

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: P959411

Luminaire Tested: **NAV-SB1A-827-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959411
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-827-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3975 lumens
Efficiency: N/A
Efficacy: 128.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

Input Watts (W): 30.9
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



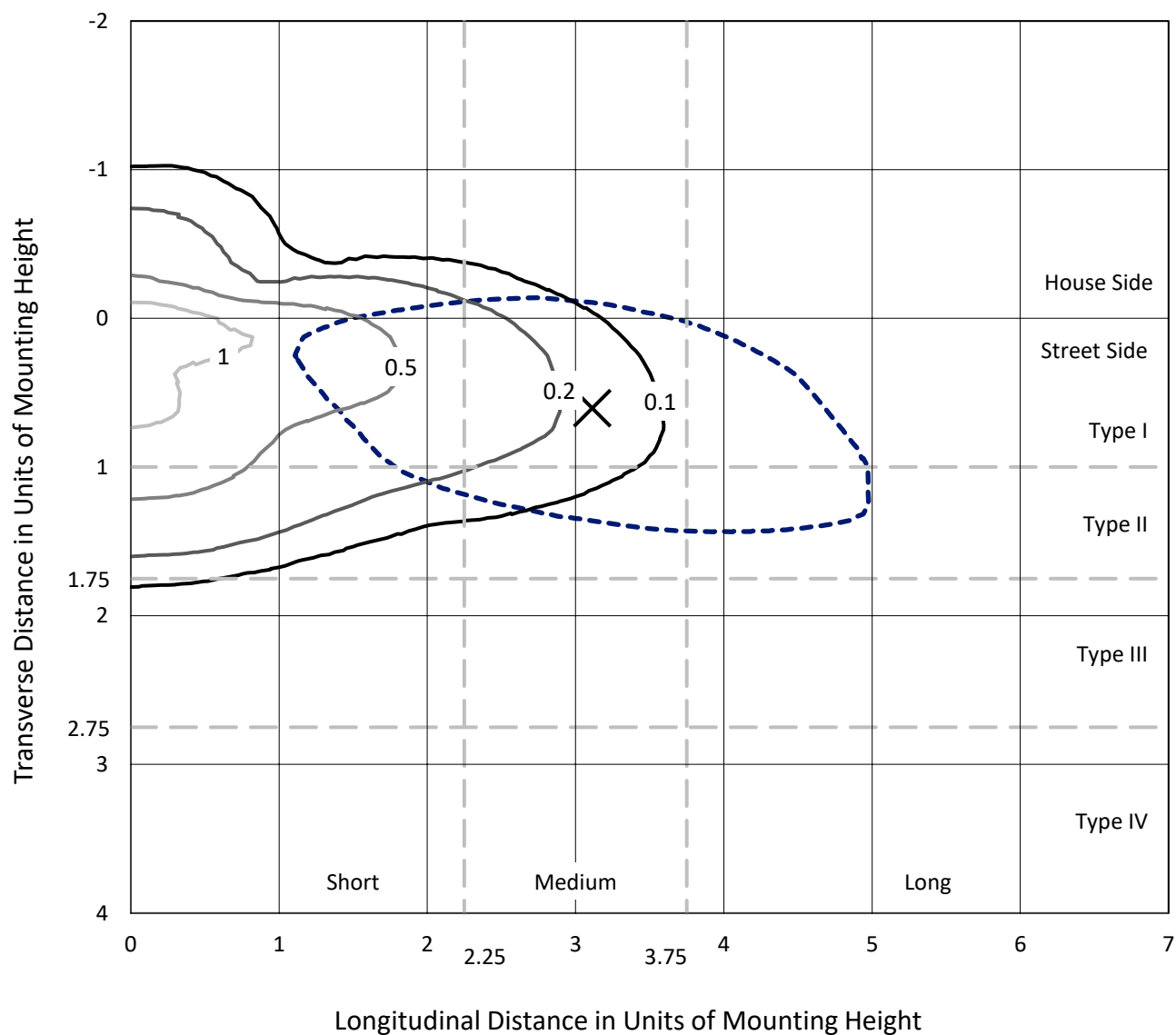
REPORT NUMBER: P959411

CATALOG NUMBER: NAV-SB1A-827-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

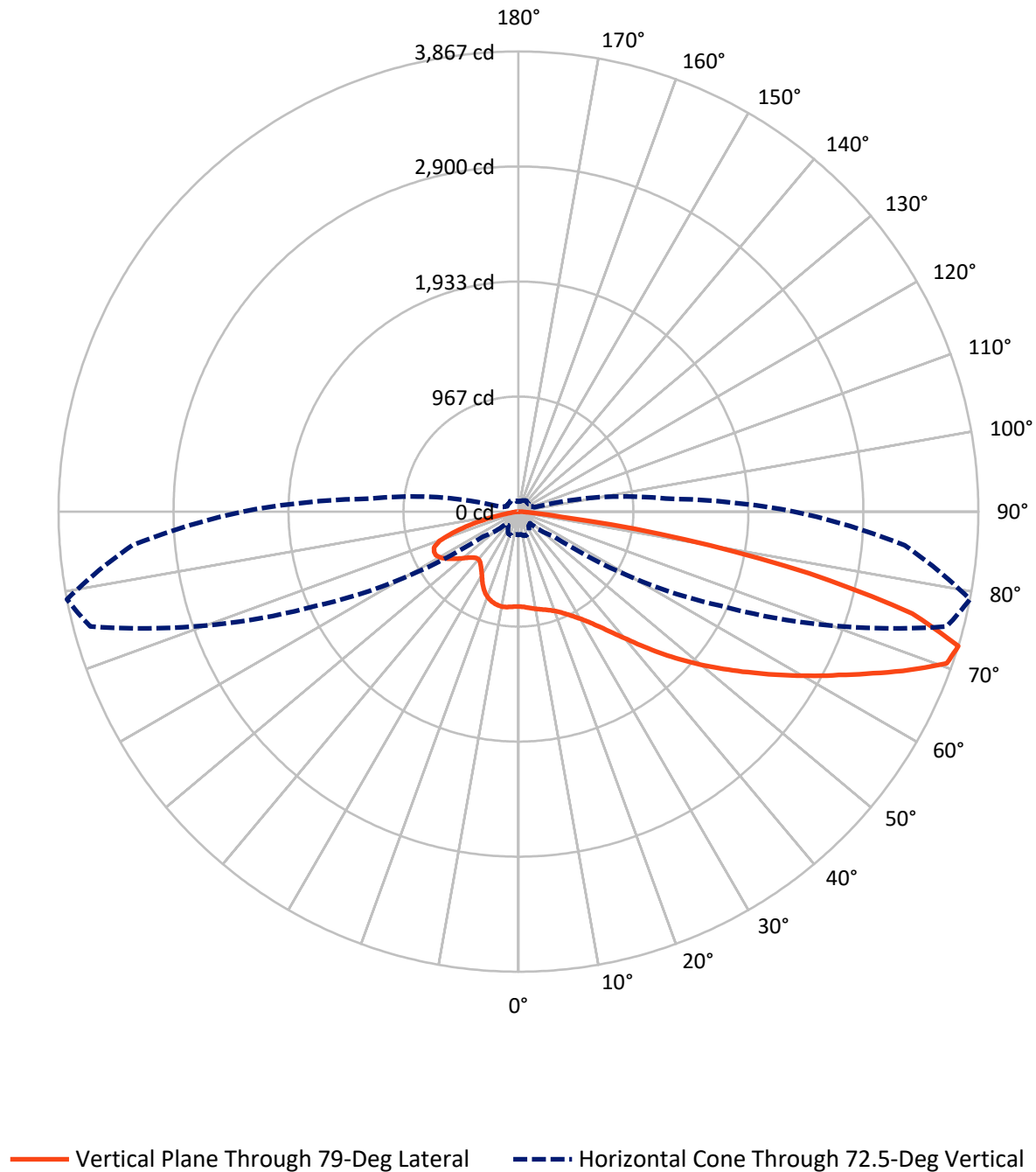
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
Type II - Medium - N/A

REPORT NUMBER: P959411
CATALOG NUMBER: NAV-SB1A-827-U-SL2

Luminous Intensity Polar Plot



REPORT NUMBER: P959411

CATALOG NUMBER: NAV-SB1A-827-U-SL2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	874.7	0.0	874.7
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	3100.2	0.0	3100.2
	% Fixture	78.0	0.0	78.0
Total	Lumens	3975.0	0.0	3975.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	1.8
10°-20°	189.4	4.8
20°-30°	305.6	7.7
30°-40°	458.6	11.5
40°-50°	650.6	16.4
50°-60°	821.6	20.7
60°-70°	834.4	21.0
70°-80°	568.7	14.3
80°-90°	73.8	1.9
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°	3975.0	100.0
0°-180°	3975.0	100.0

Coefficient of Utilization



REPORT NUMBER: P959411

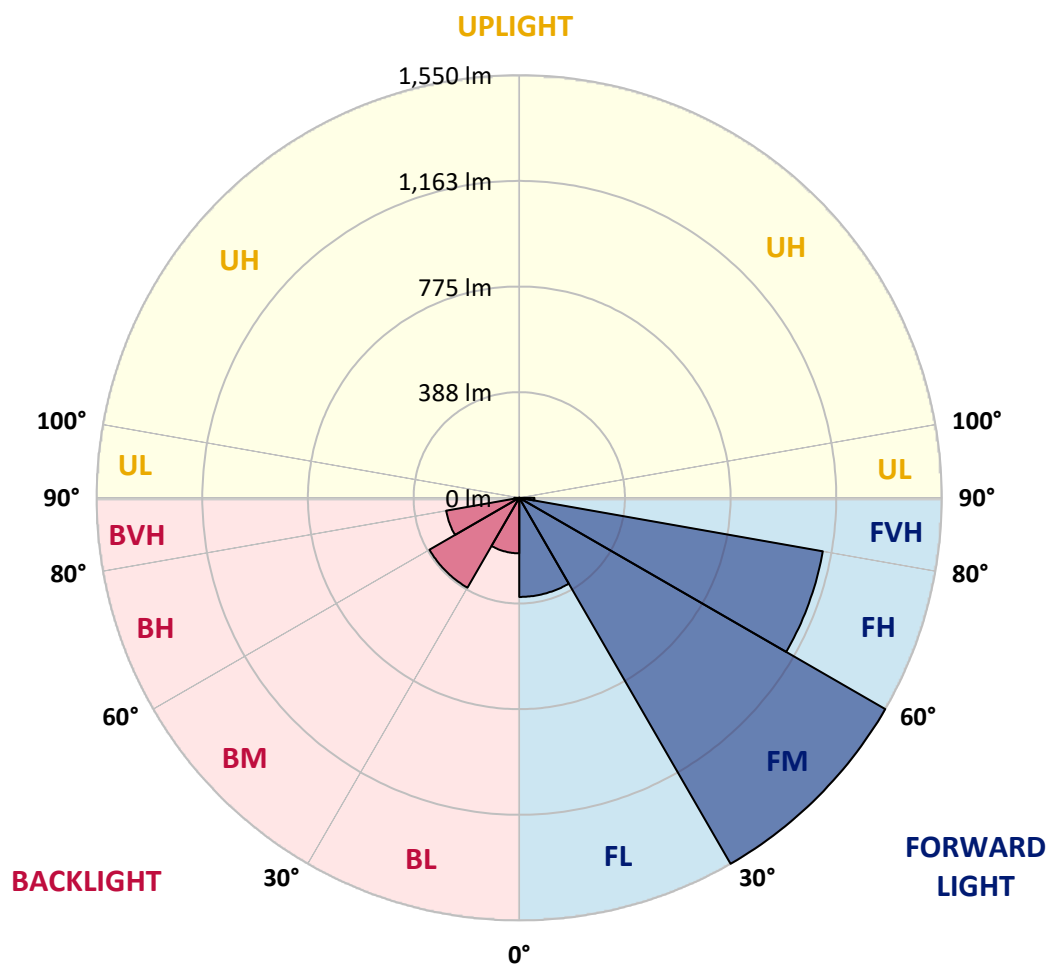
CATALOG NUMBER: NAV-SB1A-827-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	363.6	9.1			
FM	(30°-60°)	1550.3	39.0			
FH	(60°-80°)	1130.7	28.4			G1/1800
FVH	(80°-90°)	55.6	1.4			G1/100
BL	(0°-30°)	203.7	5.1	B1/500		
BM	(30°-60°)	380.4	9.6	B1/1000		
BH	(60°-80°)	272.4	6.9	B1/500		G1/500
BVH	(80°-90°)	18.2	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-G1

Type II Medium



REPORT NUMBER: P959411

CATALOG NUMBER: NAV-SB1A-827-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0
2.5°	798.4	794.6	796.8	796.0	797.1	798.4	798.8	799.4	801.6	801.3	801.0
5°	796.6	792.8	796.0	795.0	797.8	800.6	803.2	805.5	808.8	810.4	808.2
7.5°	793.1	790.6	793.8	796.8	802.0	806.4	810.0	815.2	820.0	820.8	822.4
10°	772.2	770.4	777.8	786.0	799.8	811.8	819.6	825.6	831.0	831.8	833.8
12.5°	750.6	748.4	756.6	767.6	790.2	811.8	828.2	836.2	840.8	843.6	846.8
15°	747.0	745.2	749.8	759.4	778.2	806.2	834.1	848.8	852.8	856.0	857.2
17.5°	764.3	760.8	762.6	766.0	776.9	800.8	838.8	863.2	869.2	872.6	872.6
20°	804.2	799.2	796.2	789.6	787.6	801.8	838.3	880.4	888.4	892.6	893.6
22.5°	857.4	854.0	847.8	830.8	812.2	812.0	846.3	902.4	917.4	921.4	918.8
25°	921.8	916.8	908.8	885.6	850.0	832.4	859.8	930.6	955.6	956.6	949.4
27.5°	995.8	988.2	977.2	946.8	898.8	864.4	880.4	963.0	999.6	999.2	984.0
30°	1073.8	1066.2	1054.6	1017.6	957.4	907.4	909.0	997.9	1051.8	1049.4	1023.6
32.5°	1130.8	1125.1	1122.8	1094.2	1024.6	958.4	941.8	1036.6	1116.0	1114.0	1077.8
35°	1174.5	1167.2	1169.8	1155.4	1098.0	1015.4	982.0	1082.6	1194.2	1194.0	1149.0
37.5°	1217.8	1211.3	1213.6	1204.0	1165.9	1087.6	1030.9	1139.0	1291.2	1295.8	1235.2
40°	1257.4	1250.4	1259.6	1250.6	1218.6	1164.6	1086.6	1202.6	1403.4	1412.3	1339.6
42.5°	1281.1	1275.6	1291.0	1291.2	1264.5	1229.6	1147.8	1272.9	1533.4	1553.2	1467.8
45°	1289.3	1287.4	1310.6	1315.4	1305.0	1267.2	1202.9	1349.4	1673.4	1708.8	1614.0
47.5°	1280.4	1276.9	1308.8	1326.8	1335.0	1284.9	1248.6	1432.3	1816.4	1868.2	1773.4
50°	1235.9	1229.0	1276.4	1314.2	1343.4	1296.4	1294.6	1528.0	1979.0	2035.5	1933.6
52.5°	1155.8	1150.6	1204.6	1270.0	1324.8	1302.2	1346.3	1632.4	2133.3	2206.4	2097.8
55°	1053.4	1046.4	1106.0	1191.4	1278.8	1300.2	1398.0	1749.4	2315.4	2389.6	2267.4
57.5°	891.0	877.2	952.4	1053.4	1203.8	1298.0	1451.8	1865.6	2500.4	2589.4	2448.4
60°	654.4	633.8	726.0	845.6	1057.0	1275.4	1518.5	1996.0	2722.4	2802.6	2646.1
62.5°	381.0	369.0	429.4	541.0	796.6	1143.0	1555.9	2147.6	2940.7	3024.8	2840.4
65°	295.8	292.4	297.8	306.4	443.4	855.8	1440.5	2295.4	3218.2	3277.1	3042.9
67.5°	270.6	268.0	270.4	254.2	225.0	476.6	1139.6	2332.8	3515.5	3551.3	3220.1
70°	240.6	237.6	245.2	231.2	177.0	216.8	736.4	2197.0	3752.1	3819.2	3354.9
72.5°	196.0	192.6	210.2	204.0	149.0	139.2	369.8	1874.2	3727.3	3866.5	3258.4
75°	150.6	148.6	169.6	175.0	121.6	109.6	177.4	1393.2	3280.0	3420.3	2808.2
77.5°	117.0	115.4	126.2	145.2	98.0	85.0	109.2	883.8	2471.8	2496.4	1935.2
80°	87.6	83.4	93.4	112.4	76.4	62.0	74.0	515.4	1562.4	1416.3	842.3
82.5°	54.8	52.8	61.0	75.0	53.8	42.6	48.2	284.6	626.2	368.8	162.6
85°	31.4	30.4	33.2	42.8	29.2	24.6	27.6	125.8	114.4	78.6	49.0
87.5°	12.6	12.2	15.2	19.2	10.8	9.0	9.6	30.2	25.2	23.4	16.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P959411

CATALOG NUMBER: NAV-SB1A-827-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0
2.5°	800.2	800.2	797.3	792.6	787.4	784.0	778.6	777.2	771.4	769.8	772.5
5°	810.0	808.2	799.2	786.2	768.2	751.8	733.8	722.4	706.4	700.8	705.0
7.5°	822.2	817.4	802.0	773.4	735.9	699.2	660.8	631.8	604.0	594.2	595.4
10°	833.2	826.8	800.2	750.2	685.4	621.8	560.8	518.0	485.7	472.4	475.4
12.5°	844.4	832.4	789.1	711.8	613.8	527.4	462.4	429.2	409.2	393.2	398.4
15°	855.0	838.1	771.8	660.2	535.2	447.4	399.4	373.0	357.0	346.6	348.4
17.5°	867.2	843.0	746.0	594.8	460.2	392.2	353.0	337.0	333.8	332.6	333.4
20°	884.2	847.4	712.0	521.6	405.2	348.0	327.8	326.4	326.2	325.4	327.6
22.5°	902.4	852.6	667.0	455.2	358.2	320.4	316.8	314.0	312.0	311.8	314.2
25°	924.1	854.2	610.6	400.8	318.4	307.4	303.2	298.8	297.6	297.6	298.8
27.5°	945.2	848.6	545.0	353.4	295.8	295.4	290.0	288.4	288.2	288.8	290.6
30°	966.2	837.8	479.8	309.8	282.8	282.8	281.0	282.0	282.8	285.0	286.4
32.5°	994.6	826.6	425.4	277.4	271.4	269.4	271.2	273.4	274.2	277.0	279.2
35°	1036.2	818.6	382.0	259.6	259.6	257.0	258.0	257.6	255.6	254.4	257.4
37.5°	1091.2	818.2	346.3	251.4	249.8	249.4	249.6	246.8	239.4	230.6	230.8
40°	1157.4	829.4	318.8	245.8	244.6	247.0	245.8	238.4	218.2	203.0	202.4
42.5°	1246.4	861.8	301.0	238.8	242.6	245.8	240.8	215.4	201.6	191.4	191.0
45°	1351.2	914.4	292.0	231.4	239.0	242.8	218.4	207.4	196.4	184.0	183.2
47.5°	1469.7	980.6	290.0	224.6	231.0	233.4	209.0	204.0	191.6	178.0	177.0
50°	1598.8	1059.0	295.6	216.4	219.6	211.6	205.8	201.2	188.4	175.2	173.6
52.5°	1732.4	1145.5	307.0	205.2	208.0	199.2	204.6	200.6	186.5	168.6	167.4
55°	1863.6	1232.6	318.0	192.2	196.2	188.0	201.0	198.0	177.8	157.6	156.6
57.5°	1996.8	1319.2	328.6	180.6	184.8	177.2	195.4	191.4	168.2	147.6	147.2
60°	2135.4	1403.2	333.6	169.4	172.4	167.4	186.8	179.8	157.2	137.4	136.6
62.5°	2265.1	1473.3	325.4	158.4	160.2	158.2	175.4	166.2	146.4	125.8	125.6
65°	2395.3	1514.9	300.2	147.4	147.8	146.8	159.4	151.4	133.6	115.6	114.4
67.5°	2513.2	1538.2	260.0	135.6	134.6	134.2	144.4	135.4	121.2	105.6	104.2
70°	2538.2	1479.0	198.6	121.8	121.8	120.6	128.0	118.8	107.4	94.8	94.4
72.5°	2318.3	1244.1	141.0	106.0	107.6	105.6	111.6	103.8	93.6	85.2	82.6
75°	1869.4	912.4	102.6	89.8	92.8	89.2	94.8	89.4	80.6	80.4	72.4
77.5°	1284.4	564.2	74.4	74.0	76.2	71.4	78.0	75.0	67.0	63.4	59.6
80°	548.2	225.0	54.2	57.2	57.2	53.0	60.6	61.4	54.4	52.8	52.8
82.5°	109.2	64.0	38.0	39.4	37.0	35.8	42.8	47.6	65.6	73.0	73.2
85°	32.8	23.6	23.0	21.4	19.0	19.2	25.2	47.8	58.8	33.6	29.0
87.5°	9.0	5.8	6.0	4.8	4.0	5.2	8.6	36.2	19.8	8.4	7.2
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)