

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: P882237

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

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882237
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
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
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9059 lumens
Efficiency: N/A
Efficacy: 158.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

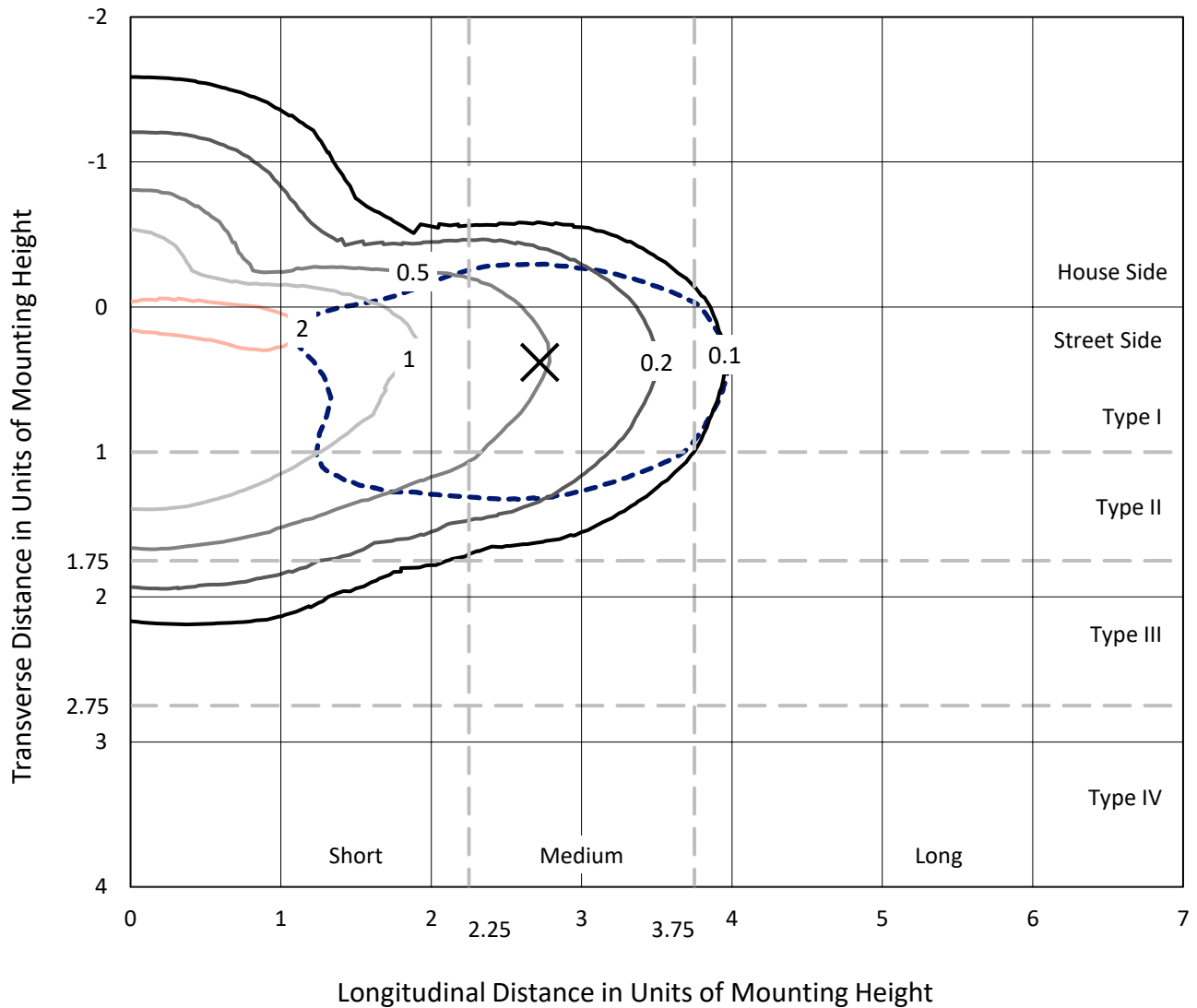
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

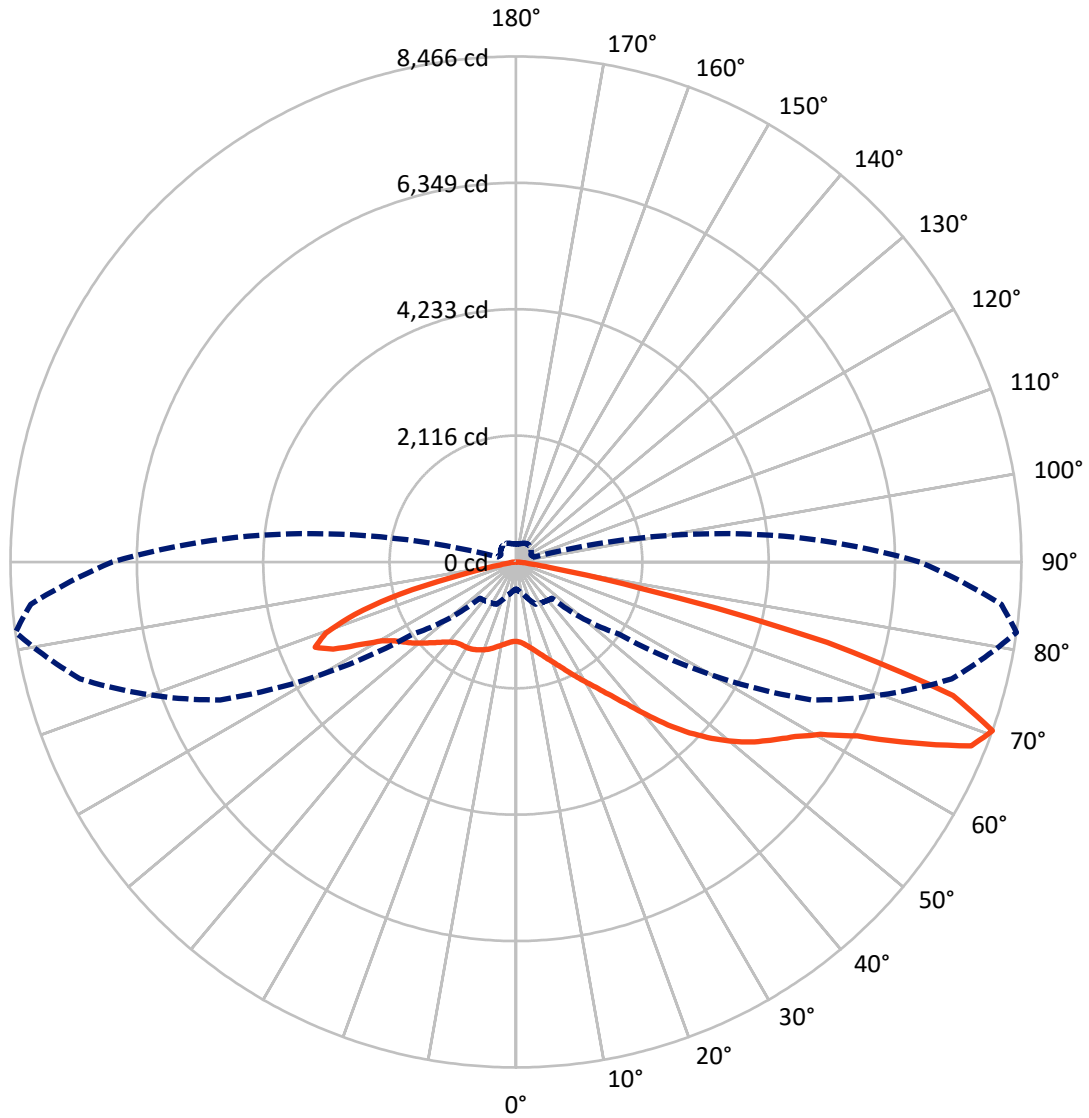
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2233.3	0.0	2233.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	6825.7	0.0	6825.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	9059.0	0.0	9059.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.4	1.4
10°-20°	360.3	4.0
20°-30°	602.7	6.7
30°-40°	941.6	10.4
40°-50°	1499.6	16.6
50°-60°	2086.9	23.0
60°-70°	2183.0	24.1
70°-80°	1141.0	12.6
80°-90°	118.5	1.3
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°	9059.0	100.0
0°-180°	9059.0	100.0

Coefficient of Utilization



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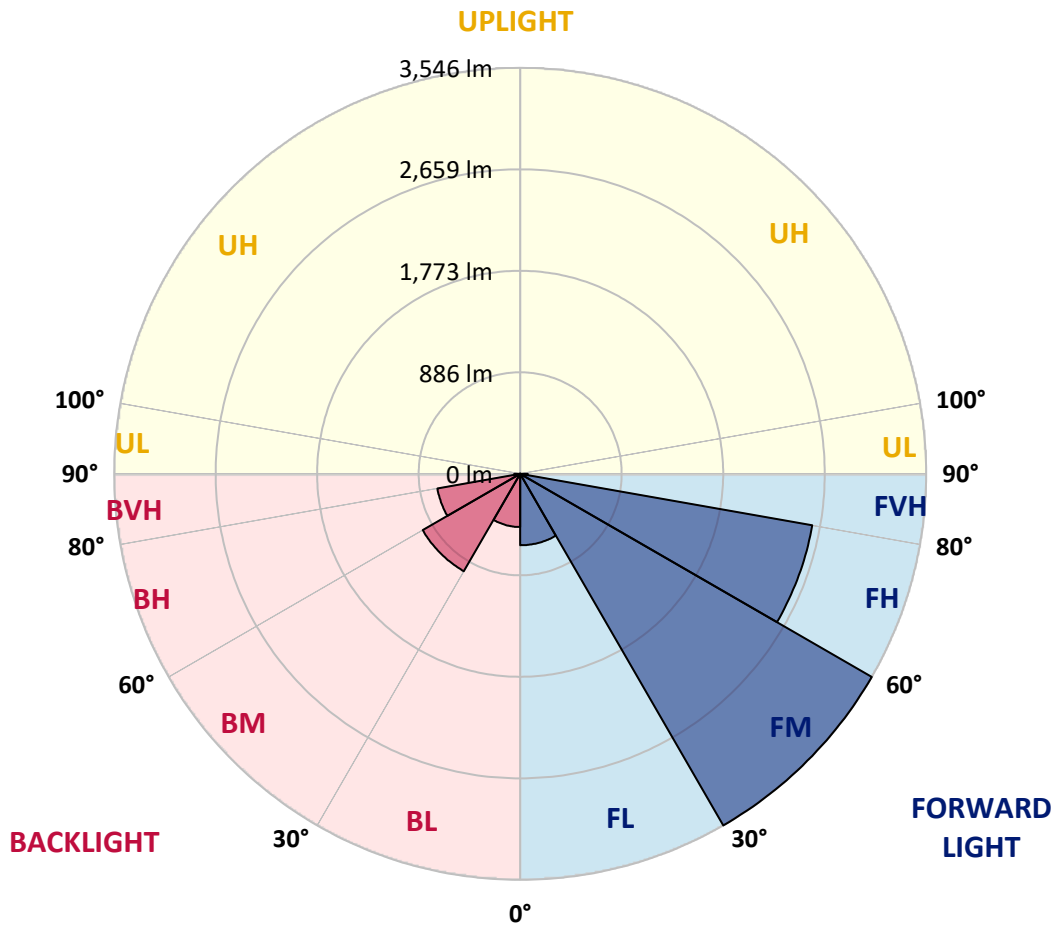
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	623.8	6.9			
FM (30°-60°)	3545.6	39.1			
FH (60°-80°)	2590.0	28.6			G2/5000
FVH (80°-90°)	66.3	0.7			G1/100
BL (0°-30°)	464.6	5.1	B1/500		
BM (30°-60°)	982.5	10.8	B1/1000		
BH (60°-80°)	734.0	8.1	B2/1000		G2/1000
BVH (80°-90°)	52.2	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2
2.5°	1359.9	1367.6	1365.2	1362.8	1362.8	1359.4	1358.9	1354.1	1350.3	1344.0	1342.6
5°	1377.2	1385.4	1384.4	1386.3	1392.6	1394.0	1395.5	1392.6	1384.9	1377.2	1373.8
7.5°	1361.8	1370.9	1373.8	1385.4	1404.6	1421.9	1434.9	1440.2	1433.0	1421.9	1416.6
10°	1309.9	1320.0	1330.1	1357.5	1391.6	1432.5	1467.1	1487.8	1486.3	1475.7	1466.6
12.5°	1204.6	1215.2	1236.8	1290.2	1352.7	1424.8	1489.2	1532.5	1547.4	1539.7	1523.8
15°	1120.5	1129.6	1146.0	1200.8	1282.0	1391.6	1497.4	1581.5	1619.5	1615.1	1595.9
17.5°	1118.1	1121.9	1132.0	1158.0	1220.5	1339.7	1488.7	1629.6	1702.1	1701.7	1677.6
20°	1160.4	1161.8	1167.6	1172.9	1208.5	1300.3	1466.6	1669.5	1794.9	1794.9	1769.0
22.5°	1219.0	1218.1	1223.9	1219.0	1236.3	1296.9	1452.7	1704.5	1898.3	1906.0	1873.3
25°	1307.0	1302.2	1300.8	1289.7	1293.1	1328.2	1468.0	1744.4	2020.8	2036.7	1995.8
27.5°	1424.3	1416.6	1411.3	1385.8	1377.2	1392.6	1515.2	1792.5	2157.4	2184.8	2132.8
30°	1577.2	1563.2	1555.5	1511.3	1480.1	1482.5	1586.3	1856.4	2300.1	2344.4	2278.5
32.5°	1785.8	1764.2	1743.5	1670.9	1613.7	1594.9	1678.1	1944.9	2454.9	2525.6	2441.0
35°	2019.4	2002.1	1980.0	1868.0	1780.0	1736.8	1802.1	2068.4	2636.1	2748.1	2638.1
37.5°	2244.4	2229.5	2240.0	2089.1	1975.7	1912.7	1964.6	2234.3	2859.7	3025.0	2885.1
40°	2477.0	2465.5	2466.9	2322.7	2190.5	2119.9	2161.7	2442.4	3115.9	3354.3	3182.2
42.5°	2729.9	2721.2	2692.4	2564.5	2416.0	2350.1	2388.6	2682.8	3390.8	3729.2	3508.1
45°	3013.0	3007.7	2980.8	2834.2	2664.0	2590.0	2641.9	2948.1	3667.2	4082.1	3835.5
47.5°	3257.7	3262.0	3258.6	3135.1	2958.7	2850.0	2912.1	3225.0	3924.4	4413.7	4149.4
50°	3375.4	3398.0	3431.2	3392.8	3283.2	3172.6	3184.6	3492.3	4169.6	4724.8	4450.3
52.5°	3313.9	3356.7	3447.1	3508.6	3550.9	3527.8	3495.6	3757.6	4400.3	5005.5	4734.9
55°	3084.6	3144.7	3294.7	3443.2	3659.1	3826.8	3869.1	4051.8	4625.3	5252.6	5004.0
57.5°	2666.9	2764.5	2899.1	3199.5	3562.9	3971.5	4304.6	4459.9	4863.7	5516.5	5285.7
60°	1950.7	2081.4	2248.7	2695.7	3226.4	3894.1	4675.2	5086.7	5202.6	5858.2	5652.5
62.5°	1248.4	1329.1	1482.9	1904.0	2514.0	3497.5	4788.7	5870.3	5777.0	6418.7	6202.4
65°	854.7	906.6	1047.4	1283.9	1625.2	2603.4	4484.9	6457.7	6689.4	7307.1	7142.7
67.5°	621.1	660.5	780.7	987.8	1059.0	1540.6	3480.2	6430.7	7576.2	8222.3	7966.6
70°	452.8	480.7	581.6	780.7	814.8	857.1	2108.3	5466.5	7557.0	8465.5	8159.3
72.5°	335.5	354.8	422.5	605.7	659.5	578.8	1043.6	3973.0	6493.7	7657.0	7411.4
75°	242.8	257.2	307.2	463.4	527.8	440.8	520.6	2321.8	4529.6	5386.2	5429.5
77.5°	185.5	196.6	229.3	339.4	422.5	330.7	323.0	1068.1	2147.7	2158.3	2279.5
80°	149.0	156.2	174.0	238.9	324.0	247.6	210.5	431.2	678.7	574.4	602.8
82.5°	109.6	121.6	147.1	167.8	231.7	170.6	128.3	217.8	258.1	222.1	224.0
85°	62.5	70.7	88.9	120.2	148.1	104.3	73.5	96.6	120.2	98.5	88.0
87.5°	22.1	28.8	31.2	47.1	64.4	43.3	28.4	27.9	39.4	29.3	24.5
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°	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2	1328.2
2.5°	1337.8	1335.4	1325.8	1312.8	1299.3	1286.3	1282.0	1272.9	1266.6	1263.3	1267.1
5°	1364.7	1357.0	1334.4	1305.6	1275.3	1242.6	1219.5	1198.4	1183.0	1168.6	1174.3
7.5°	1403.2	1389.7	1350.8	1300.3	1246.4	1192.1	1151.7	1121.0	1100.3	1086.9	1089.7
10°	1447.9	1427.2	1367.6	1292.1	1209.0	1131.1	1083.5	1057.1	1044.1	1036.9	1038.8
12.5°	1499.3	1470.0	1384.9	1273.4	1151.7	1062.8	1030.1	1022.4	1022.9	1023.4	1024.4
15°	1562.7	1521.9	1398.8	1232.5	1077.2	1010.4	1004.7	1017.2	1030.1	1036.4	1035.9
17.5°	1634.4	1576.7	1401.2	1165.2	1004.2	976.8	995.0	1022.0	1041.7	1050.3	1052.2
20°	1711.3	1632.4	1383.9	1070.0	944.1	949.4	982.1	1016.7	1038.3	1049.4	1052.2
22.5°	1799.2	1692.0	1342.6	970.0	895.1	919.6	958.0	991.7	1014.3	1025.3	1028.2
25°	1899.7	1758.9	1277.7	885.9	852.8	885.9	924.4	952.3	970.5	980.6	983.5
27.5°	2011.2	1828.6	1191.2	819.1	815.7	851.3	883.0	904.7	914.3	922.0	924.9
30°	2123.2	1892.0	1086.4	768.6	783.5	817.2	839.8	849.4	852.3	853.7	857.1
32.5°	2244.4	1946.8	976.3	726.8	752.8	784.0	797.5	801.8	788.3	779.2	782.1
35°	2391.0	2005.5	868.6	693.6	722.5	749.4	753.7	749.9	734.0	715.3	716.2
37.5°	2572.2	2078.5	782.6	670.1	694.1	711.9	706.6	705.7	707.1	685.0	686.4
40°	2794.3	2173.7	719.6	651.8	671.1	674.9	660.0	668.2	675.4	641.7	642.7
42.5°	3040.9	2288.6	679.7	639.3	651.8	642.7	619.6	628.8	627.8	583.6	583.1
45°	3292.3	2413.6	665.8	630.2	634.0	615.8	590.3	592.7	572.5	532.6	534.1
47.5°	3542.2	2547.7	674.4	622.5	611.9	591.3	571.5	561.0	531.2	501.4	501.4
50°	3787.4	2688.5	706.1	607.1	581.6	569.6	555.2	536.5	504.7	479.3	477.3
52.5°	4014.8	2830.3	741.7	581.6	543.7	550.9	541.7	520.1	488.9	462.9	463.4
55°	4230.1	2972.1	755.7	546.6	508.1	534.5	529.2	489.3	451.9	430.7	428.8
57.5°	4464.7	3142.8	740.3	501.8	479.3	515.8	495.6	451.4	429.7	413.9	412.4
60°	4789.7	3410.5	707.1	446.6	451.9	487.9	453.3	435.0	411.5	393.7	392.7
62.5°	5329.5	3910.0	653.7	391.8	419.6	446.6	433.1	414.8	390.8	373.5	373.5
65°	6127.4	4604.1	553.3	349.0	383.6	406.2	411.5	393.2	368.2	349.9	350.9
67.5°	6800.4	5039.6	418.7	313.4	346.6	373.5	388.4	370.6	344.2	326.4	326.9
70°	6763.4	4723.3	319.7	278.3	313.9	341.3	360.5	346.6	318.2	301.4	302.8
72.5°	6007.3	3951.3	258.6	242.8	280.7	307.6	330.7	320.1	291.3	275.0	275.0
75°	4413.3	2804.9	206.7	206.7	239.4	272.6	298.0	291.3	264.9	253.3	250.0
77.5°	1860.3	1176.7	162.0	171.6	199.0	234.1	265.8	268.2	245.2	259.6	235.5
80°	494.6	324.5	123.5	135.1	156.2	193.2	231.2	230.3	205.3	191.8	178.3
82.5°	188.4	127.9	88.0	95.2	113.0	148.1	183.1	188.9	163.9	141.8	141.8
85°	72.6	54.8	54.3	57.2	65.9	98.1	138.4	143.2	123.5	104.8	108.2
87.5°	18.7	16.3	20.2	19.2	30.3	52.4	79.3	82.2	75.5	43.7	62.5
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)