

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: P882898

Luminaire Tested: **NAV-SB3A-727-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882898
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9563 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

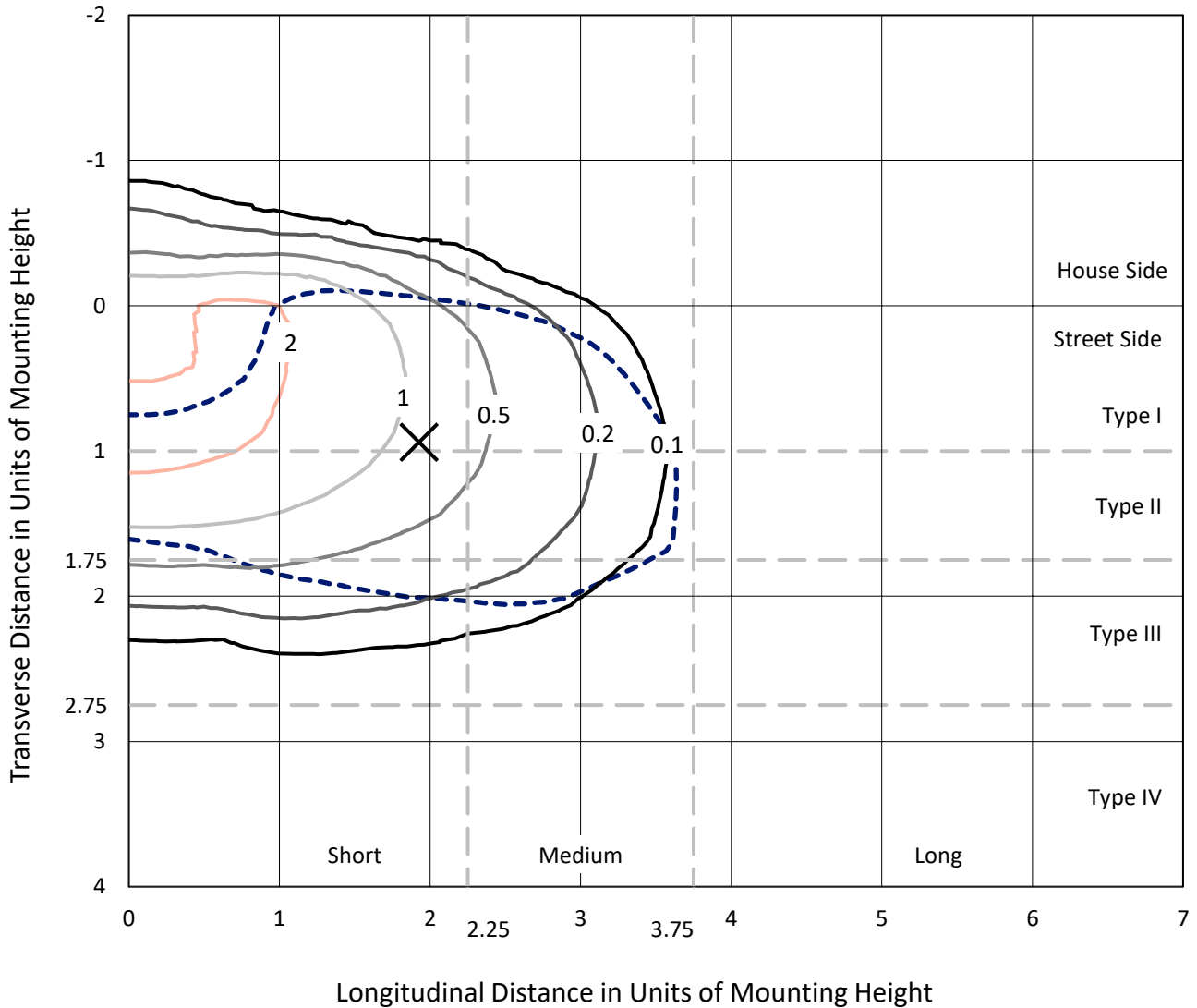
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

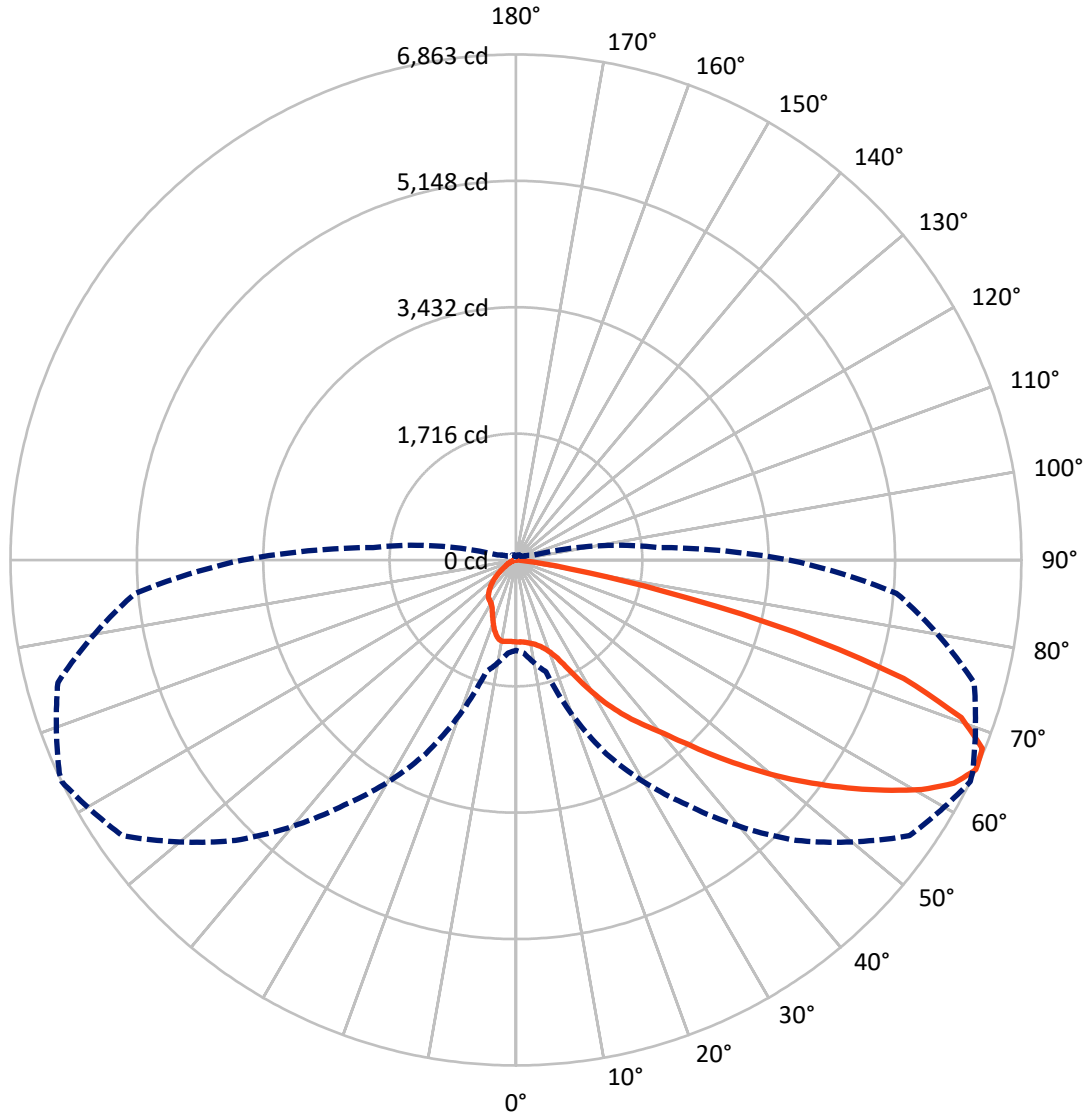
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1278.9	0.0	1278.9
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	8284.1	0.0	8284.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	9563.0	0.0	9563.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.6	1.1
10°-20°	278.3	2.9
20°-30°	527.4	5.5
30°-40°	1067.2	11.2
40°-50°	1818.1	19.0
50°-60°	2472.4	25.9
60°-70°	2321.7	24.3
70°-80°	930.2	9.7
80°-90°	45.1	0.5
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°	9563.0	100.0
0°-180°	9563.0	100.0

Coefficient of Utilization



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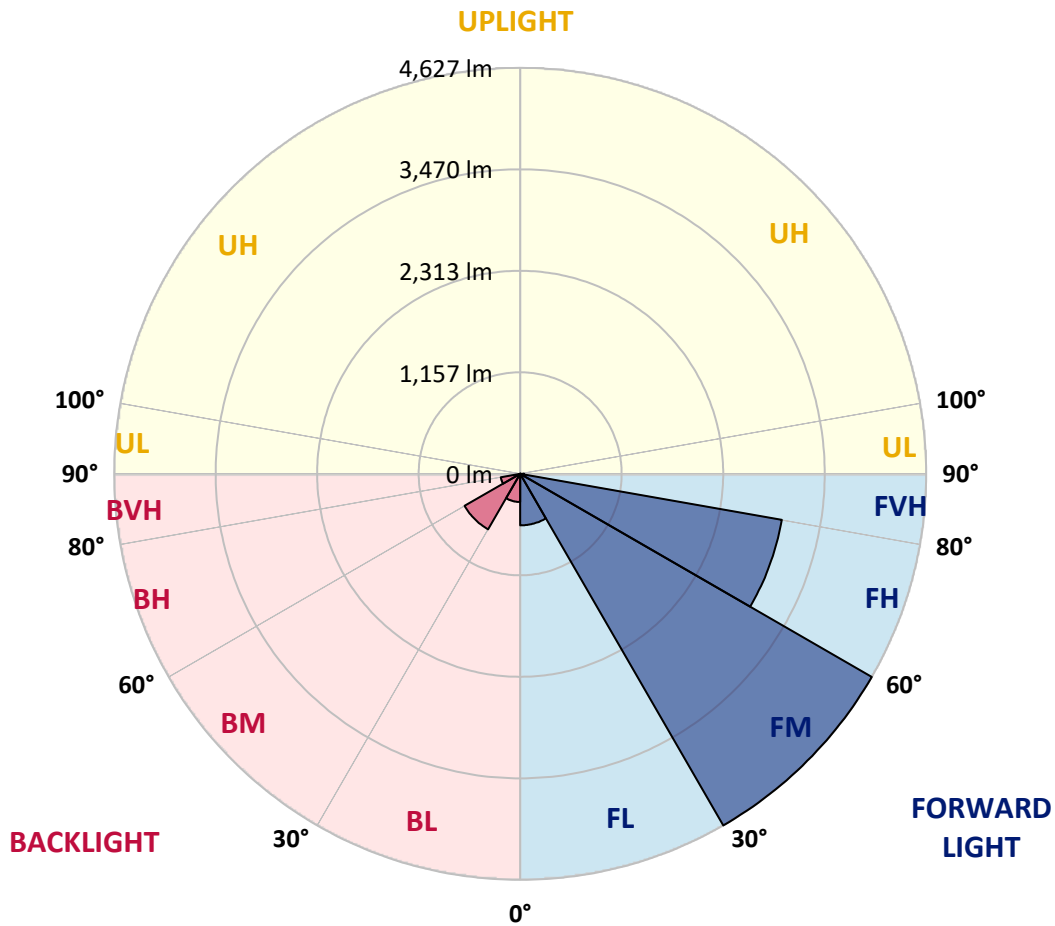
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	587.3	6.1			
FM (30°-60°)	4626.6	48.4			
FH (60°-80°)	3027.4	31.7			G2/5000
FVH (80°-90°)	42.9	0.4			G1/100
BL (0°-30°)	321.1	3.4	B1/500		
BM (30°-60°)	731.1	7.6	B1/1000		
BH (60°-80°)	224.5	2.3	B1/500		G1/500
BVH (80°-90°)	2.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3
2.5°	1108.4	1116.1	1114.2	1112.3	1111.6	1112.9	1113.6	1112.9	1112.9	1112.9	1113.6
5°	1087.3	1093.7	1093.7	1098.2	1104.6	1112.3	1118.0	1119.3	1120.6	1122.5	1121.9
7.5°	1046.9	1052.0	1055.9	1070.6	1086.6	1107.1	1124.5	1133.4	1134.7	1141.8	1144.3
10°	1019.3	1025.7	1032.1	1047.5	1070.6	1101.4	1130.9	1152.7	1155.9	1172.5	1180.2
12.5°	1018.0	1024.4	1032.8	1049.5	1076.4	1109.1	1145.0	1176.4	1182.2	1206.5	1222.5
15°	1031.5	1039.2	1046.9	1067.4	1096.2	1136.0	1174.5	1213.6	1219.3	1254.0	1271.3
17.5°	1059.1	1069.3	1075.1	1095.6	1126.4	1170.6	1221.3	1266.1	1271.3	1311.7	1333.4
20°	1113.6	1125.7	1127.7	1144.3	1174.5	1221.9	1282.2	1337.9	1344.3	1390.5	1414.9
22.5°	1226.4	1243.7	1228.3	1236.6	1263.6	1311.0	1376.4	1446.9	1455.9	1508.5	1530.3
25°	1425.1	1449.5	1409.7	1395.6	1407.2	1456.5	1538.6	1627.7	1638.0	1680.3	1691.2
27.5°	1815.5	1784.1	1723.9	1664.9	1630.3	1658.5	1750.8	1861.1	1873.9	1914.9	1902.1
30°	2244.4	2216.9	2135.4	2004.7	1922.6	1918.1	2003.4	2126.5	2141.2	2180.3	2141.2
32.5°	2674.0	2647.7	2559.2	2398.3	2256.0	2185.4	2244.4	2381.0	2388.7	2413.7	2356.0
35°	3096.4	3069.5	2981.0	2816.3	2641.3	2481.0	2469.4	2623.3	2625.9	2652.2	2566.2
37.5°	3521.5	3499.0	3404.8	3243.2	3070.8	2849.6	2742.5	2852.8	2856.0	2881.7	2792.6
40°	3824.7	3834.3	3769.6	3644.5	3496.5	3254.8	3049.0	3097.1	3077.8	3120.8	3067.6
42.5°	4085.0	4104.2	4047.8	3985.0	3899.1	3686.2	3428.5	3420.2	3389.4	3412.5	3357.3
45°	4310.0	4326.0	4275.4	4260.6	4258.7	4109.3	3843.3	3793.3	3750.3	3745.8	3679.8
47.5°	4392.7	4423.5	4445.3	4494.6	4590.8	4528.0	4272.2	4194.6	4146.5	4111.3	4006.8
50°	4424.1	4456.8	4531.2	4674.8	4902.3	4929.3	4699.1	4611.9	4553.0	4488.9	4335.0
52.5°	4381.8	4440.1	4540.1	4781.8	5112.0	5251.1	5108.8	5032.5	4965.2	4860.7	4632.5
55°	4132.4	4190.7	4395.3	4780.5	5216.5	5476.8	5496.0	5462.0	5386.4	5221.6	4872.9
57.5°	3606.7	3693.3	4017.0	4617.7	5214.6	5671.0	5875.5	5899.9	5815.2	5579.3	5062.0
60°	2878.5	2995.8	3390.7	4256.8	5053.6	5776.1	6208.2	6330.0	6240.3	5931.9	5215.2
62.5°	2008.5	2144.4	2518.2	3691.3	4685.7	5700.5	6451.2	6676.2	6608.3	6247.3	5274.2
65°	1225.1	1268.7	1570.0	2904.7	4060.0	5383.8	6526.2	6863.4	6841.0	6440.3	5187.0
67.5°	816.1	852.6	939.2	1991.8	3151.6	4751.1	6346.7	6830.7	6837.1	6408.9	4867.7
70°	491.7	523.1	579.5	1158.4	2042.5	3760.6	5790.9	6414.0	6451.2	5989.0	4262.6
72.5°	202.6	223.7	275.0	525.0	1057.8	2386.7	4611.3	5506.9	5593.4	5035.7	3271.4
75°	114.8	125.7	161.6	263.5	459.0	1112.3	2793.2	3909.3	4036.9	3470.8	1968.1
77.5°	76.3	81.4	104.5	170.5	258.4	379.5	1193.7	2036.7	2280.3	1895.7	852.0
80°	51.3	55.8	71.8	114.1	168.0	162.8	380.2	754.6	928.3	651.3	207.7
82.5°	34.6	35.3	51.3	75.0	106.4	78.9	112.2	234.6	294.9	188.5	78.9
85°	19.9	19.2	37.8	43.6	47.4	32.7	34.0	70.5	92.3	79.5	44.9
87.5°	2.6	3.8	14.7	11.5	6.4	7.1	7.1	12.2	18.0	19.2	9.6
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°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3
2.5°	1113.6	1112.9	1111.0	1109.1	1104.6	1102.0	1103.3	1102.0	1101.4	1102.0	1104.6
5°	1121.9	1120.0	1114.8	1108.4	1099.5	1088.6	1081.5	1071.2	1061.6	1055.9	1057.1
7.5°	1144.3	1142.4	1135.4	1117.4	1088.6	1043.0	1001.4	964.8	937.3	921.2	921.9
10°	1180.2	1177.0	1166.1	1126.4	1050.7	951.4	868.7	800.1	755.2	734.0	732.1
12.5°	1222.5	1218.7	1199.5	1118.0	978.9	823.8	709.7	633.4	591.7	573.1	571.2
15°	1272.5	1267.4	1229.6	1078.3	874.4	682.8	578.3	521.2	494.3	477.6	478.2
17.5°	1334.7	1325.8	1252.0	1018.7	761.0	575.1	497.5	454.5	430.8	414.8	413.5
20°	1415.5	1400.8	1270.0	947.5	656.5	507.1	443.0	407.1	389.1	375.0	372.5
22.5°	1528.3	1507.2	1291.8	870.6	582.7	460.3	402.6	376.3	361.6	345.5	343.0
25°	1668.1	1643.1	1318.7	799.4	532.1	419.9	373.1	351.3	334.0	315.4	313.5
27.5°	1863.6	1818.7	1350.8	741.1	488.5	385.3	346.2	321.8	301.9	286.6	283.4
30°	2081.6	2007.9	1379.0	705.8	448.8	353.2	310.9	286.6	268.0	257.1	255.2
32.5°	2288.0	2188.0	1397.6	690.4	412.9	316.7	272.5	246.2	232.1	228.9	230.8
35°	2482.9	2350.8	1395.6	675.7	380.8	280.2	234.6	207.7	196.8	198.7	198.7
37.5°	2707.3	2524.6	1382.2	652.6	354.5	246.8	201.9	178.2	168.6	169.2	171.8
40°	2968.2	2725.2	1373.8	609.0	325.7	216.0	175.0	155.8	148.7	146.2	145.5
42.5°	3246.4	2919.5	1375.1	559.7	289.8	188.5	156.4	140.4	134.0	132.1	131.4
45°	3525.9	3104.8	1377.0	508.4	251.9	167.3	143.0	129.5	125.7	123.1	123.1
47.5°	3788.8	3262.5	1341.1	453.2	214.8	151.3	132.1	123.1	119.9	116.7	116.7
50°	4033.7	3367.6	1254.6	389.1	185.3	138.5	123.7	117.3	114.1	110.9	110.9
52.5°	4224.1	3384.3	1111.6	323.1	164.8	128.9	118.6	112.8	109.0	105.8	105.1
55°	4308.7	3279.8	908.4	261.6	148.7	120.5	113.5	107.7	103.2	100.0	99.4
57.5°	4286.9	3059.9	708.4	210.3	133.3	112.2	107.1	103.2	98.1	93.0	92.3
60°	4179.9	2765.6	534.0	175.0	119.2	103.2	100.0	96.8	89.8	82.1	80.8
62.5°	3994.6	2395.7	380.8	144.9	103.9	93.0	91.7	89.1	78.9	64.7	63.5
65°	3711.2	1946.3	256.4	120.5	89.1	81.4	82.1	77.6	64.1	48.1	46.8
67.5°	3297.1	1423.2	164.1	98.7	74.4	68.0	68.6	66.0	54.5	41.0	39.1
70°	2769.5	942.4	107.1	75.0	59.6	52.6	56.4	57.1	46.2	33.3	32.1
72.5°	2030.3	556.5	75.0	55.8	43.6	36.5	46.2	47.4	37.2	25.0	23.7
75°	1157.2	264.1	56.4	40.4	26.9	25.6	35.9	35.9	25.6	16.7	15.4
77.5°	485.9	110.3	39.7	26.3	15.4	14.7	24.4	22.4	12.8	7.7	7.7
80°	140.4	49.4	21.2	12.8	6.4	5.8	9.6	7.1	3.2	1.3	1.3
82.5°	55.1	21.8	8.3	5.1	2.6	2.6	1.3	0.0	0.0	0.0	0.0
85°	32.7	9.0	3.8	1.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.3	1.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)