

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: P882236

Luminaire Tested: **NAV-SB2A-735-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882236  
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-735-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

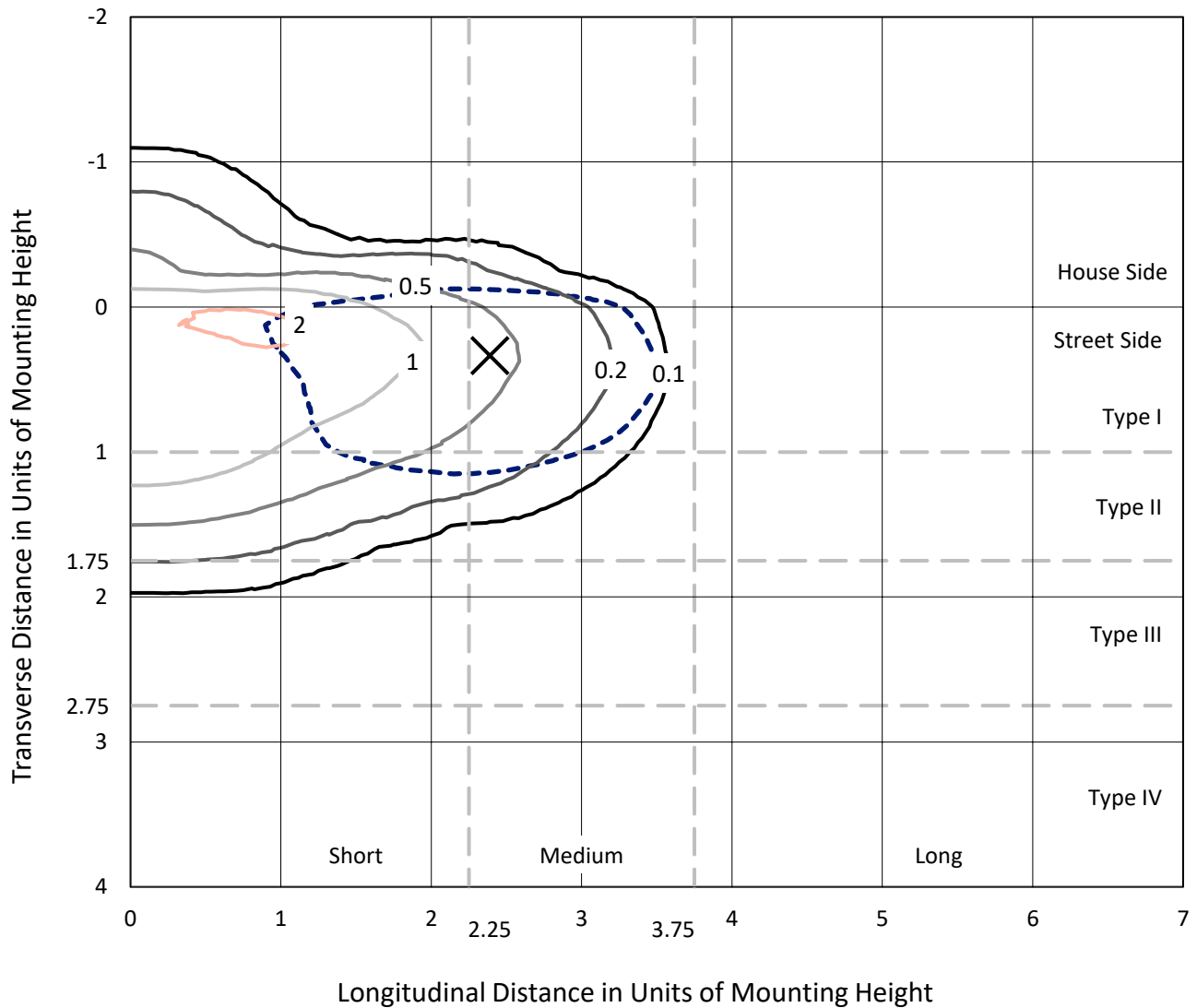
Lumens per Lamp: N/A  
Luminaire Lumens: 6676 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 57.3  
Input Voltage (V): 120.0  
Input Current (Ain): 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

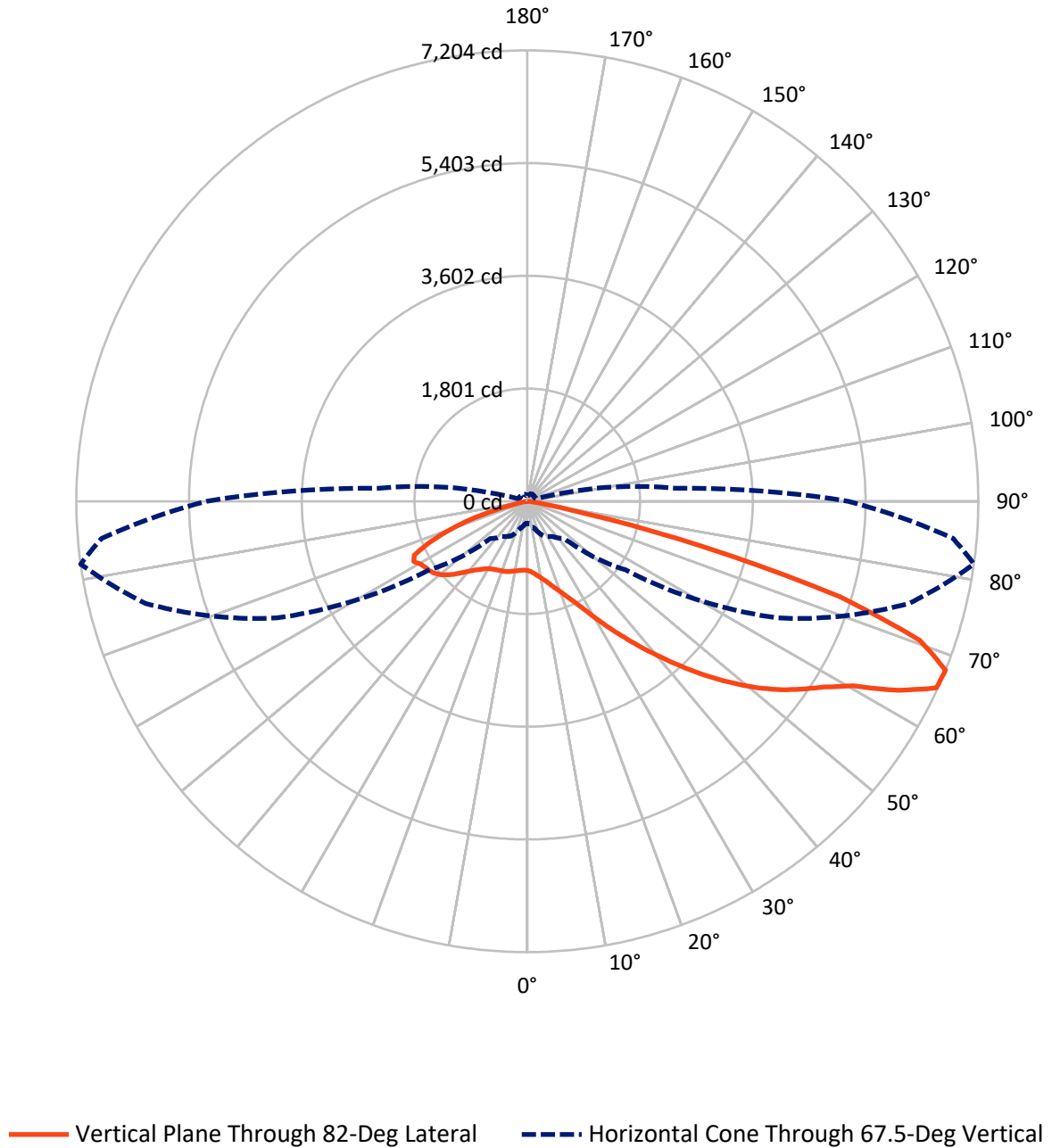
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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	1209.3	0.0	1209.3
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	5466.7	0.0	5466.7
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	6676.0	0.0	6676.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.5	1.5
10°-20°	256.1	3.8
20°-30°	410.1	6.1
30°-40°	725.2	10.9
40°-50°	1270.6	19.0
50°-60°	1694.7	25.4
60°-70°	1577.7	23.6
70°-80°	605.5	9.1
80°-90°	37.6	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°	6676.0	100.0
0°-180°	6676.0	100.0

**Coefficient of Utilization**



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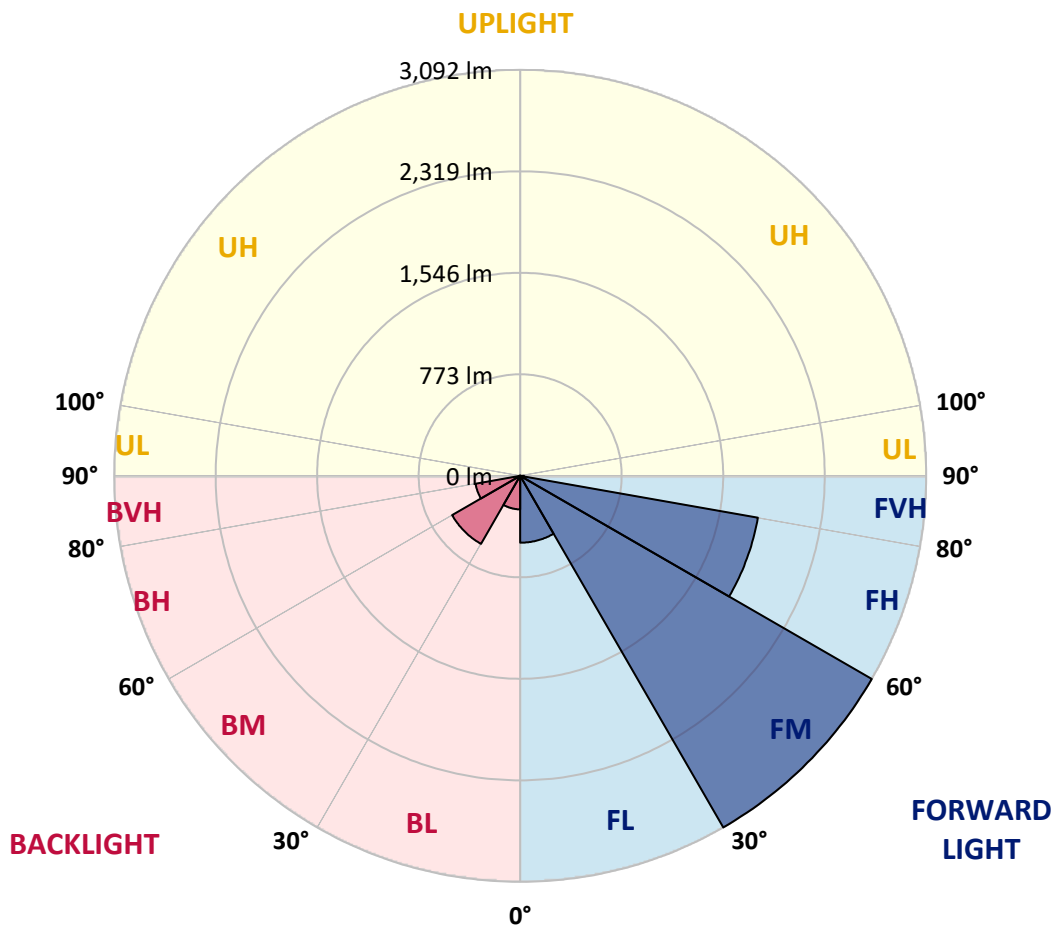
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	509.3	7.6			
FM (30°-60°)	3092.1	46.3			
FH (60°-80°)	1838.0	27.5			G2/5000
FVH (80°-90°)	27.3	0.4			G1/100
BL (0°-30°)	255.4	3.8	B1/500		
BM (30°-60°)	598.5	9.0	B1/1000		
BH (60°-80°)	345.2	5.2	B1/500		G1/500
BVH (80°-90°)	10.3	0.2			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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0
2.5°	1169.0	1175.7	1171.8	1169.9	1166.5	1161.7	1157.9	1145.9	1133.4	1125.2	1122.3
5°	1192.5	1199.2	1198.8	1200.7	1203.1	1204.5	1203.6	1190.1	1172.3	1158.4	1150.2
7.5°	1172.3	1180.0	1186.3	1195.9	1212.7	1230.5	1239.1	1236.2	1218.0	1198.8	1188.7
10°	1115.1	1123.3	1138.2	1160.8	1196.4	1234.8	1267.0	1281.9	1270.4	1249.2	1235.3
12.5°	1010.3	1018.5	1047.8	1096.9	1156.5	1223.3	1284.8	1324.7	1327.6	1306.4	1290.1
15°	892.6	900.7	932.0	993.5	1084.4	1191.5	1294.4	1369.9	1395.3	1377.1	1357.4
17.5°	819.5	826.7	850.3	899.8	994.5	1128.1	1291.0	1417.9	1476.1	1461.7	1438.1
20°	797.4	803.7	814.7	849.3	928.1	1062.2	1268.9	1463.1	1563.1	1554.9	1528.5
22.5°	821.0	826.7	830.1	845.5	895.0	1019.0	1241.1	1509.3	1664.0	1665.0	1632.8
25°	875.3	881.0	877.2	886.8	908.4	1005.5	1230.5	1563.6	1790.9	1801.5	1765.0
27.5°	964.7	965.2	956.0	955.5	958.9	1025.7	1241.5	1621.7	1951.0	1970.7	1925.5
30°	1144.0	1136.7	1101.7	1063.7	1046.4	1086.3	1272.3	1690.5	2139.9	2175.0	2118.2
32.5°	1420.3	1409.8	1345.4	1254.5	1163.2	1183.9	1327.6	1768.8	2345.6	2409.0	2339.8
35°	1720.3	1717.4	1650.1	1515.0	1355.4	1322.8	1417.5	1871.7	2570.1	2671.0	2588.8
37.5°	1999.0	1997.6	1959.1	1800.1	1605.9	1516.5	1561.6	2006.3	2810.4	2956.5	2859.4
40°	2253.8	2258.1	2219.7	2077.4	1881.8	1765.0	1757.8	2172.6	3077.6	3267.5	3152.1
42.5°	2473.9	2478.7	2439.8	2334.5	2154.3	2039.9	1998.6	2376.4	3338.6	3601.5	3465.0
45°	2623.4	2653.2	2647.4	2563.3	2434.0	2315.3	2287.9	2632.1	3636.2	3955.8	3795.7
47.5°	2665.7	2693.1	2736.4	2747.9	2669.1	2552.3	2585.0	2940.2	3937.0	4310.5	4128.3
50°	2561.4	2586.9	2676.8	2796.5	2851.2	2815.2	2873.8	3270.4	4245.1	4664.3	4454.7
52.5°	2355.7	2381.6	2495.1	2684.5	2908.0	3021.4	3163.7	3595.8	4543.6	4999.3	4763.8
55°	2058.2	2085.6	2231.2	2445.6	2799.8	3106.5	3405.4	3920.7	4817.1	5300.7	5042.6
57.5°	1653.5	1673.6	1825.0	2125.0	2527.8	3021.9	3583.8	4275.4	5074.8	5596.7	5318.9
60°	1077.6	1095.4	1271.3	1605.9	2076.9	2739.3	3619.3	4671.0	5417.0	5981.8	5691.4
62.5°	716.7	728.7	833.0	1078.6	1462.6	2196.6	3411.2	4986.8	5918.8	6651.8	6330.2
65°	491.7	503.7	608.0	779.1	945.0	1453.0	2812.8	4945.0	6373.5	7183.9	6803.7
67.5°	350.9	361.0	449.4	610.9	684.0	844.0	1906.8	4410.5	6308.1	7204.1	6829.1
70°	251.4	257.2	330.2	475.8	543.6	507.1	1060.3	3373.2	5523.2	6652.3	6309.1
72.5°	175.9	177.8	229.3	362.4	437.9	370.1	504.7	2249.0	4177.4	5221.4	4891.1
75°	119.2	121.6	154.3	265.8	351.4	282.6	267.2	1206.0	2452.3	2890.2	2590.7
77.5°	73.1	74.0	99.5	181.7	262.9	215.3	172.1	510.9	948.8	931.5	794.0
80°	41.3	41.3	63.4	113.0	179.3	138.9	120.6	217.3	300.4	263.9	232.6
82.5°	23.1	23.6	46.1	70.2	118.7	82.2	66.3	100.5	129.8	114.9	100.0
85°	9.6	10.6	28.4	33.2	56.7	40.9	26.9	42.3	48.1	42.8	31.2
87.5°	1.0	1.4	8.7	6.2	6.7	8.2	3.8	8.2	6.7	6.7	4.8
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°	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0	1106.0
2.5°	1113.2	1106.0	1087.7	1066.6	1038.7	1025.2	1007.0	994.5	983.9	984.9	975.2
5°	1134.8	1116.6	1075.7	1024.8	961.3	916.1	868.1	834.9	808.0	802.2	789.2
7.5°	1164.6	1135.8	1064.2	972.4	865.2	783.9	711.4	664.7	631.6	621.0	610.4
10°	1203.1	1161.3	1049.3	906.5	752.2	648.9	571.0	534.5	511.9	504.2	498.4
12.5°	1247.8	1190.6	1029.6	826.2	635.9	536.4	486.9	468.6	461.4	459.0	457.6
15°	1304.0	1227.1	999.8	731.1	537.4	467.7	446.5	444.1	445.1	444.1	443.6
17.5°	1370.8	1267.0	951.2	633.0	471.0	432.6	424.9	426.8	429.2	428.7	427.8
20°	1443.9	1306.4	889.2	546.0	425.9	407.6	403.3	405.2	407.1	406.2	405.7
22.5°	1527.0	1348.7	820.5	478.3	395.6	384.5	379.7	380.2	380.2	378.3	377.3
25°	1626.5	1395.3	748.4	430.2	372.5	363.9	358.1	356.2	353.3	347.5	346.6
27.5°	1745.3	1444.8	679.2	396.5	354.2	346.1	339.3	334.5	327.3	317.7	316.8
30°	1878.9	1504.9	620.5	375.4	339.8	331.7	324.0	316.8	306.2	294.2	293.2
32.5°	2036.1	1569.3	577.7	361.5	326.8	318.2	309.1	300.4	288.9	276.9	277.3
35°	2223.5	1647.2	552.8	351.8	316.8	305.2	295.1	285.5	276.9	266.3	265.3
37.5°	2426.8	1729.9	545.1	347.0	310.0	292.2	280.7	274.0	273.0	266.8	266.3
40°	2649.4	1827.9	550.8	344.1	302.8	279.7	267.2	265.8	268.2	257.2	257.6
42.5°	2884.9	1944.2	560.4	340.8	292.7	267.2	255.2	255.2	253.3	237.9	237.9
45°	3139.6	2078.4	570.1	332.6	280.7	254.7	245.6	242.3	234.1	219.2	218.7
47.5°	3396.3	2214.9	577.3	317.7	266.3	244.2	236.0	228.3	216.3	202.8	202.4
50°	3640.0	2337.4	569.6	295.6	249.9	234.1	225.4	214.9	201.9	192.7	191.3
52.5°	3857.7	2443.7	536.9	269.6	232.6	223.5	215.8	204.8	194.2	184.6	183.6
55°	4047.1	2529.7	479.2	245.1	217.3	214.4	206.7	192.7	178.3	170.2	169.2
57.5°	4228.8	2595.1	407.1	224.9	203.3	204.3	192.7	180.2	166.8	158.1	157.2
60°	4470.6	2682.5	334.1	206.2	188.4	191.3	178.8	169.7	152.8	141.8	140.4
62.5°	4857.0	2818.6	265.3	183.1	171.1	172.1	166.8	155.7	135.5	122.6	121.6
65°	5163.7	2768.6	209.1	158.1	151.4	152.8	152.8	140.8	119.2	104.3	102.9
67.5°	5129.1	2370.6	166.8	133.6	132.7	133.6	137.0	126.9	105.7	93.7	91.8
70°	4724.8	1885.6	133.6	111.0	115.4	113.0	122.6	115.8	95.2	83.2	81.7
72.5°	3855.3	1358.3	101.9	91.8	88.4	92.3	110.6	104.3	79.3	65.8	64.4
75°	2252.8	724.8	75.9	72.6	63.9	76.9	98.1	88.9	60.6	48.5	47.1
77.5°	733.5	252.8	55.8	53.4	47.6	62.0	83.6	75.0	49.5	38.5	37.0
80°	196.6	76.4	38.0	35.1	30.8	46.1	66.3	59.6	35.6	25.0	24.5
82.5°	78.8	32.2	22.1	19.7	16.8	31.7	52.4	48.1	26.4	15.9	15.9
85°	25.5	10.6	8.2	6.2	7.7	19.7	31.2	32.7	18.7	8.2	6.2
87.5°	3.4	1.4	1.4	1.9	1.4	3.4	9.6	9.1	5.3	1.0	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)