

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: P959225

Luminaire Tested: **NAV-SB1A-727-U-SL2**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959225  
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-727-U-SL2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT  
ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

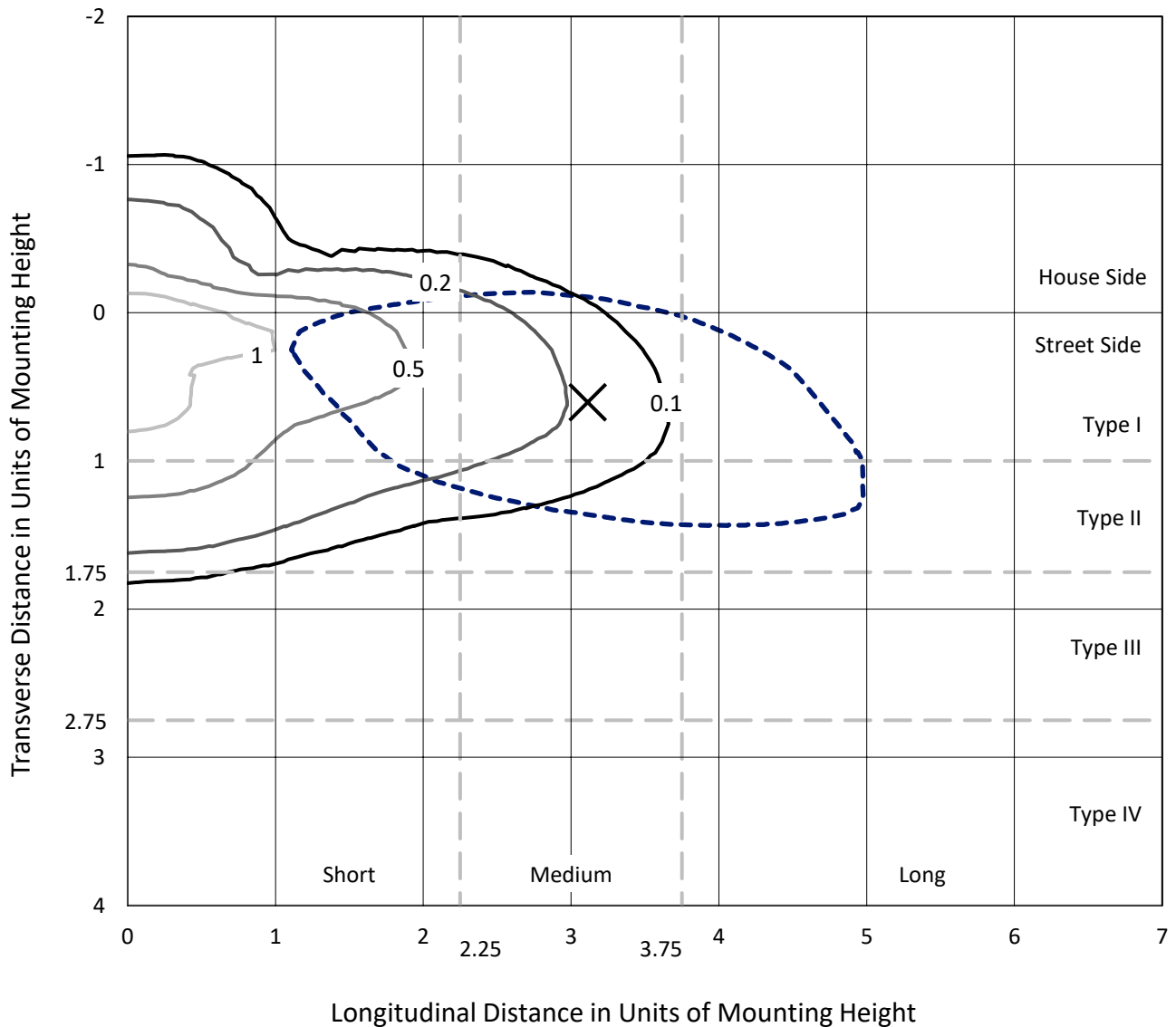
Lumens per Lamp: N/A  
Luminaire Lumens: 4240.4 lumens  
Efficiency: N/A  
Efficacy: 137.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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



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### Iso-Footcandle Lines of Horizontal Illumination

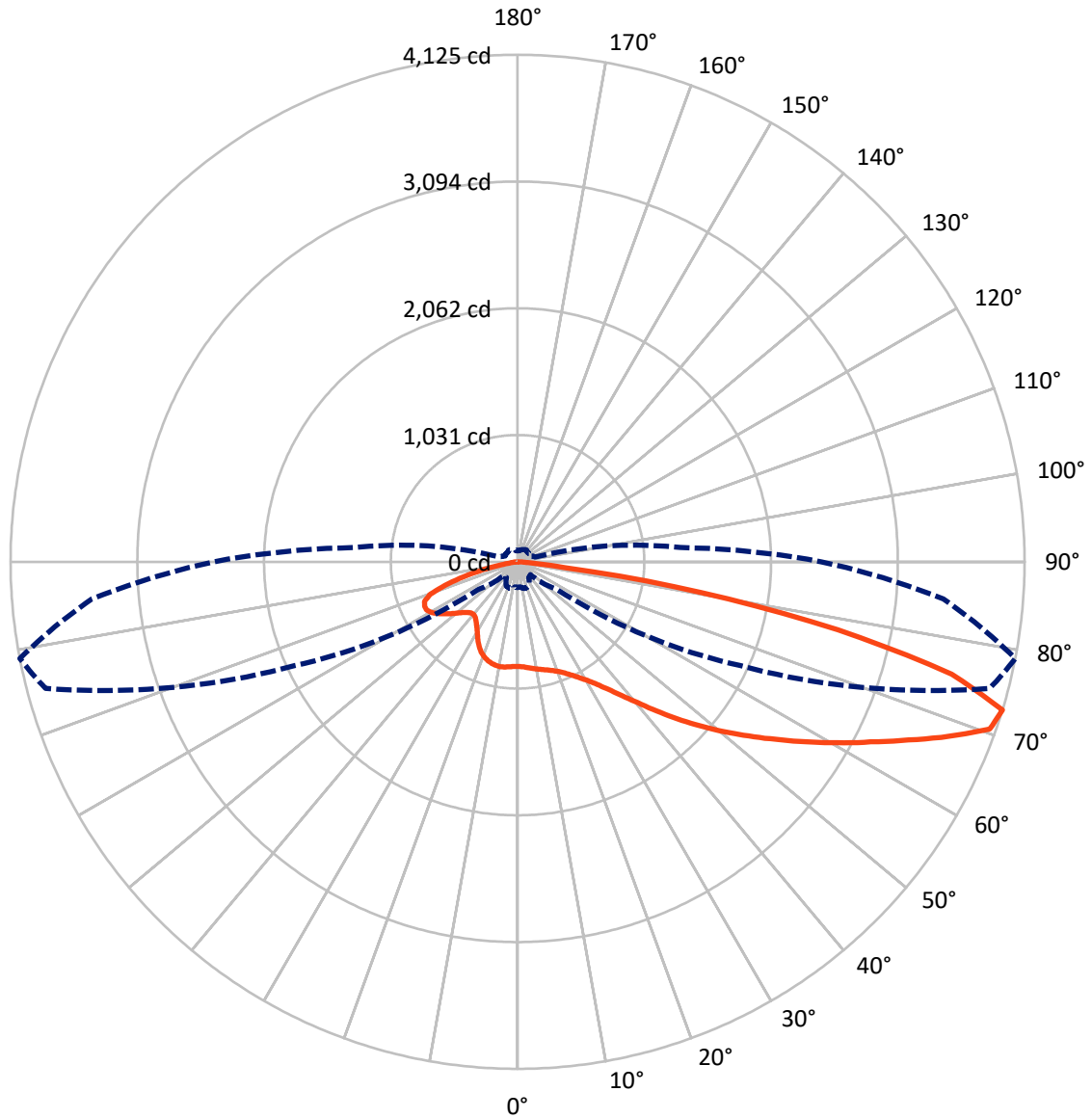
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	933.1	0.0	933.1
	% Fixture	22.0	0.0	22.0
<b>Street Side</b>	Lumens	3307.3	0.0	3307.3
	% Fixture	78.0	0.0	78.0
<b>Total</b>	Lumens	4240.4	0.0	4240.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.3	1.8
10°-20°	202.0	4.8
20°-30°	326.0	7.7
30°-40°	489.2	11.5
40°-50°	694.0	16.4
50°-60°	876.4	20.7
60°-70°	890.1	21.0
70°-80°	606.7	14.3
80°-90°	78.7	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°	4240.4	100.0
0°-180°	4240.4	100.0

**Coefficient of Utilization**

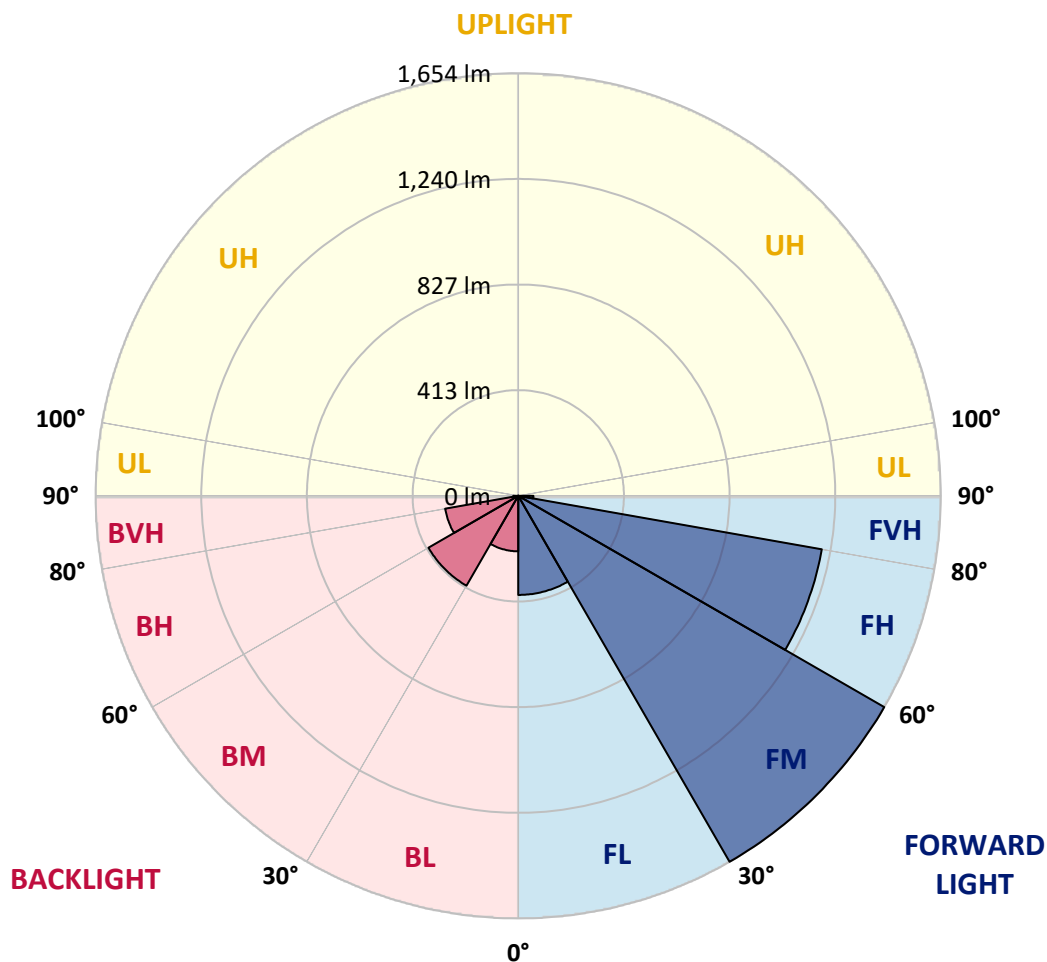


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	387.9	9.1			
FM (30°-60°)	1653.8	39.0			
FH (60°-80°)	1206.3	28.4			G1/1800
FVH (80°-90°)	59.3	1.4			G1/100
BL (0°-30°)	217.4	5.1	B1/500		
BM (30°-60°)	405.8	9.6	B1/1000		
BH (60°-80°)	290.5	6.9	B1/500		G1/500
BVH (80°-90°)	19.4	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	851.3	851.3	851.3	851.3	851.3	851.3	851.3	851.3	851.3	851.3	851.3
2.5°	851.7	847.7	850.1	849.2	850.3	851.7	852.1	852.8	855.1	854.8	854.5
5°	849.9	845.8	849.2	848.1	851.0	854.1	856.8	859.3	862.8	864.5	862.2
7.5°	846.0	843.4	846.8	850.1	855.5	860.2	864.0	869.6	874.7	875.7	877.2
10°	823.9	821.8	829.7	838.4	853.2	866.0	874.3	880.8	886.4	887.3	889.6
12.5°	800.7	798.3	807.1	819.0	843.0	866.0	883.6	892.1	897.0	899.8	903.2
15°	796.9	794.9	799.9	810.2	830.1	860.0	889.8	905.5	909.8	913.2	914.5
17.5°	815.4	811.5	813.5	817.1	828.8	854.3	894.7	920.8	927.2	930.8	930.8
20°	857.9	852.6	849.4	842.2	840.2	855.3	894.3	939.1	947.7	952.1	953.2
22.5°	914.7	911.1	904.4	886.2	866.4	866.2	902.8	962.7	978.7	982.9	980.2
25°	983.4	978.0	969.4	944.7	906.8	888.1	917.2	992.7	1019.5	1020.6	1012.7
27.5°	1062.3	1054.2	1042.5	1010.0	958.9	922.1	939.1	1027.3	1066.3	1065.9	1049.7
30°	1145.5	1137.4	1125.1	1085.6	1021.2	968.1	969.6	1064.6	1122.0	1119.5	1091.9
32.5°	1206.3	1200.3	1197.8	1167.3	1093.1	1022.3	1004.6	1105.8	1190.6	1188.4	1149.7
35°	1253.0	1245.1	1248.0	1232.6	1171.3	1083.1	1047.4	1155.0	1274.1	1273.8	1225.8
37.5°	1299.2	1292.2	1294.7	1284.3	1243.7	1160.3	1099.7	1215.0	1377.4	1382.4	1317.7
40°	1341.3	1333.9	1343.8	1334.1	1300.0	1242.4	1159.2	1283.0	1497.2	1506.6	1429.1
42.5°	1366.6	1360.8	1377.2	1377.4	1348.9	1311.7	1224.5	1357.9	1635.8	1656.9	1565.9
45°	1375.4	1373.4	1398.1	1403.2	1392.3	1351.9	1283.2	1439.6	1785.2	1822.9	1721.7
47.5°	1366.0	1362.2	1396.3	1415.3	1424.1	1370.7	1331.9	1528.0	1937.8	1992.9	1891.7
50°	1318.5	1311.1	1361.7	1401.9	1433.1	1383.0	1381.0	1630.0	2111.1	2171.5	2062.7
52.5°	1233.0	1227.3	1285.0	1354.7	1413.4	1389.1	1436.2	1741.5	2275.8	2353.8	2237.9
55°	1123.7	1116.3	1179.9	1270.9	1364.2	1387.1	1491.4	1866.2	2470.0	2549.2	2418.9
57.5°	950.6	935.8	1016.1	1123.7	1284.1	1384.6	1548.8	1990.2	2667.4	2762.3	2612.0
60°	698.0	676.1	774.5	902.1	1127.6	1360.6	1619.9	2129.3	2904.2	2989.7	2822.8
62.5°	406.4	393.6	458.1	577.2	849.9	1219.3	1659.8	2291.0	3137.1	3226.8	3030.1
65°	315.6	312.0	317.6	326.8	473.0	912.9	1536.7	2448.7	3433.1	3496.0	3246.1
67.5°	288.6	286.0	288.4	271.2	240.0	508.5	1215.8	2488.6	3750.4	3788.5	3435.2
70°	256.6	253.5	261.6	246.7	188.9	231.2	785.5	2343.8	4002.6	4074.2	3579.0
72.5°	209.1	205.4	224.3	217.6	159.1	148.5	394.5	1999.5	3976.2	4124.7	3476.0
75°	160.6	158.6	181.0	186.7	129.7	116.8	189.3	1486.2	3499.1	3648.7	2995.8
77.5°	124.7	123.1	134.6	155.0	104.6	90.6	116.4	942.7	2636.9	2663.2	2064.5
80°	93.6	89.1	99.6	120.0	81.4	66.2	78.9	549.8	1666.8	1510.8	898.5
82.5°	58.5	56.3	65.1	80.1	57.4	45.5	51.4	303.7	668.0	393.4	173.4
85°	33.4	32.5	35.5	45.7	31.2	26.2	29.4	134.2	122.0	83.8	52.3
87.5°	13.4	13.0	16.2	20.4	11.5	9.6	10.4	32.3	27.0	24.9	17.2
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°	851.3	851.3	851.3	851.3	851.3	851.3	851.3	851.3	851.3	851.3	851.3
2.5°	853.7	853.7	850.5	845.6	840.0	836.4	830.6	829.0	823.0	821.1	824.1
5°	864.0	862.2	852.6	838.7	819.6	802.1	782.8	770.7	753.7	747.6	752.0
7.5°	877.0	872.1	855.5	825.0	785.0	745.8	705.0	674.0	644.4	633.9	635.2
10°	888.9	881.9	853.7	800.3	731.2	663.3	598.2	552.7	518.1	504.0	507.2
12.5°	900.8	888.1	841.8	759.2	654.8	562.5	493.2	457.8	436.4	419.4	425.1
15°	912.0	894.1	823.4	704.3	570.8	477.3	426.2	397.9	380.9	369.6	371.7
17.5°	925.1	899.2	795.8	634.6	491.0	418.3	376.6	359.6	356.2	354.9	355.8
20°	943.2	903.9	759.5	556.5	432.2	371.3	349.7	348.1	347.9	347.3	349.4
22.5°	962.7	909.6	711.5	485.6	382.2	341.8	338.0	334.9	332.8	332.6	335.1
25°	985.8	911.3	651.4	427.5	339.6	327.9	323.5	318.8	317.3	317.3	318.8
27.5°	1008.2	905.3	581.4	377.1	315.6	315.2	309.3	307.7	307.5	308.2	310.0
30°	1030.6	893.8	511.9	330.4	301.7	301.7	299.7	300.8	301.7	303.9	305.4
32.5°	1061.0	881.7	453.8	295.8	289.6	287.3	289.4	291.6	292.5	295.4	297.9
35°	1105.4	873.2	407.5	277.1	277.1	274.1	275.2	274.8	272.8	271.4	274.5
37.5°	1164.1	872.8	369.4	268.2	266.5	266.0	266.3	263.3	255.4	246.1	246.3
40°	1234.8	884.9	340.0	262.2	260.9	263.5	262.2	254.4	232.8	216.5	216.0
42.5°	1329.6	919.4	321.2	254.8	258.8	262.2	256.9	229.7	215.1	204.1	203.7
45°	1441.4	975.5	311.6	246.9	255.0	259.0	233.1	221.2	209.5	196.3	195.4
47.5°	1567.8	1046.1	309.3	239.5	246.5	249.0	222.9	217.6	204.4	189.9	188.9
50°	1705.6	1129.9	315.4	230.8	234.2	225.6	219.6	214.6	201.0	186.9	185.3
52.5°	1848.0	1222.0	327.5	218.9	221.8	212.4	218.2	214.0	199.0	179.9	178.6
55°	1988.0	1314.9	339.2	205.0	209.3	200.5	214.4	211.3	189.7	168.2	167.1
57.5°	2130.2	1407.2	350.5	192.7	197.2	189.1	208.4	204.1	179.5	157.4	157.0
60°	2278.0	1497.0	356.0	180.8	183.9	178.6	199.2	191.8	167.8	146.5	145.8
62.5°	2416.4	1571.6	347.3	168.9	170.9	168.7	187.1	177.2	156.1	134.2	133.9
65°	2555.2	1616.1	320.3	157.2	157.6	156.5	170.0	161.5	142.5	123.4	122.0
67.5°	2681.1	1641.0	277.5	144.6	143.6	143.1	154.1	144.4	129.1	112.6	111.2
70°	2707.7	1577.8	212.0	129.9	129.9	128.7	136.6	126.7	114.6	101.2	100.8
72.5°	2473.1	1327.2	150.5	113.1	114.8	112.6	119.1	110.8	99.8	90.8	88.1
75°	1994.2	973.2	109.5	95.7	98.9	95.1	101.2	95.3	85.9	85.7	77.2
77.5°	1370.2	601.8	79.4	78.9	81.2	76.3	83.2	80.1	71.5	67.8	63.4
80°	584.8	240.0	57.9	61.0	61.0	56.5	64.6	65.5	58.1	56.3	56.3
82.5°	116.4	68.2	40.6	41.9	39.5	38.1	45.7	50.7	70.0	77.8	78.1
85°	35.0	25.1	24.5	22.9	20.2	20.4	27.0	50.9	62.8	35.9	31.0
87.5°	9.6	6.3	6.5	5.1	4.3	5.6	9.2	38.5	21.1	9.0	7.6
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)