

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: P882216

Luminaire Tested: **NAV-SB2A-727-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882216  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2A-727-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

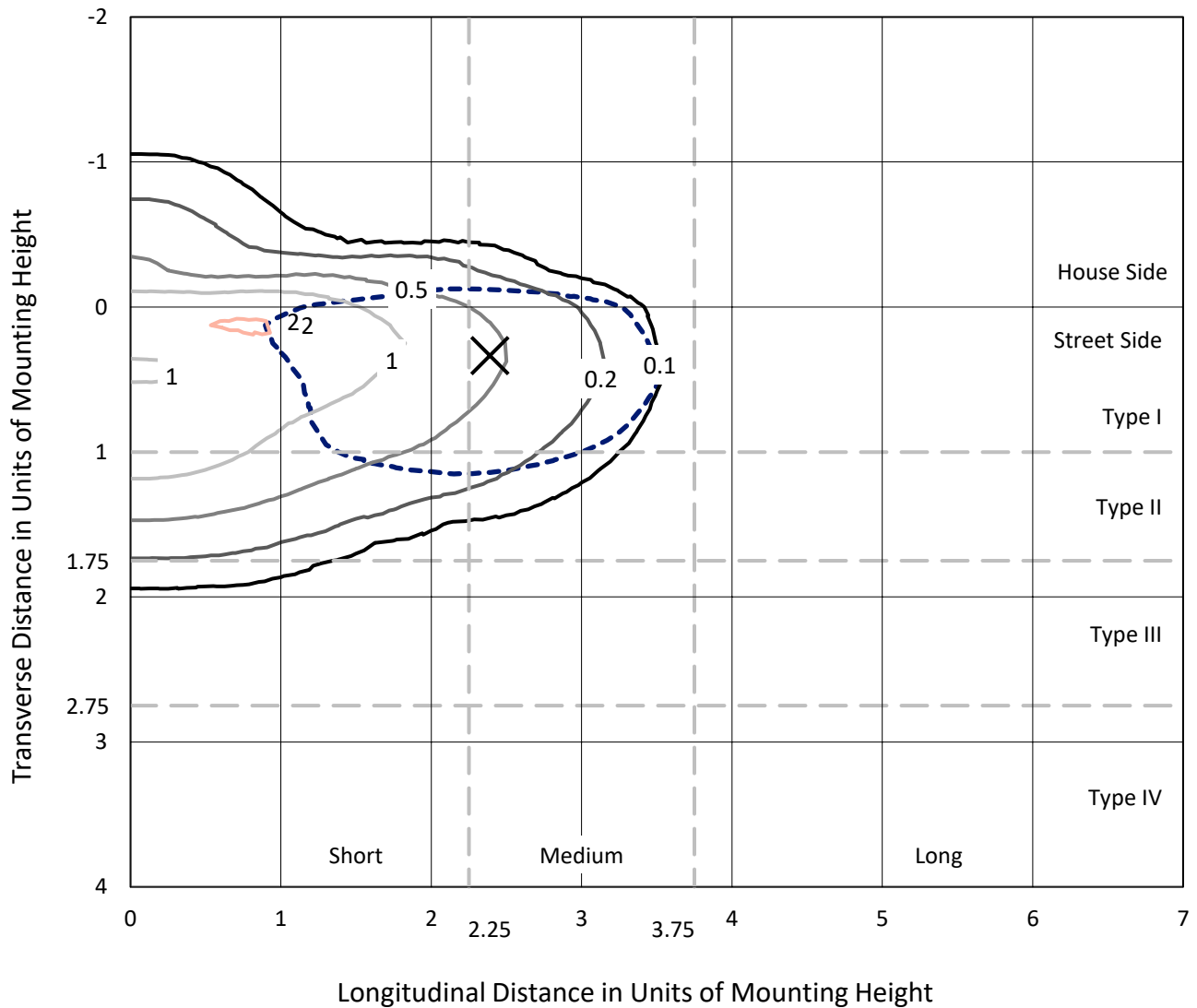
Lumens per Lamp: N/A  
Luminaire Lumens: 6050 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 57.3  
Input Voltage (V): 120.0  
Input Current (Ain): 0.484  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.038  
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

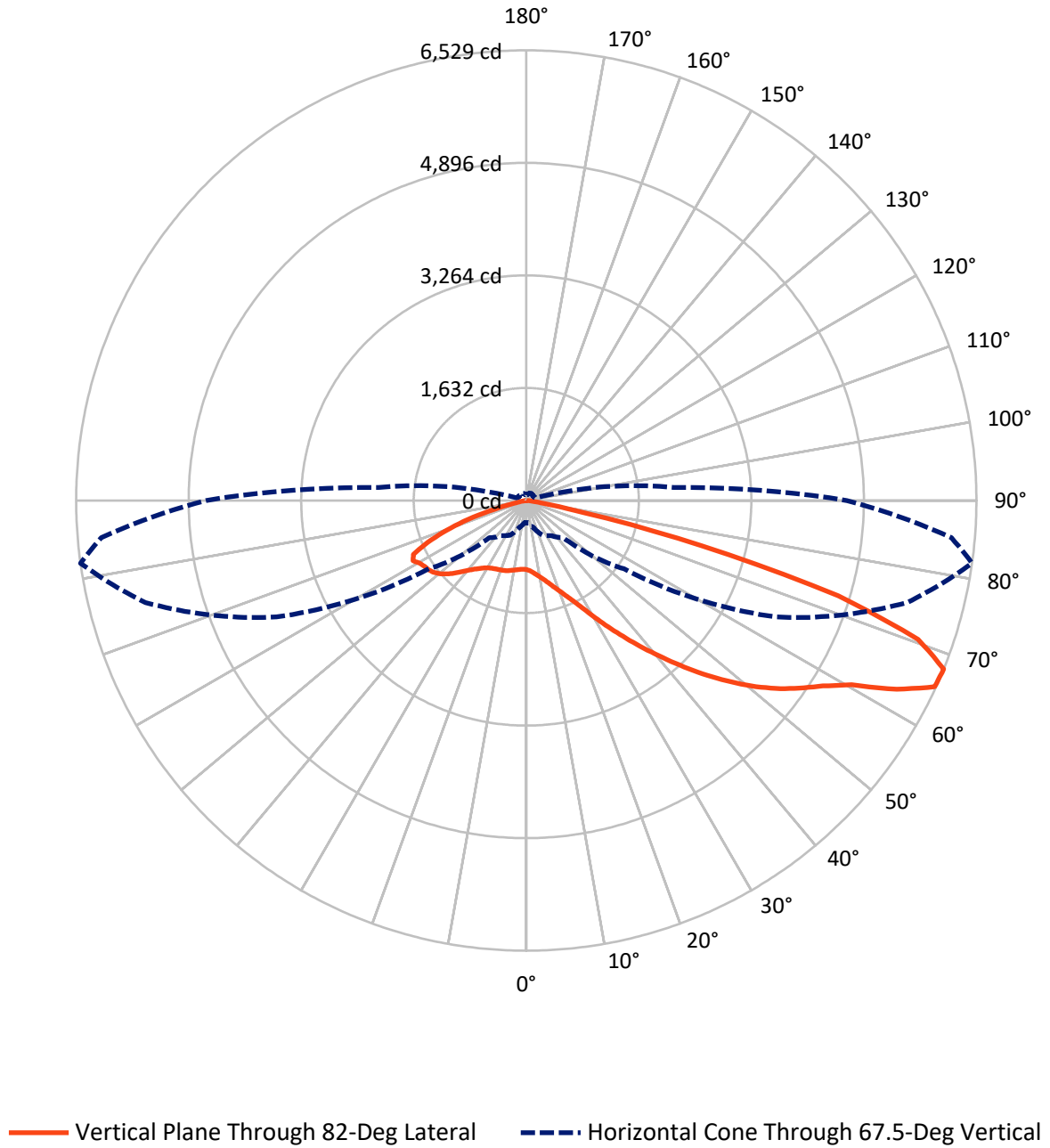
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1095.9	0.0	1095.9
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	4954.1	0.0	4954.1
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	6050.0	0.0	6050.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.3	1.5
10°-20°	232.0	3.8
20°-30°	371.7	6.1
30°-40°	657.2	10.9
40°-50°	1151.5	19.0
50°-60°	1535.8	25.4
60°-70°	1429.7	23.6
70°-80°	548.7	9.1
80°-90°	34.1	0.6
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°	6050.0	100.0
0°-180°	6050.0	100.0

**Coefficient of Utilization**



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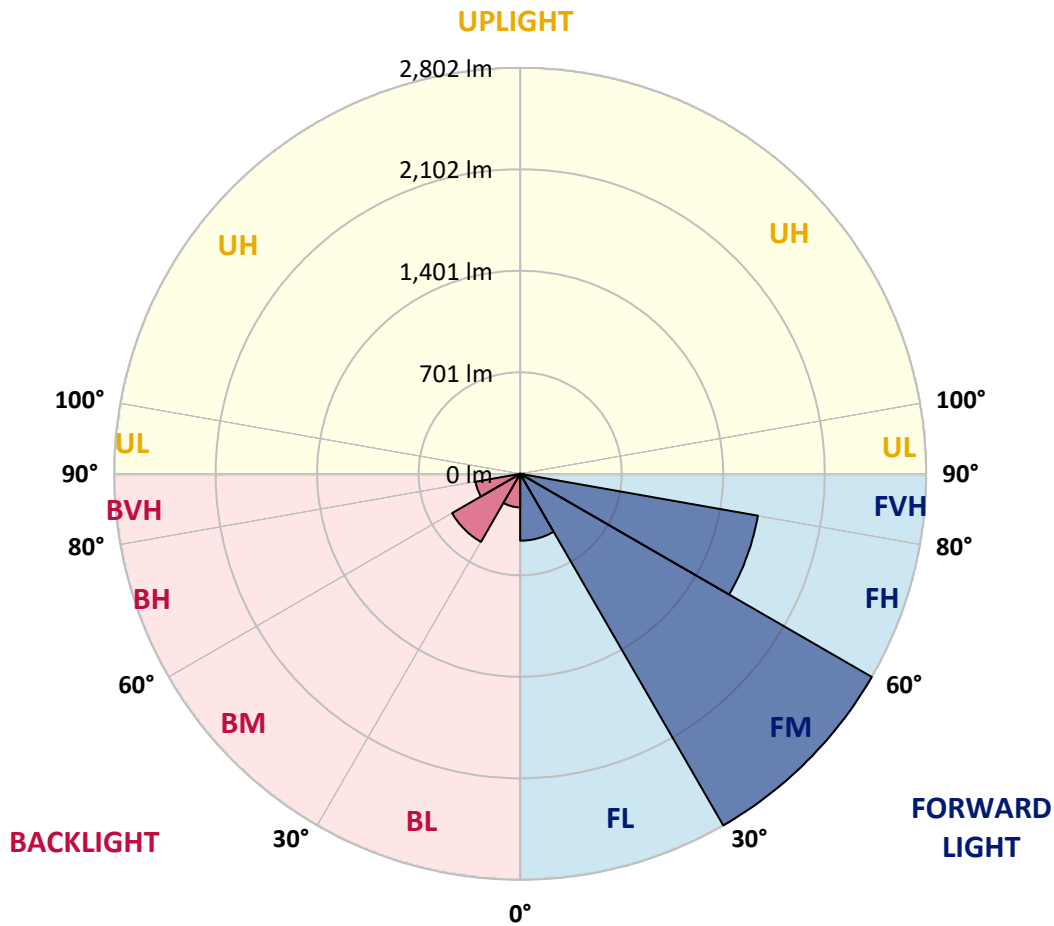
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	461.5	7.6			
FM (30°-60°)	2802.1	46.3			
FH (60°-80°)	1665.7	27.5			G1/1800
FVH (80°-90°)	24.8	0.4			G1/100
BL (0°-30°)	231.5	3.8	B1/500		
BM (30°-60°)	542.4	9.0	B1/1000		
BH (60°-80°)	312.8	5.2	B1/500		G1/500
BVH (80°-90°)	9.3	0.2			G0/10
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



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3
2.5°	1059.3	1065.4	1062.0	1060.2	1057.2	1052.8	1049.3	1038.4	1027.1	1019.7	1017.1
5°	1080.7	1086.8	1086.3	1088.1	1090.3	1091.6	1090.7	1078.5	1062.4	1049.8	1042.4
7.5°	1062.4	1069.4	1075.0	1083.7	1099.0	1115.1	1122.9	1120.3	1103.8	1086.3	1077.2
10°	1010.6	1018.0	1031.5	1051.9	1084.2	1119.0	1148.2	1161.7	1151.3	1132.1	1119.5
12.5°	915.6	923.0	949.6	994.0	1048.0	1108.6	1164.3	1200.5	1203.1	1183.9	1169.1
15°	808.9	816.3	844.6	900.4	982.7	1079.8	1173.0	1241.4	1264.5	1247.9	1230.1
17.5°	742.7	749.2	770.5	815.4	901.2	1022.3	1170.0	1285.0	1337.7	1324.6	1303.3
20°	722.6	728.3	738.3	769.7	841.1	962.6	1149.9	1325.9	1416.5	1409.1	1385.2
22.5°	744.0	749.2	752.3	766.2	811.1	923.4	1124.7	1367.7	1508.0	1508.9	1479.7
25°	793.2	798.4	794.9	803.7	823.3	911.2	1115.1	1417.0	1623.0	1632.6	1599.5
27.5°	874.2	874.7	866.4	865.9	869.0	929.5	1125.1	1469.7	1768.0	1785.9	1745.0
30°	1036.7	1030.2	998.4	963.9	948.3	984.4	1153.0	1532.0	1939.2	1971.0	1919.6
32.5°	1287.2	1277.6	1219.2	1136.9	1054.1	1072.8	1203.1	1603.0	2125.7	2183.2	2120.4
35°	1559.0	1556.3	1495.4	1373.0	1228.3	1198.7	1284.5	1696.2	2329.1	2420.5	2346.1
37.5°	1811.6	1810.3	1775.4	1631.3	1455.3	1374.3	1415.2	1818.1	2546.9	2679.3	2591.3
40°	2042.5	2046.4	2011.5	1882.6	1705.3	1599.5	1592.9	1968.8	2789.0	2961.1	2856.6
42.5°	2242.0	2246.3	2211.0	2115.6	1952.3	1848.6	1811.2	2153.5	3025.6	3263.8	3140.1
45°	2377.4	2404.4	2399.2	2323.0	2205.8	2098.2	2073.4	2385.3	3295.2	3584.9	3439.8
47.5°	2415.8	2440.6	2479.8	2490.2	2418.8	2313.0	2342.6	2664.5	3567.9	3906.3	3741.2
50°	2321.2	2344.3	2425.8	2534.2	2583.9	2551.2	2604.4	2963.7	3847.1	4226.9	4037.0
52.5°	2134.8	2158.3	2261.1	2432.7	2635.3	2738.1	2867.0	3258.6	4117.6	4530.5	4317.1
55°	1865.2	1890.0	2022.0	2216.3	2537.3	2815.2	3086.1	3553.1	4365.4	4803.6	4569.7
57.5°	1498.4	1516.7	1653.9	1925.7	2290.7	2738.5	3247.7	3874.5	4598.9	5071.9	4820.2
60°	976.6	992.7	1152.1	1455.3	1882.2	2482.4	3280.0	4233.0	4909.0	5420.9	5157.8
62.5°	649.5	660.3	754.9	977.5	1325.5	1990.6	3091.3	4519.2	5363.8	6028.1	5736.6
65°	445.6	456.5	551.0	706.1	856.4	1316.8	2549.0	4481.3	5775.9	6510.2	6165.7
67.5°	318.0	327.1	407.3	553.6	619.8	764.9	1728.0	3996.9	5716.6	6528.5	6188.8
70°	227.8	233.0	299.2	431.2	492.6	459.5	960.9	3056.9	5005.3	6028.5	5717.5
72.5°	159.4	161.2	207.8	328.4	396.8	335.4	457.4	2038.1	3785.7	4731.8	4432.5
75°	108.0	110.2	139.8	240.9	318.4	256.1	242.2	1092.9	2222.4	2619.2	2347.8
77.5°	66.2	67.1	90.2	164.7	238.3	195.1	155.9	463.0	859.8	844.2	719.6
80°	37.5	37.5	57.5	102.4	162.5	125.9	109.3	196.9	272.2	239.1	210.8
82.5°	20.9	21.3	41.8	63.6	107.6	74.5	60.1	91.0	117.6	104.1	90.6
85°	8.7	9.6	25.7	30.1	51.4	37.0	24.4	38.3	43.6	38.8	28.3
87.5°	0.9	1.3	7.8	5.7	6.1	7.4	3.5	7.4	6.1	6.1	4.4
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°	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3
2.5°	1008.8	1002.3	985.7	966.6	941.3	929.1	912.5	901.2	891.6	892.5	883.8
5°	1028.4	1011.9	974.8	928.7	871.2	830.2	786.7	756.6	732.2	727.0	715.2
7.5°	1055.4	1029.3	964.4	881.2	784.1	710.4	644.7	602.4	572.4	562.8	553.2
10°	1090.3	1052.4	950.9	821.5	681.7	588.0	517.5	484.4	463.9	456.9	451.7
12.5°	1130.8	1078.9	933.0	748.8	576.3	486.1	441.2	424.7	418.2	416.0	414.7
15°	1181.7	1112.0	906.0	662.5	487.0	423.8	404.7	402.5	403.4	402.5	402.0
17.5°	1242.3	1148.2	862.0	573.7	426.9	392.0	385.1	386.8	389.0	388.5	387.7
20°	1308.5	1183.9	805.8	494.8	385.9	369.4	365.5	367.2	368.9	368.1	367.6
22.5°	1383.9	1222.3	743.5	433.4	358.5	348.5	344.1	344.5	344.5	342.8	341.9
25°	1474.0	1264.5	678.2	389.8	337.6	329.7	324.5	322.8	320.2	314.9	314.1
27.5°	1581.6	1309.4	615.5	359.4	321.0	313.6	307.5	303.2	296.6	287.9	287.1
30°	1702.7	1363.8	562.3	340.2	308.0	300.6	293.6	287.1	277.5	266.6	265.7
32.5°	1845.1	1422.2	523.6	327.6	296.2	288.4	280.1	272.2	261.8	250.9	251.3
35°	2015.0	1492.7	500.9	318.8	287.1	276.6	267.4	258.7	250.9	241.3	240.4
37.5°	2199.3	1567.7	494.0	314.5	281.0	264.8	254.4	248.3	247.4	241.7	241.3
40°	2400.9	1656.5	499.2	311.9	274.4	253.5	242.2	240.9	243.1	233.0	233.5
42.5°	2614.4	1761.9	507.9	308.8	265.3	242.2	231.3	231.3	229.6	215.6	215.6
45°	2845.2	1883.5	516.6	301.4	254.4	230.9	222.6	219.5	212.1	198.6	198.2
47.5°	3077.8	2007.2	523.1	287.9	241.3	221.3	213.9	206.9	196.0	183.8	183.4
50°	3298.7	2118.2	516.2	267.9	226.5	212.1	204.3	194.7	182.9	174.7	173.4
52.5°	3496.0	2214.5	486.5	244.4	210.8	202.5	195.6	185.6	176.0	167.3	166.4
55°	3667.6	2292.5	434.3	222.1	196.9	194.3	187.3	174.7	161.6	154.2	153.3
57.5°	3832.3	2351.7	368.9	203.9	184.3	185.1	174.7	163.3	151.1	143.3	142.4
60°	4051.4	2431.0	302.7	186.9	170.7	173.4	162.0	153.8	138.5	128.5	127.2
62.5°	4401.6	2554.3	240.4	166.0	155.1	155.9	151.1	141.1	122.8	111.1	110.2
65°	4679.5	2509.0	189.5	143.3	137.2	138.5	138.5	127.6	108.0	94.5	93.2
67.5°	4648.1	2148.3	151.1	121.1	120.2	121.1	124.1	115.0	95.8	84.9	83.2
70°	4281.8	1708.8	121.1	100.6	104.5	102.4	111.1	105.0	86.2	75.4	74.0
72.5°	3493.8	1231.0	92.3	83.2	80.1	83.6	100.2	94.5	71.9	59.7	58.4
75°	2041.6	656.9	68.8	65.8	57.9	69.7	88.9	80.6	54.9	44.0	42.7
77.5°	664.7	229.1	50.5	48.3	43.1	56.2	75.8	68.0	44.9	34.8	33.5
80°	178.2	69.3	34.4	31.8	27.9	41.8	60.1	54.0	32.2	22.7	22.2
82.5°	71.4	29.2	20.0	17.9	15.2	28.7	47.5	43.6	24.0	14.4	14.4
85°	23.1	9.6	7.4	5.7	7.0	17.9	28.3	29.6	17.0	7.4	5.7
87.5°	3.0	1.3	1.3	1.7	1.3	3.0	8.7	8.3	4.8	0.9	0.0
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)