

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: P882249

Luminaire Tested: **NAV-SB2A-740-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882249  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2A-740-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9863 lumens  
Efficiency: N/A  
Efficacy: 172.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

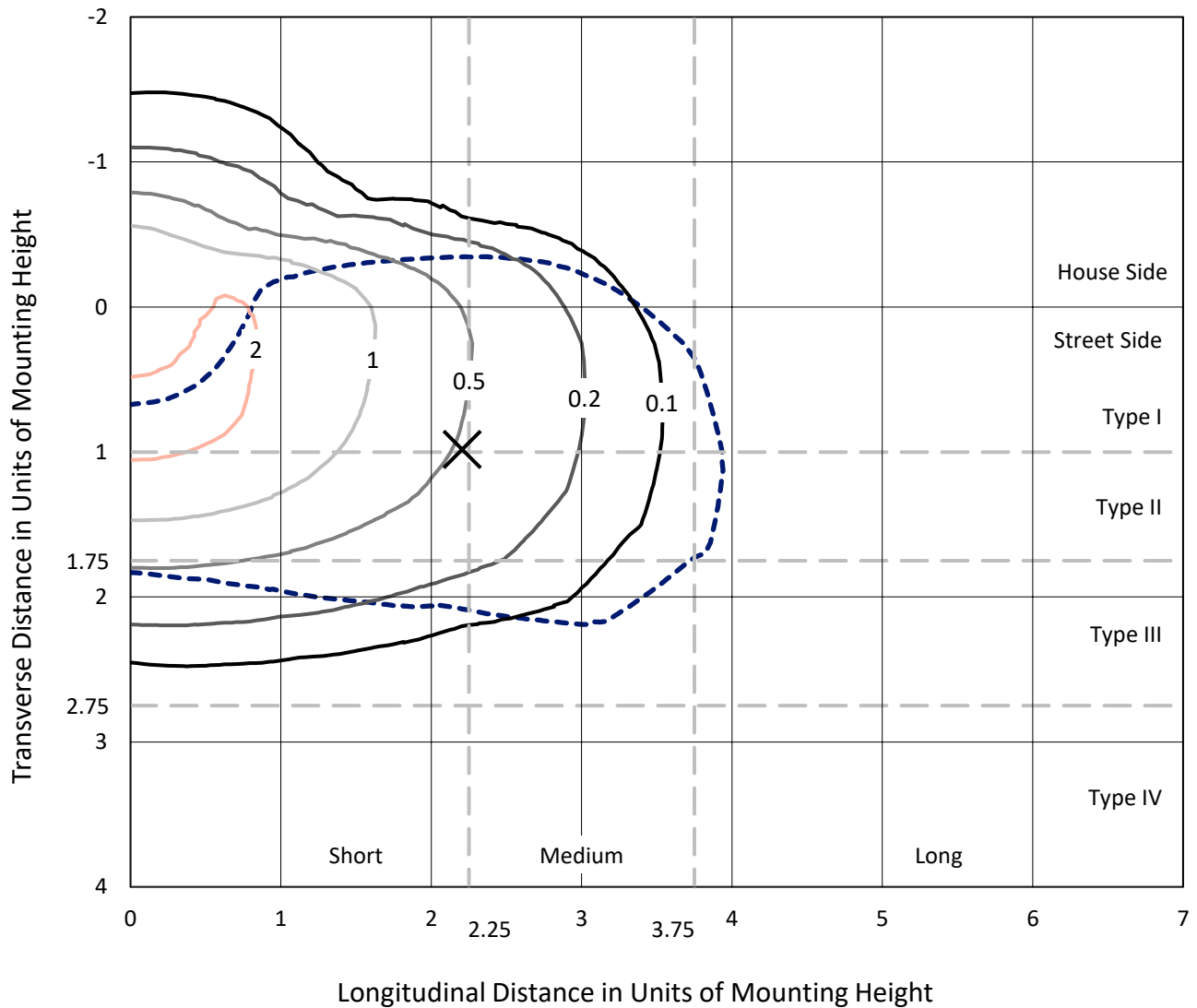
Input Watts (W): 57.3  
Input Voltage (V): 120.0  
Input Current (Ain): 0.484  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.038  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

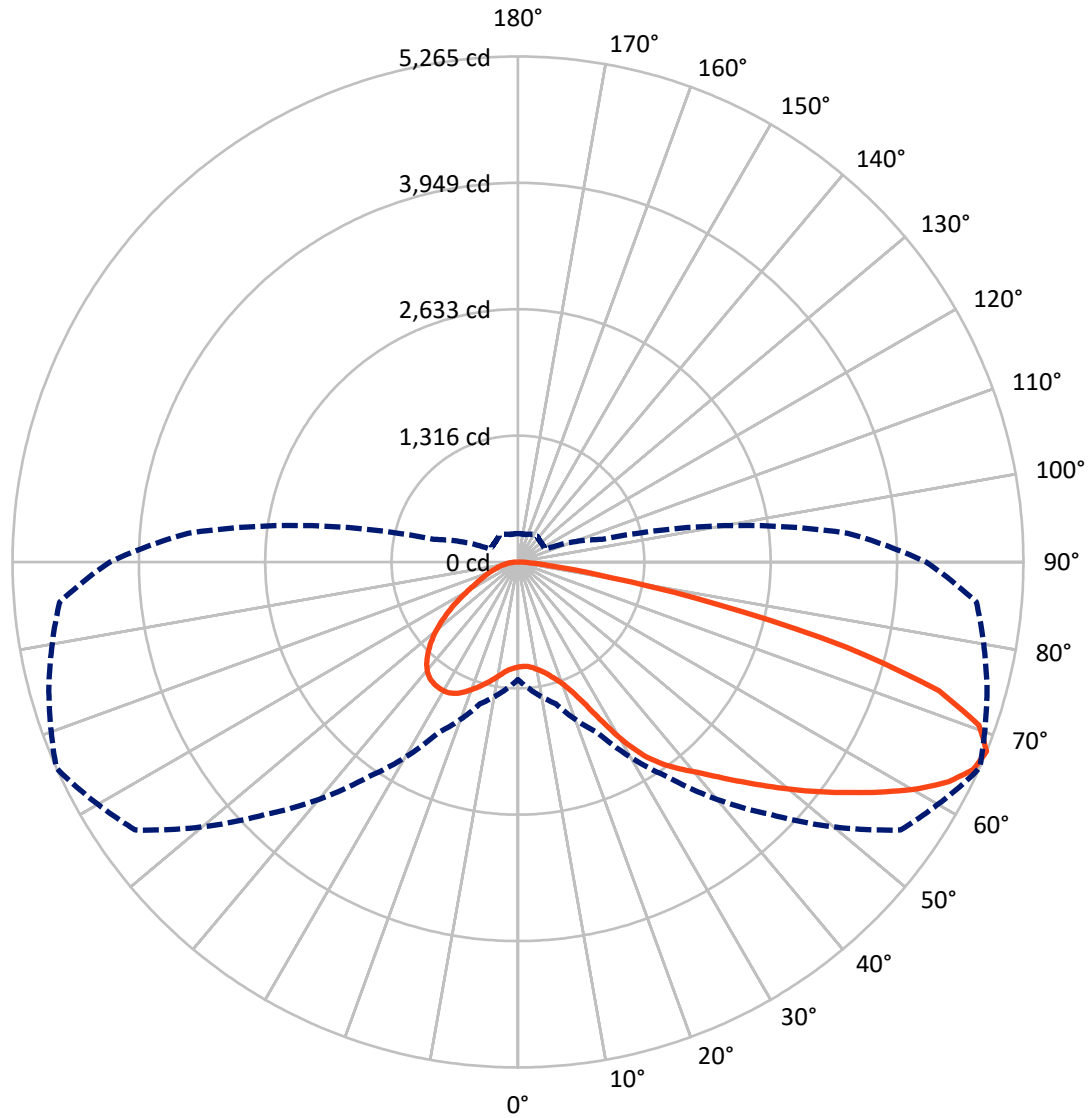
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2452.4	0.0	2452.4
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	7410.6	0.0	7410.6
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	9863.0	0.0	9863.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.5	1.1
10°-20°	358.3	3.6
20°-30°	690.7	7.0
30°-40°	1211.0	12.3
40°-50°	1800.4	18.3
50°-60°	2282.1	23.1
60°-70°	2233.0	22.6
70°-80°	1065.2	10.8
80°-90°	113.8	1.2
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°	9863.0	100.0
0°-180°	9863.0	100.0

**Coefficient of Utilization**



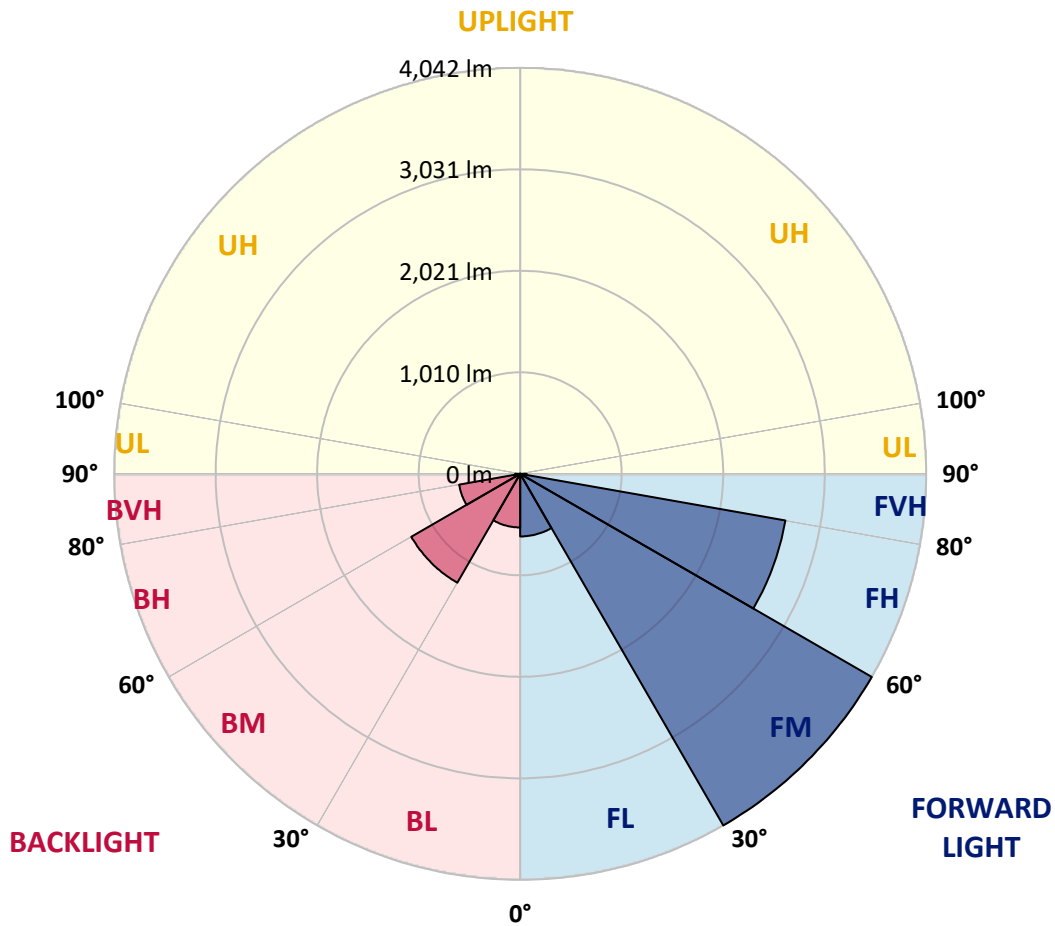
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	623.2	6.3			
FM (30°-60°)	4041.8	41.0			
FH (60°-80°)	2681.0	27.2			G2/5000
FVH (80°-90°)	64.5	0.7			G1/100
BL (0°-30°)	534.2	5.4	B2/1000		
BM (30°-60°)	1251.7	12.7	B2/2500		
BH (60°-80°)	617.2	6.3	B2/1000		G2/1000
BVH (80°-90°)	49.3	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9
2.5°	1082.5	1088.8	1087.2	1084.6	1084.1	1085.1	1086.7	1088.2	1087.7	1090.3	1094.5
5°	1079.4	1085.6	1085.1	1085.1	1087.2	1091.3	1093.9	1096.5	1093.9	1097.0	1102.7
7.5°	1081.5	1086.2	1088.2	1090.3	1095.5	1103.3	1109.5	1115.2	1112.1	1115.7	1123.0
10°	1107.9	1111.6	1113.6	1113.6	1117.3	1126.1	1132.3	1142.6	1140.1	1145.8	1155.1
12.5°	1156.1	1159.7	1159.7	1157.7	1160.3	1166.0	1168.0	1179.4	1174.8	1184.1	1193.4
15°	1215.2	1222.5	1216.8	1213.1	1214.2	1219.9	1219.3	1228.2	1223.5	1231.3	1239.6
17.5°	1280.5	1289.8	1280.5	1280.0	1277.9	1284.1	1284.6	1292.4	1284.1	1289.8	1295.5
20°	1357.7	1370.7	1362.9	1365.5	1360.8	1363.4	1366.0	1377.4	1364.4	1368.6	1367.0
22.5°	1466.5	1482.1	1473.8	1483.6	1480.5	1478.4	1477.9	1498.1	1477.9	1479.5	1464.5
25°	1625.1	1643.8	1629.2	1642.7	1642.7	1649.5	1657.2	1683.1	1649.5	1639.6	1600.7
27.5°	1859.3	1878.0	1849.5	1857.8	1855.2	1871.8	1863.5	1927.7	1891.5	1875.4	1797.1
30°	2141.2	2174.4	2120.5	2118.4	2115.8	2142.3	2154.2	2196.7	2159.9	2143.8	2049.5
32.5°	2445.9	2480.7	2416.4	2397.7	2387.9	2404.0	2394.1	2428.3	2402.9	2378.1	2261.5
35°	2768.3	2802.5	2741.3	2705.0	2665.7	2632.0	2596.7	2605.5	2581.7	2543.9	2423.1
37.5°	3073.0	3135.7	3070.9	3032.0	2959.5	2893.7	2795.2	2754.3	2732.0	2697.3	2575.5
40°	3383.4	3419.1	3369.9	3336.7	3258.0	3154.9	2997.3	2910.8	2880.7	2847.0	2743.9
42.5°	3611.9	3646.1	3619.7	3596.9	3535.2	3415.5	3211.9	3103.5	3060.0	3022.2	2934.6
45°	3793.3	3818.7	3802.1	3810.4	3784.0	3667.9	3434.2	3310.3	3265.2	3219.1	3150.2
47.5°	3866.3	3893.3	3919.7	3969.0	4014.0	3928.5	3673.1	3534.2	3486.5	3439.3	3371.5
50°	3858.1	3885.5	3962.2	4066.9	4206.8	4178.3	3924.9	3772.6	3728.5	3674.6	3611.9
52.5°	3791.7	3822.8	3921.3	4095.4	4318.2	4365.4	4181.4	4018.7	3977.2	3913.0	3850.3
55°	3617.6	3636.3	3784.0	4030.6	4344.7	4496.0	4432.8	4280.9	4239.5	4149.8	4081.4
57.5°	3294.8	3321.7	3536.8	3856.0	4278.3	4584.6	4653.5	4556.6	4516.7	4387.7	4316.2
60°	2873.5	2916.5	3162.6	3562.7	4109.4	4584.1	4854.1	4827.6	4794.5	4621.9	4547.3
62.5°	2396.7	2446.5	2683.3	3148.1	3814.0	4454.0	4979.5	5054.6	5037.5	4838.0	4742.6
65°	1840.7	1874.9	2110.7	2611.8	3354.4	4174.7	4994.0	5209.5	5212.7	5002.3	4844.7
67.5°	1225.6	1324.0	1528.7	1959.9	2738.7	3718.1	4866.5	5234.9	5265.0	5058.7	4793.4
70°	598.0	727.6	928.1	1273.8	1959.9	3018.0	4533.3	5026.6	5093.5	4894.0	4487.7
72.5°	248.2	290.2	399.5	628.6	1125.0	2036.6	3863.8	4461.8	4585.6	4336.4	3773.1
75°	167.4	181.4	228.5	322.3	512.5	1004.3	2786.4	3326.9	3526.4	3275.1	2677.1
77.5°	129.0	137.8	166.3	225.4	304.7	379.8	1491.4	2004.9	2108.1	1951.6	1392.9
80°	101.6	108.3	124.4	164.3	216.1	203.1	508.4	908.4	968.0	812.0	447.7
82.5°	88.1	90.7	89.1	111.4	143.5	118.7	166.9	335.3	370.0	268.4	146.1
85°	63.7	71.0	74.1	68.9	76.2	60.1	68.4	118.7	130.6	116.6	82.4
87.5°	25.9	38.3	47.2	44.6	28.0	17.1	21.2	34.7	39.9	43.5	26.9
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°	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9	1093.9
2.5°	1095.0	1098.6	1101.2	1104.3	1106.4	1109.5	1115.7	1119.3	1119.8	1122.4	1121.9
5°	1104.8	1110.0	1115.7	1124.0	1133.3	1141.1	1153.0	1161.3	1164.4	1167.0	1166.5
7.5°	1126.1	1133.3	1143.7	1158.2	1171.7	1182.0	1196.5	1206.4	1216.2	1219.9	1220.4
10°	1157.7	1168.0	1183.1	1202.8	1217.3	1230.7	1245.8	1254.1	1263.9	1268.1	1270.1
12.5°	1197.1	1207.9	1227.6	1255.1	1268.6	1277.9	1283.1	1281.0	1283.1	1286.7	1287.7
15°	1242.1	1254.1	1276.3	1305.9	1315.2	1306.9	1295.5	1285.2	1283.6	1284.6	1288.3
17.5°	1295.5	1304.3	1330.2	1355.1	1348.4	1314.2	1289.3	1272.7	1264.4	1261.8	1265.5
20°	1370.1	1370.1	1391.4	1406.9	1361.9	1303.8	1264.9	1238.0	1220.9	1213.6	1212.1
22.5°	1460.8	1452.5	1466.0	1455.1	1359.3	1274.8	1220.9	1174.3	1148.3	1138.0	1136.4
25°	1575.9	1566.0	1562.4	1495.0	1340.6	1228.7	1141.1	1084.6	1061.8	1056.1	1057.1
27.5°	1749.5	1724.6	1677.4	1516.8	1306.4	1156.1	1047.8	995.5	982.5	983.0	984.6
30°	1980.6	1930.8	1815.3	1520.4	1250.4	1053.5	952.5	915.2	908.9	911.5	920.3
32.5°	2194.6	2147.5	1956.2	1503.8	1164.4	953.0	867.0	842.1	832.8	835.9	840.0
35°	2362.5	2349.6	2086.8	1480.5	1058.7	858.7	790.3	769.0	750.9	746.7	749.8
37.5°	2521.1	2515.9	2184.8	1447.9	954.0	791.8	728.6	700.6	674.2	659.7	660.2
40°	2695.2	2690.0	2249.0	1397.6	861.3	733.8	673.2	636.4	603.7	577.3	579.9
42.5°	2891.1	2860.5	2279.6	1325.6	782.5	684.6	628.1	578.3	535.3	511.0	512.5
45°	3105.1	3036.2	2279.1	1233.9	716.2	639.5	579.9	509.4	469.5	446.7	445.7
47.5°	3332.1	3204.1	2251.1	1132.3	651.9	589.7	505.3	451.4	424.9	410.9	407.8
50°	3566.3	3361.1	2203.4	1015.7	586.1	533.2	458.6	421.8	401.6	388.7	384.0
52.5°	3786.5	3503.6	2145.9	883.5	519.2	478.3	437.9	409.4	388.1	373.6	367.4
55°	3991.2	3626.4	2064.5	748.3	464.8	441.5	428.0	404.2	379.8	362.7	356.0
57.5°	4173.1	3706.2	1924.1	621.3	426.0	416.1	417.7	395.4	367.4	352.9	343.6
60°	4324.4	3764.8	1716.3	503.7	394.4	391.2	401.6	378.8	346.2	329.6	322.3
62.5°	4415.1	3763.7	1461.3	412.5	367.4	368.4	380.4	358.1	324.9	309.4	304.7
65°	4407.4	3671.5	1181.5	352.9	341.5	342.5	358.1	335.3	307.3	298.0	297.5
67.5°	4251.4	3446.6	906.3	314.0	313.0	317.7	335.8	319.7	296.4	295.4	296.9
70°	3829.0	2979.7	652.9	282.9	283.5	290.2	314.0	309.9	290.7	292.8	292.3
72.5°	3070.4	2271.8	438.4	250.3	250.8	261.7	293.3	302.1	285.0	312.5	316.6
75°	2044.8	1416.8	281.9	215.6	216.1	230.1	275.2	287.1	269.5	311.4	314.0
77.5°	982.5	636.9	204.2	181.4	181.4	194.3	237.9	257.0	229.6	242.0	221.8
80°	339.4	239.4	160.6	146.1	143.0	151.8	200.5	222.8	198.0	182.4	171.0
82.5°	133.7	124.4	129.0	113.5	103.1	108.8	156.0	184.0	145.6	131.6	131.1
85°	76.7	80.8	91.2	75.1	59.6	66.8	114.5	132.1	109.9	96.9	99.0
87.5°	20.7	28.5	42.0	38.9	26.9	28.5	54.4	73.1	63.2	48.7	50.3
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)