

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: P882207

Luminaire Tested: **NAV-SB2A-722-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882207
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-722-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7219 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

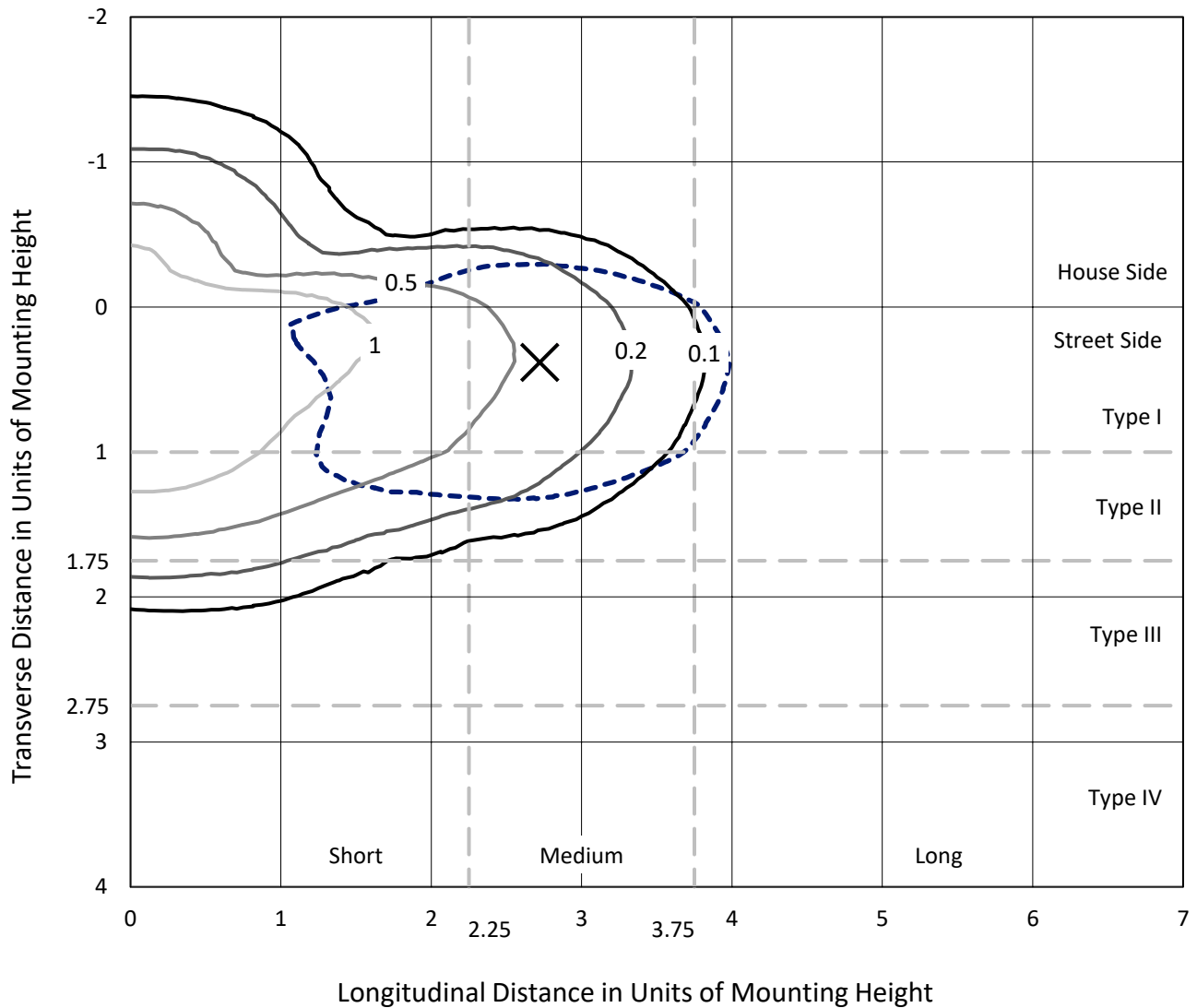
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

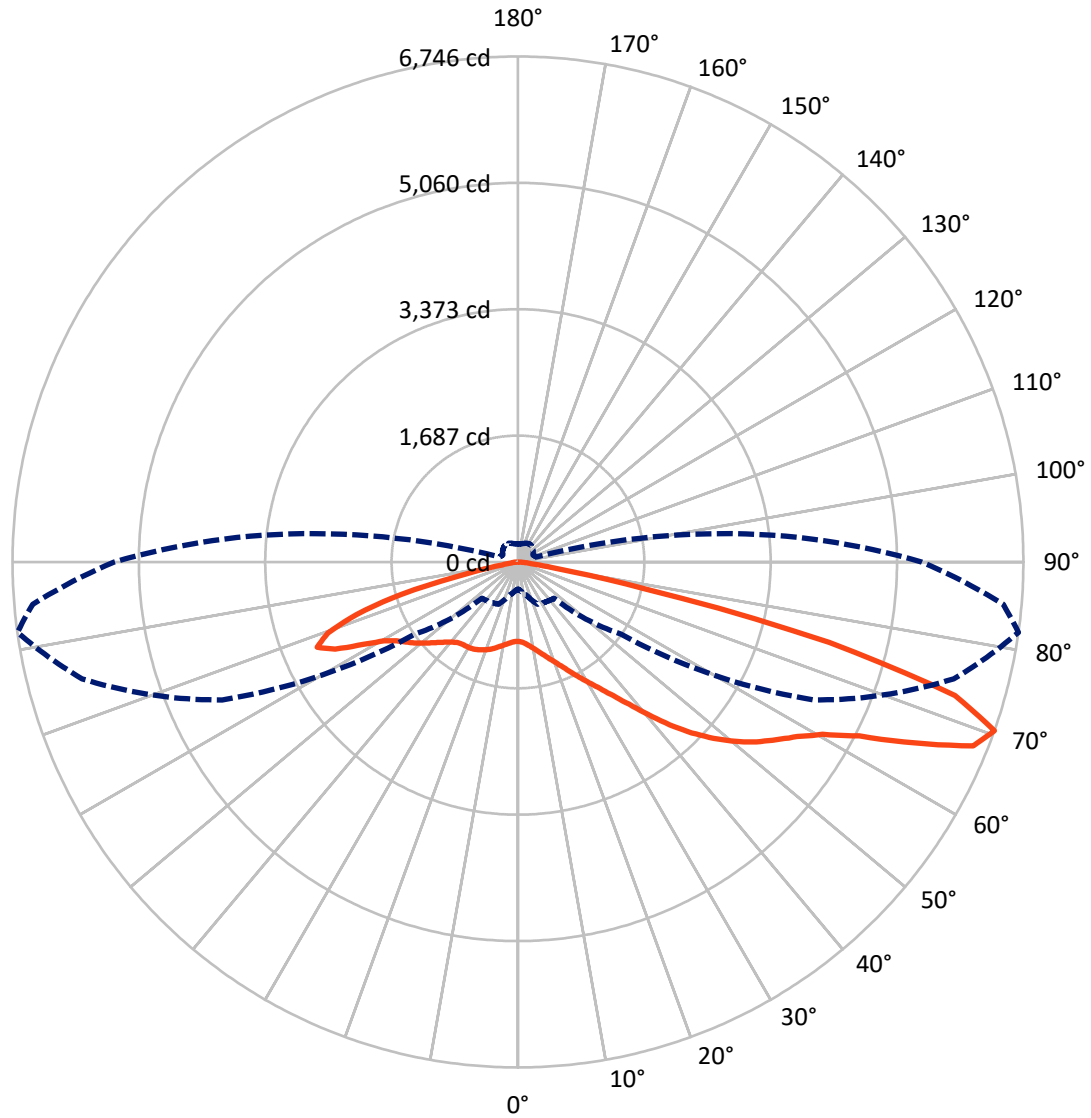
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 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	1779.7	0.0	1779.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	5439.3	0.0	5439.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	7219.0	0.0	7219.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.4
10°-20°	287.1	4.0
20°-30°	480.3	6.7
30°-40°	750.4	10.4
40°-50°	1195.0	16.6
50°-60°	1663.0	23.0
60°-70°	1739.6	24.1
70°-80°	909.2	12.6
80°-90°	94.4	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°	7219.0	100.0
0°-180°	7219.0	100.0

Coefficient of Utilization



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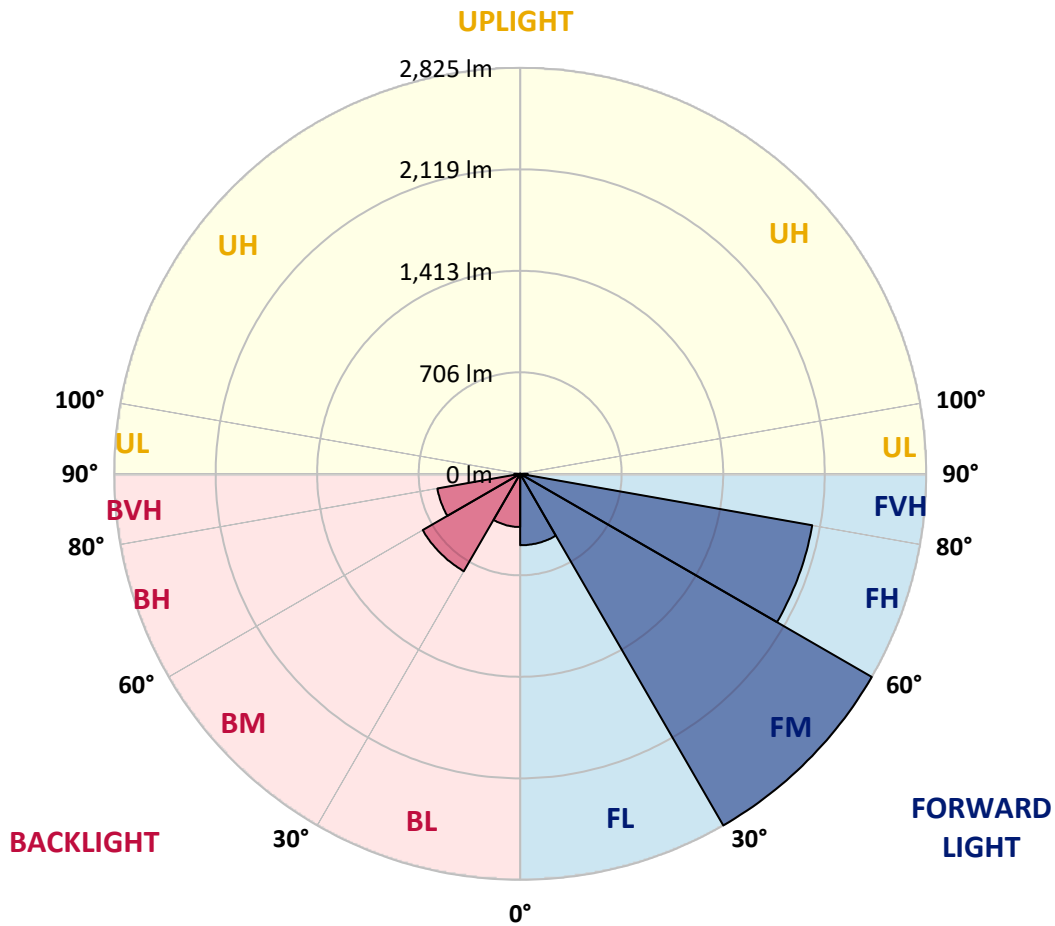
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	497.1	6.9			
FM (30°-60°)	2825.4	39.1			
FH (60°-80°)	2063.9	28.6			G2/5000
FVH (80°-90°)	52.9	0.7			G1/100
BL (0°-30°)	370.2	5.1	B1/500		
BM (30°-60°)	783.0	10.8	B1/1000		
BH (60°-80°)	584.9	8.1	B2/1000		G2/1000
BVH (80°-90°)	41.6	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°	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4
2.5°	1083.7	1089.8	1087.9	1086.0	1086.0	1083.3	1082.9	1079.1	1076.0	1071.0	1069.9
5°	1097.5	1104.0	1103.2	1104.7	1109.7	1110.9	1112.0	1109.7	1103.6	1097.5	1094.8
7.5°	1085.2	1092.5	1094.8	1104.0	1119.3	1133.1	1143.4	1147.6	1141.9	1133.1	1128.9
10°	1043.8	1051.9	1059.9	1081.8	1109.0	1141.5	1169.1	1185.6	1184.4	1176.0	1168.7
12.5°	959.9	968.4	985.6	1028.1	1077.9	1135.4	1186.7	1221.2	1233.1	1226.9	1214.3
15°	892.9	900.2	913.2	956.9	1021.6	1109.0	1193.2	1260.3	1290.5	1287.1	1271.8
17.5°	891.0	894.1	902.1	922.8	972.6	1067.6	1186.3	1298.6	1356.4	1356.0	1336.9
20°	924.7	925.9	930.5	934.7	963.0	1036.2	1168.7	1330.4	1430.3	1430.3	1409.7
22.5°	971.4	970.7	975.3	971.4	985.2	1033.5	1157.6	1358.3	1512.7	1518.8	1492.8
25°	1041.5	1037.7	1036.6	1027.8	1030.4	1058.4	1169.9	1390.1	1610.4	1623.0	1590.5
27.5°	1135.0	1128.9	1124.7	1104.4	1097.5	1109.7	1207.4	1428.4	1719.2	1741.0	1699.6
30°	1256.8	1245.7	1239.6	1204.3	1179.4	1181.4	1264.1	1479.4	1832.9	1868.2	1815.7
32.5°	1423.1	1405.8	1389.4	1331.5	1285.9	1271.0	1337.3	1549.9	1956.3	2012.6	1945.2
35°	1609.2	1595.4	1577.8	1488.6	1418.5	1384.0	1436.1	1648.3	2100.7	2190.0	2102.2
37.5°	1788.5	1776.6	1785.1	1664.8	1574.4	1524.2	1565.6	1780.5	2278.8	2410.6	2299.1
40°	1973.9	1964.7	1965.9	1850.9	1745.6	1689.3	1722.6	1946.3	2483.0	2673.0	2535.9
42.5°	2175.4	2168.5	2145.5	2043.6	1925.3	1872.8	1903.4	2137.9	2702.1	2971.8	2795.6
45°	2401.0	2396.8	2375.4	2258.5	2122.9	2063.9	2105.3	2349.3	2922.4	3252.9	3056.4
47.5°	2596.0	2599.4	2596.8	2498.3	2357.7	2271.2	2320.6	2570.0	3127.3	3517.3	3306.6
50°	2689.8	2707.9	2734.3	2703.6	2616.3	2528.2	2537.8	2782.9	3322.7	3765.1	3546.4
52.5°	2640.8	2674.9	2746.9	2796.0	2829.7	2811.3	2785.6	2994.4	3506.5	3988.8	3773.1
55°	2458.1	2506.0	2625.5	2743.9	2915.9	3049.5	3083.3	3228.8	3685.8	4185.7	3987.7
57.5°	2125.2	2203.0	2310.2	2549.6	2839.2	3164.8	3430.3	3554.0	3875.8	4396.0	4212.1
60°	1554.5	1658.7	1792.0	2148.2	2571.1	3103.2	3725.6	4053.5	4145.9	4668.4	4504.4
62.5°	994.8	1059.2	1181.7	1517.3	2003.4	2787.1	3816.0	4677.9	4603.6	5115.0	4942.6
65°	681.1	722.5	834.7	1023.2	1295.1	2074.7	3574.0	5146.0	5330.7	5822.9	5691.9
67.5°	494.9	526.3	622.1	787.2	843.9	1227.7	2773.4	5124.6	6037.4	6552.2	6348.5
70°	360.8	383.1	463.5	622.1	649.3	683.0	1680.1	4356.2	6022.1	6746.1	6502.1
72.5°	267.4	282.7	336.7	482.7	525.6	461.2	831.6	3166.0	5174.8	6101.8	5906.0
75°	193.4	204.9	244.8	369.3	420.6	351.3	414.9	1850.2	3609.6	4292.2	4326.7
77.5°	147.9	156.7	182.7	270.4	336.7	263.5	257.4	851.2	1711.5	1719.9	1816.5
80°	118.7	124.5	138.7	190.4	258.2	197.3	167.8	343.6	540.9	457.8	480.4
82.5°	87.3	96.9	117.2	133.7	184.6	136.0	102.3	173.5	205.7	177.0	178.5
85°	49.8	56.3	70.9	95.8	118.0	83.1	58.6	77.0	95.8	78.5	70.1
87.5°	17.6	23.0	24.9	37.5	51.3	34.5	22.6	22.2	31.4	23.4	19.5
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°	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4	1058.4
2.5°	1066.1	1064.1	1056.5	1046.1	1035.4	1025.1	1021.6	1014.3	1009.4	1006.7	1009.7
5°	1087.5	1081.4	1063.4	1040.4	1016.3	990.2	971.8	955.0	942.7	931.2	935.8
7.5°	1118.2	1107.4	1076.4	1036.2	993.3	950.0	917.8	893.3	876.8	866.1	868.4
10°	1153.8	1137.3	1089.8	1029.7	963.4	901.3	863.4	842.3	832.0	826.3	827.8
12.5°	1194.8	1171.4	1103.6	1014.7	917.8	846.9	820.9	814.8	815.2	815.5	816.3
15°	1245.3	1212.8	1114.7	982.2	858.4	805.2	800.6	810.6	820.9	825.9	825.5
17.5°	1302.4	1256.4	1116.6	928.5	800.2	778.4	792.9	814.4	830.1	837.0	838.5
20°	1363.7	1300.9	1102.8	852.7	752.3	756.5	782.6	810.2	827.4	836.2	838.5
22.5°	1433.8	1348.4	1069.9	773.0	713.3	732.8	763.4	790.3	808.3	817.1	819.4
25°	1513.9	1401.6	1018.2	706.0	679.5	706.0	736.6	758.8	773.4	781.4	783.7
27.5°	1602.7	1457.2	949.2	652.7	650.1	678.4	703.7	720.9	728.6	734.7	737.0
30°	1692.0	1507.7	865.7	612.5	624.4	651.2	669.2	676.9	679.2	680.3	683.0
32.5°	1788.5	1551.4	778.0	579.2	599.9	624.8	635.5	638.9	628.2	620.9	623.2
35°	1905.3	1598.1	692.2	552.8	575.7	597.2	600.6	597.6	584.9	570.0	570.8
37.5°	2049.8	1656.4	623.6	534.0	553.1	567.3	563.1	562.3	563.5	545.9	547.0
40°	2226.7	1732.2	573.4	519.4	534.8	537.8	525.9	532.5	538.2	511.4	512.2
42.5°	2423.2	1823.8	541.6	509.5	519.4	512.2	493.8	501.0	500.3	465.0	464.7
45°	2623.6	1923.3	530.5	502.2	505.3	490.7	470.4	472.3	456.2	424.4	425.6
47.5°	2822.8	2030.2	537.4	496.1	487.6	471.2	455.5	447.0	423.3	399.5	399.5
50°	3018.1	2142.5	562.7	483.8	463.5	453.9	442.4	427.5	402.2	381.9	380.4
52.5°	3199.3	2255.5	591.1	463.5	433.2	439.0	431.7	414.5	389.6	368.9	369.3
55°	3370.9	2368.5	602.2	435.5	404.9	426.0	421.7	390.0	360.1	343.2	341.7
57.5°	3557.9	2504.4	589.9	399.9	381.9	411.0	394.9	359.7	342.5	329.8	328.7
60°	3816.8	2717.8	563.5	355.9	360.1	388.8	361.2	346.7	327.9	313.7	313.0
62.5°	4247.0	3115.8	521.0	312.2	334.4	355.9	345.1	330.6	311.4	297.6	297.6
65°	4882.9	3669.0	440.9	278.1	305.7	323.7	327.9	313.3	293.4	278.9	279.6
67.5°	5419.2	4016.0	333.6	249.8	276.2	297.6	309.5	295.3	274.3	260.1	260.5
70°	5389.7	3764.0	254.7	221.8	250.1	272.0	287.3	276.2	253.6	240.2	241.3
72.5°	4787.1	3148.8	206.1	193.4	223.7	245.2	263.5	255.1	232.1	219.1	219.1
75°	3516.9	2235.2	164.7	164.7	190.8	217.2	237.5	232.1	211.1	201.9	199.2
77.5°	1482.4	937.7	129.1	136.8	158.6	186.6	211.8	213.7	195.4	206.9	187.7
80°	394.2	258.6	98.4	107.6	124.5	154.0	184.3	183.5	163.6	152.8	142.1
82.5°	150.2	101.9	70.1	75.8	90.0	118.0	145.9	150.5	130.6	113.0	113.0
85°	57.8	43.7	43.3	45.6	52.5	78.1	110.3	114.2	98.4	83.5	86.2
87.5°	14.9	13.0	16.1	15.3	24.1	41.8	63.2	65.5	60.1	34.9	49.8
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)