

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: P882386

Luminaire Tested: **NAV-SB2B-727-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882386
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-SB2B-727-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 450mA 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: 7595 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

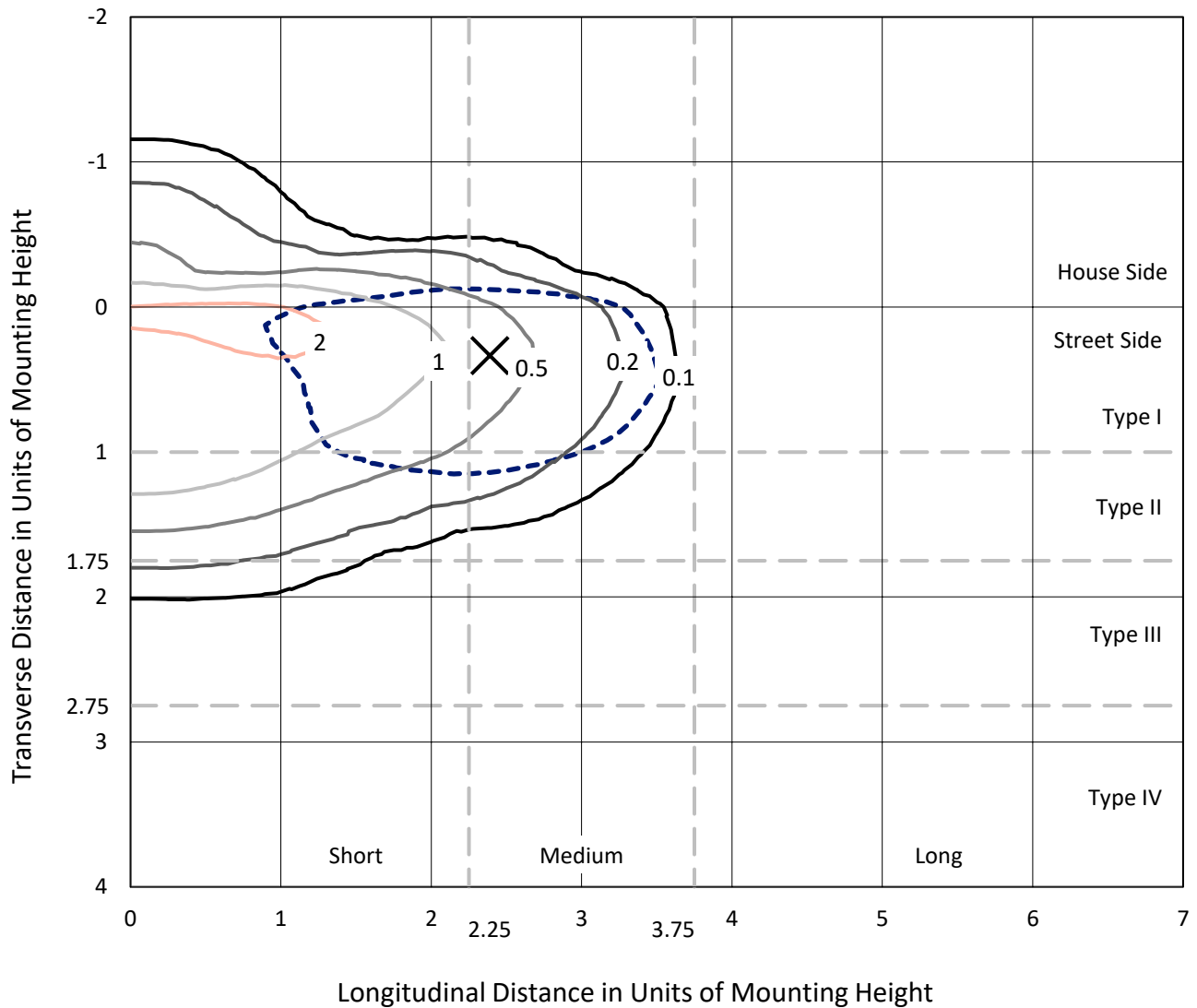
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

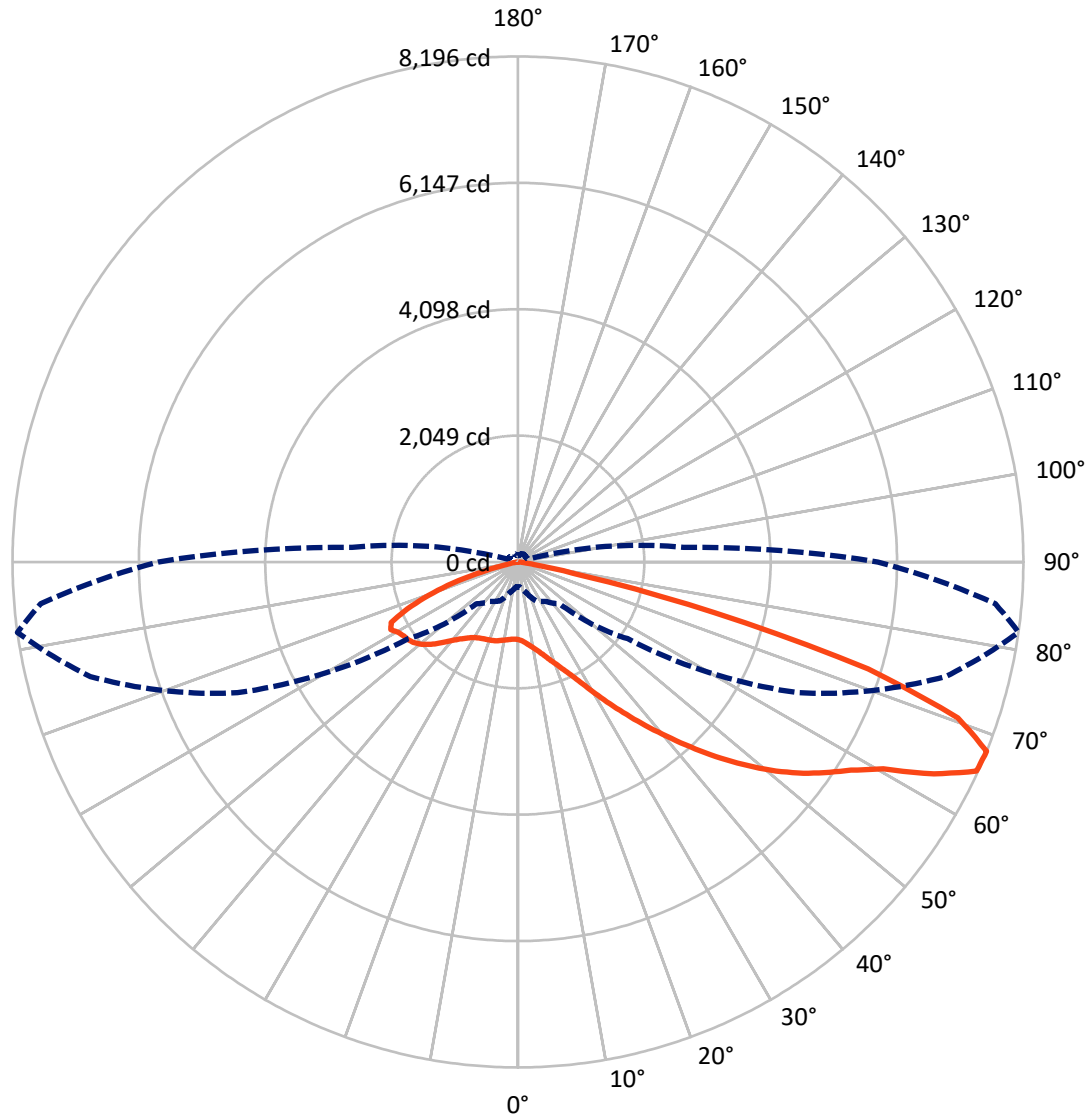
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1375.8	0.0	1375.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	6219.2	0.0	6219.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	7595.0	0.0	7595.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	1.5
10°-20°	291.3	3.8
20°-30°	466.6	6.1
30°-40°	825.0	10.9
40°-50°	1445.6	19.0
50°-60°	1928.0	25.4
60°-70°	1794.8	23.6
70°-80°	688.9	9.1
80°-90°	42.8	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°	7595.0	100.0
0°-180°	7595.0	100.0

Coefficient of Utilization



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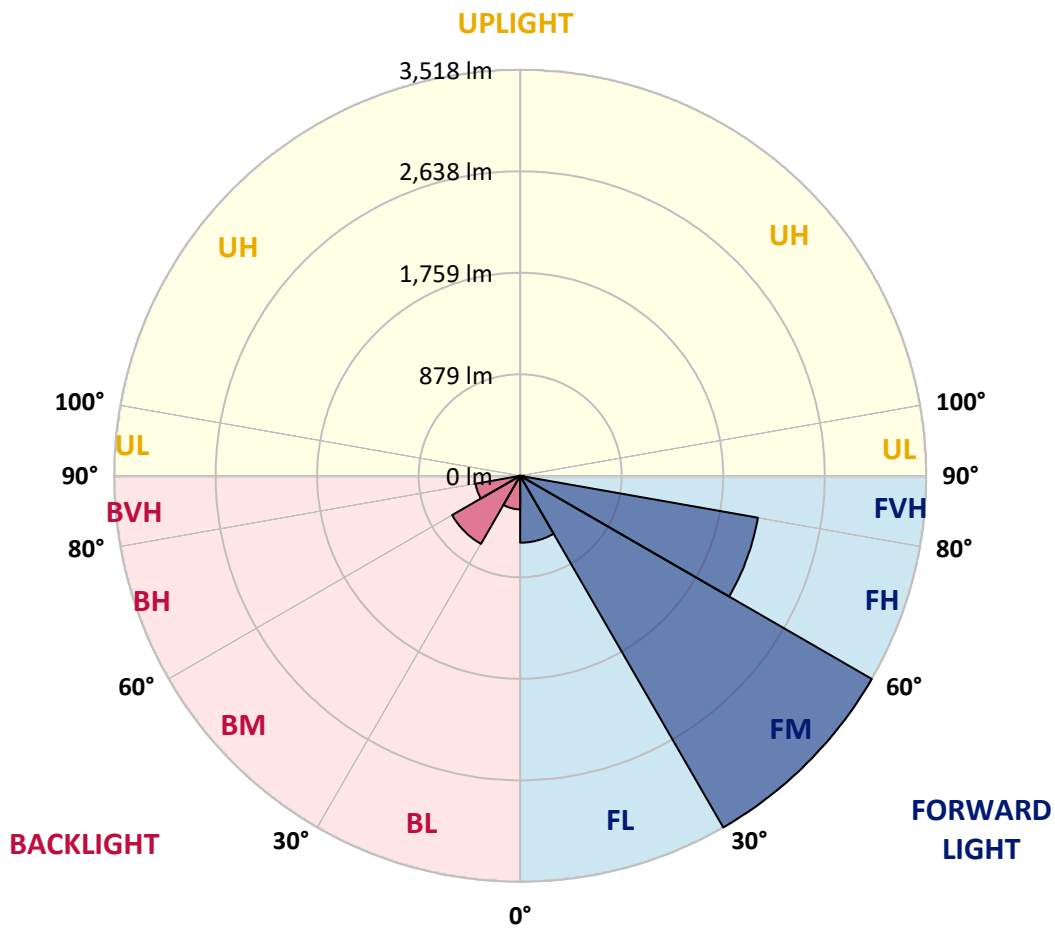
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	579.4	7.6			
FM (30°-60°)	3517.7	46.3			
FH (60°-80°)	2091.0	27.5			G2/5000
FVH (80°-90°)	31.1	0.4			G1/100
BL (0°-30°)	290.6	3.8	B1/500		
BM (30°-60°)	680.9	9.0	B1/1000		
BH (60°-80°)	392.7	5.2	B1/500		G1/500
BVH (80°-90°)	11.7	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°	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2
2.5°	1329.9	1337.5	1333.1	1331.0	1327.1	1321.7	1317.3	1303.6	1289.4	1280.1	1276.8
5°	1356.7	1364.3	1363.8	1366.0	1368.7	1370.3	1369.2	1353.9	1333.7	1317.8	1308.5
7.5°	1333.7	1342.4	1349.6	1360.5	1379.6	1399.9	1409.7	1406.4	1385.6	1363.8	1352.3
10°	1268.6	1277.9	1294.9	1320.6	1361.0	1404.8	1441.4	1458.4	1445.2	1421.2	1405.3
12.5°	1149.4	1158.7	1192.1	1247.8	1315.7	1391.7	1461.7	1507.0	1510.3	1486.3	1467.7
15°	1015.4	1024.7	1060.3	1130.3	1233.6	1355.6	1472.6	1558.4	1587.4	1566.6	1544.2
17.5°	932.3	940.5	967.3	1023.6	1131.4	1283.4	1468.8	1613.1	1679.3	1662.9	1636.1
20°	907.2	914.3	926.9	966.2	1055.9	1208.5	1443.6	1664.5	1778.3	1769.0	1738.9
22.5°	934.0	940.5	944.4	961.9	1018.2	1159.3	1411.9	1717.0	1893.1	1894.2	1857.5
25°	995.8	1002.3	997.9	1008.9	1033.5	1143.9	1399.9	1778.8	2037.5	2049.5	2007.9
27.5°	1097.5	1098.0	1087.6	1087.1	1090.9	1166.9	1412.4	1845.0	2219.5	2242.0	2190.6
30°	1301.4	1293.2	1253.3	1210.1	1190.4	1235.8	1447.4	1923.2	2434.4	2474.4	2409.8
32.5°	1615.9	1603.8	1530.6	1427.2	1323.3	1346.8	1510.3	2012.3	2668.5	2740.7	2661.9
35°	1957.1	1953.8	1877.2	1723.6	1542.0	1504.9	1612.6	2129.3	2923.9	3038.7	2945.2
37.5°	2274.2	2272.6	2228.8	2047.8	1826.9	1725.2	1776.6	2282.4	3197.3	3363.5	3253.0
40°	2564.0	2569.0	2525.2	2363.4	2140.8	2007.9	1999.7	2471.6	3501.3	3717.3	3586.1
42.5°	2814.5	2820.0	2775.7	2655.9	2450.9	2320.7	2273.7	2703.5	3798.2	4097.3	3942.0
45°	2984.5	3018.5	3011.9	2916.2	2769.1	2634.0	2602.9	2994.4	4136.7	4500.3	4318.2
47.5°	3032.7	3063.8	3113.1	3126.2	3036.5	2903.6	2940.8	3344.9	4479.0	4903.9	4696.6
50°	2914.0	2943.0	3045.2	3181.4	3243.7	3202.7	3269.4	3720.6	4829.5	5306.3	5067.9
52.5°	2680.0	2709.5	2838.5	3054.0	3308.3	3437.3	3599.2	4090.8	5169.1	5687.5	5419.5
55°	2341.5	2372.7	2538.3	2782.2	3185.2	3534.1	3874.2	4460.4	5480.2	6030.3	5736.7
57.5°	1881.1	1904.0	2076.3	2417.5	2875.7	3437.9	4077.1	4864.0	5773.3	6367.2	6051.1
60°	1226.0	1246.2	1446.3	1826.9	2362.8	3116.3	4117.6	5314.0	6162.7	6805.2	6474.9
62.5°	815.3	829.0	947.6	1227.1	1664.0	2499.0	3880.8	5673.3	6733.6	7567.5	7201.6
65°	559.4	573.1	691.7	886.4	1075.0	1653.0	3200.0	5625.7	7250.8	8172.8	7740.2
67.5°	399.2	410.7	511.3	695.0	778.1	960.2	2169.2	5017.6	7176.5	8195.7	7769.2
70°	286.0	292.5	375.7	541.4	618.5	576.9	1206.3	3837.6	6283.5	7568.0	7177.6
72.5°	200.1	202.3	260.8	412.3	498.2	421.1	574.2	2558.6	4752.4	5940.1	5564.4
75°	135.6	138.3	175.5	302.4	399.7	321.5	304.0	1372.0	2789.9	3288.0	2947.4
77.5°	83.1	84.2	113.2	206.7	299.1	245.0	195.8	581.3	1079.4	1059.7	903.3
80°	47.0	47.0	72.2	128.5	204.0	158.0	137.3	247.2	341.8	300.2	264.7
82.5°	26.2	26.8	52.5	79.8	135.1	93.5	75.5	114.3	147.6	130.7	113.7
85°	10.9	12.0	32.3	37.7	64.5	46.5	30.6	48.1	54.7	48.7	35.5
87.5°	1.1	1.6	9.8	7.1	7.7	9.3	4.4	9.3	7.7	7.7	5.5
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°	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2	1258.2
2.5°	1266.4	1258.2	1237.5	1213.4	1181.7	1166.4	1145.6	1131.4	1119.3	1120.4	1109.5
5°	1291.0	1270.3	1223.8	1165.8	1093.6	1042.2	987.6	949.8	919.2	912.6	897.9
7.5°	1324.9	1292.1	1210.7	1106.2	984.3	891.9	809.3	756.3	718.5	706.5	694.5
10°	1368.7	1321.1	1193.7	1031.3	855.8	738.2	649.6	608.1	582.4	573.6	567.1
12.5°	1419.5	1354.5	1171.3	940.0	723.4	610.3	553.9	533.2	524.9	522.2	520.6
15°	1483.5	1396.0	1137.4	831.7	611.3	532.1	508.0	505.3	506.4	505.3	504.7
17.5°	1559.5	1441.4	1082.2	720.2	535.9	492.1	483.4	485.6	488.3	487.8	486.7
20°	1642.6	1486.3	1011.6	621.2	484.5	463.7	458.8	461.0	463.2	462.1	461.5
22.5°	1737.2	1534.4	933.4	544.1	450.0	437.5	432.0	432.5	432.5	430.3	429.3
25°	1850.4	1587.4	851.4	489.4	423.8	413.9	407.4	405.2	401.9	395.4	394.3
27.5°	1985.5	1643.7	772.7	451.1	403.0	393.7	386.1	380.6	372.4	361.4	360.4
30°	2137.5	1712.1	705.9	427.1	386.6	377.3	368.6	360.4	348.3	334.7	333.6
32.5°	2316.3	1785.4	657.3	411.2	371.8	362.0	351.6	341.8	328.6	315.0	315.5
35°	2529.6	1874.0	628.8	400.3	360.4	347.2	335.7	324.8	315.0	302.9	301.8
37.5°	2760.9	1968.0	620.1	394.8	352.7	332.5	319.3	311.7	310.6	303.5	302.9
40°	3014.1	2079.6	626.7	391.5	344.5	318.2	304.0	302.4	305.1	292.5	293.1
42.5°	3282.0	2211.9	637.6	387.7	333.0	304.0	290.4	290.4	288.2	270.7	270.7
45°	3571.8	2364.5	648.5	378.4	319.3	289.8	279.4	275.6	266.3	249.4	248.8
47.5°	3863.8	2519.7	656.7	361.4	302.9	277.8	268.5	259.7	246.1	230.8	230.2
50°	4141.1	2659.2	648.0	336.3	284.3	266.3	256.5	244.4	229.7	219.3	217.6
52.5°	4388.8	2780.0	610.8	306.8	264.7	254.3	245.5	232.9	220.9	210.0	208.9
55°	4604.2	2877.9	545.2	278.9	247.2	243.9	235.1	219.3	202.9	193.6	192.5
57.5°	4810.9	2952.3	463.2	255.9	231.3	232.4	219.3	205.1	189.7	179.9	178.8
60°	5086.0	3051.8	380.0	234.6	214.4	217.6	203.4	193.0	173.9	161.3	159.7
62.5°	5525.6	3206.6	301.8	208.3	194.7	195.8	189.7	177.2	154.2	139.4	138.3
65°	5874.5	3149.7	237.9	179.9	172.2	173.9	173.9	160.2	135.6	118.7	117.0
67.5°	5835.1	2696.9	189.7	152.0	150.9	152.0	155.8	144.4	120.3	106.6	104.4
70°	5375.2	2145.2	152.0	126.3	131.2	128.5	139.4	131.8	108.3	94.6	93.0
72.5°	4386.0	1545.3	115.9	104.4	100.6	105.0	125.8	118.7	90.2	74.9	73.3
75°	2562.9	824.6	86.4	82.6	72.7	87.5	111.6	101.2	68.9	55.2	53.6
77.5°	834.4	287.6	63.4	60.7	54.1	70.5	95.1	85.3	56.3	43.7	42.1
80°	223.6	86.9	43.2	39.9	35.0	52.5	75.5	67.8	40.5	28.4	27.9
82.5°	89.7	36.6	25.2	22.4	19.1	36.1	59.6	54.7	30.1	18.0	18.0
85°	29.0	12.0	9.3	7.1	8.7	22.4	35.5	37.2	21.3	9.3	7.1
87.5°	3.8	1.6	1.6	2.2	1.6	3.8	10.9	10.4	6.0	1.1	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)