0	302.8	285.9	288.0
42.5°	1118.4	683.9	358.4	339.9	343.4	346.7	335.5	300.0	280.6	270.6	270.6
45°	1174.9	721.5	369.6	329.2	333.0	338.8	305.6	288.6	279.8	280.1	281.5
47.5°	1246.3	761.1	390.3	320.0	318.1	321.3	285.6	275.2	263.2	266.2	273.9
50°	1329.0	801.1	410.0	307.4	301.5	290.8	272.8	262.9	247.6	240.6	242.5
52.5°	1418.4	839.9	417.9	292.1	283.4	271.1	264.0	252.0	233.5	221.8	221.5
55°	1503.3	875.0	409.2	273.9	265.4	255.8	254.8	247.4	227.4	211.2	211.2
57.5°	1583.4	904.6	387.3	255.3	247.1	241.4	248.8	245.2	220.2	199.2	198.0
60°	1651.4	924.8	355.7	236.5	230.7	227.8	238.9	237.9	209.7	186.3	185.5
62.5°	1705.4	932.6	320.8	218.5	217.1	211.7	225.3	225.3	196.7	173.7	172.9
65°	1747.6	925.0	285.4	200.8	203.5	195.3	208.7	207.0	182.8	162.6	161.4
67.5°	1785.0	899.8	246.0	183.3	189.6	179.2	191.3	187.4	167.5	151.4	150.3
70°	1801.6	841.5	201.3	165.8	173.5	163.4	173.7	166.7	150.3	139.4	137.2
72.5°	1668.0	699.4	158.5	147.6	154.2	146.0	155.0	146.8	131.7	126.8	122.8
75°	1380.0	524.8	122.0	127.6	132.5	126.3	132.3	126.3	112.6	116.2	106.1
77.5°	1002.1	354.3	93.3	106.7	108.9	105.6	110.7	103.9	91.6	90.8	86.7
80°	498.4	207.6	73.1	84.3	83.4	81.3	87.3	84.0	73.7	78.0	77.2
82.5°	144.3	89.0	53.2	59.1	57.6	58.1	62.4	64.1	96.0	95.2	97.4
85°	45.3	35.0	31.9	33.0	31.4	32.2	36.8	73.1	67.6	39.6	42.8
87.5°	11.7	12.0	7.9	8.4	8.7	10.4	11.7	44.5	21.3	13.9	14.8
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)