

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: P882037

Luminaire Tested: **NAV-SB1D-722-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882037
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-SB1D-722-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8042 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

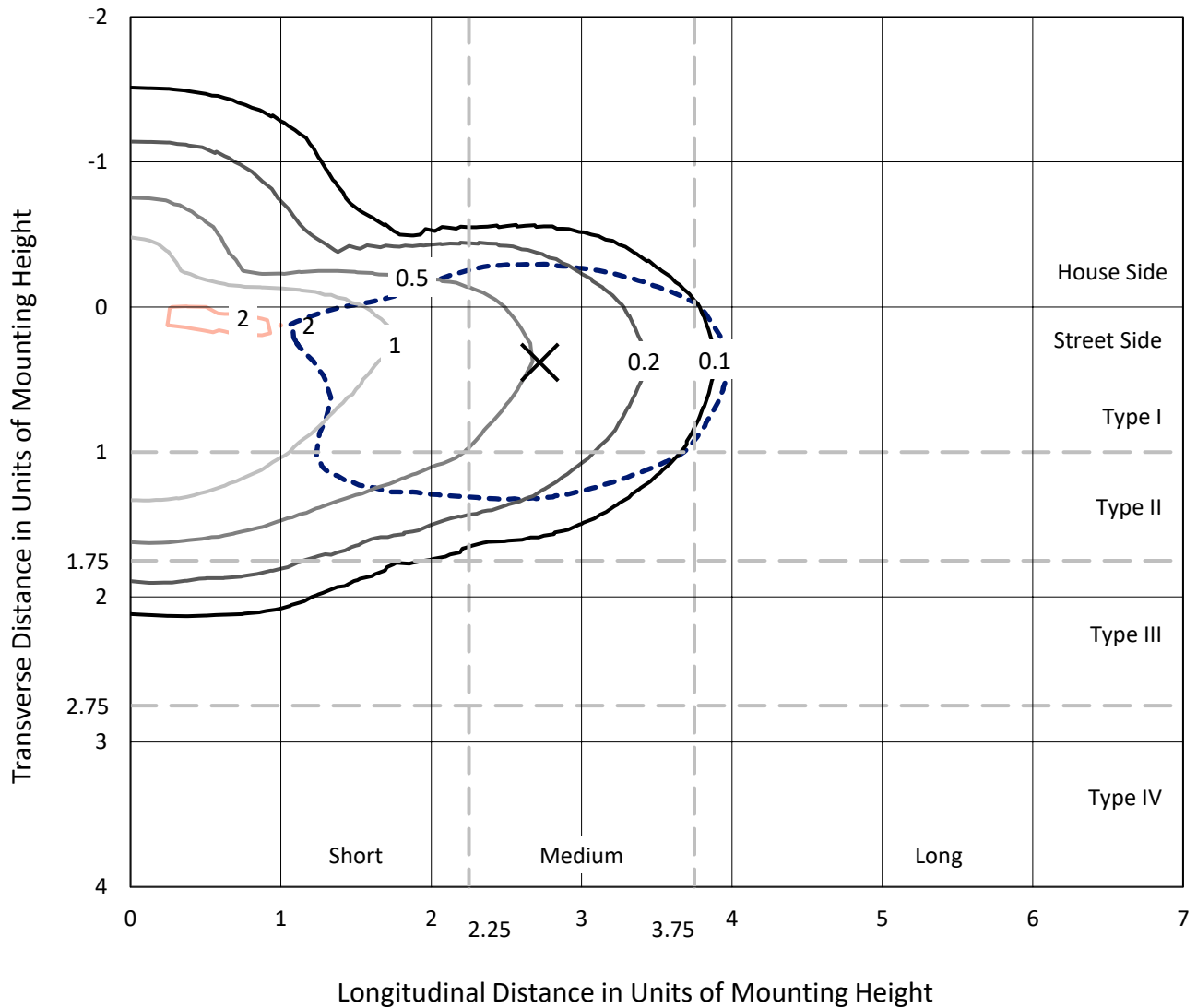
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

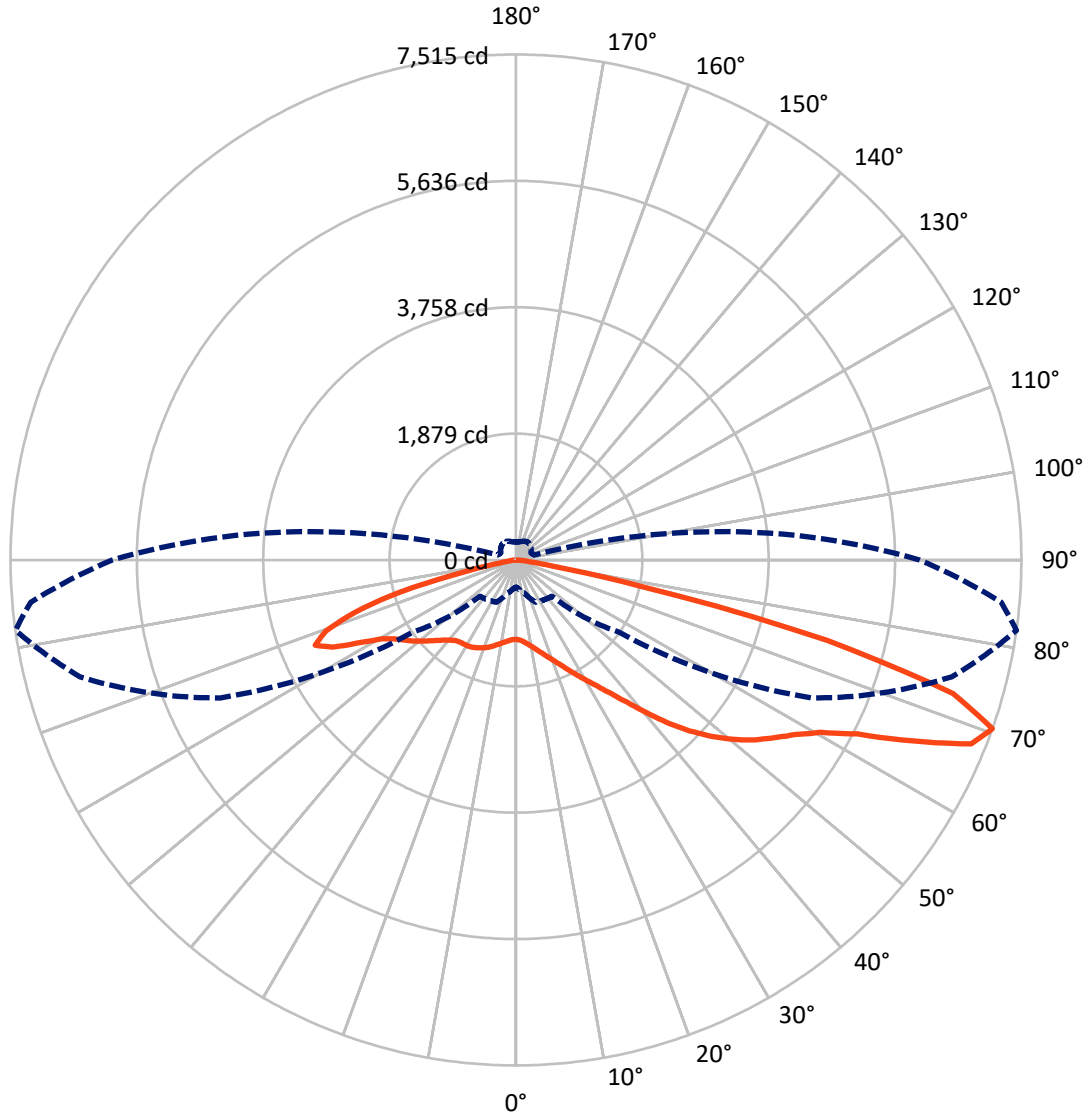
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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	1982.6	0.0	1982.6
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	6059.4	0.0	6059.4
	% Fixture	75.3	0.0	75.3
Total	Lumens	8042.0	0.0	8042.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.3	1.4
10°-20°	319.8	4.0
20°-30°	535.1	6.7
30°-40°	835.9	10.4
40°-50°	1331.3	16.6
50°-60°	1852.6	23.0
60°-70°	1937.9	24.1
70°-80°	1012.9	12.6
80°-90°	105.2	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°	8042.0	100.0
0°-180°	8042.0	100.0

Coefficient of Utilization

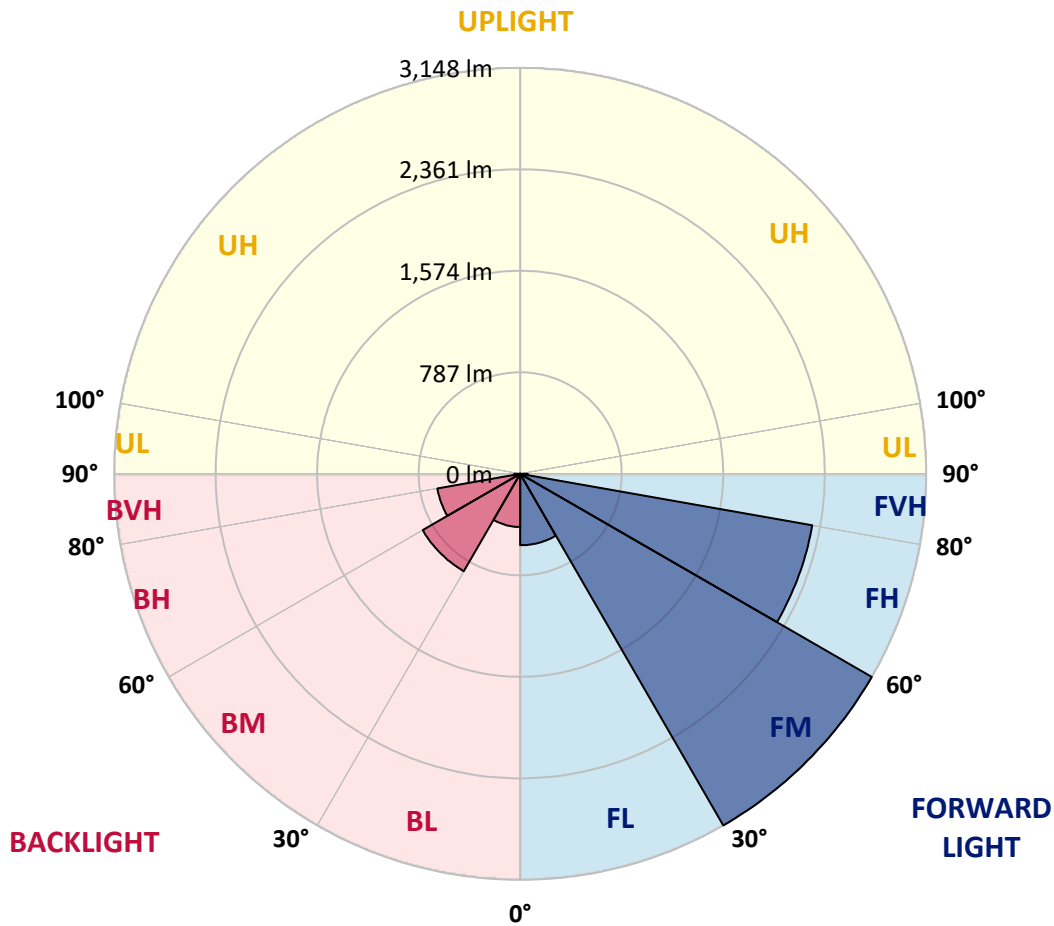


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	553.8	6.9			
FM (30°-60°)	3147.6	39.1			
FH (60°-80°)	2299.2	28.6			G2/5000
FVH (80°-90°)	58.9	0.7			G1/100
BL (0°-30°)	412.4	5.1	B1/500		
BM (30°-60°)	872.2	10.8	B1/1000		
BH (60°-80°)	651.6	8.1	B2/1000		G2/1000
BVH (80°-90°)	46.3	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°	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1
2.5°	1207.2	1214.0	1211.9	1209.8	1209.8	1206.8	1206.4	1202.1	1198.7	1193.1	1191.9
5°	1222.6	1229.8	1229.0	1230.7	1236.2	1237.5	1238.8	1236.2	1229.4	1222.6	1219.6
7.5°	1208.9	1217.0	1219.6	1229.8	1246.9	1262.3	1273.8	1278.5	1272.1	1262.3	1257.6
10°	1162.8	1171.8	1180.8	1205.1	1235.4	1271.7	1302.4	1320.7	1319.5	1310.1	1302.0
12.5°	1069.4	1078.8	1098.0	1145.3	1200.8	1264.8	1322.0	1360.4	1373.6	1366.8	1352.7
15°	994.7	1002.8	1017.3	1066.0	1138.1	1235.4	1329.3	1403.9	1437.7	1433.8	1416.7
17.5°	992.6	996.0	1005.0	1028.0	1083.5	1189.3	1321.6	1446.6	1511.1	1510.6	1489.3
20°	1030.1	1031.4	1036.5	1041.2	1072.8	1154.3	1302.0	1482.0	1593.4	1593.4	1570.4
22.5°	1082.2	1081.3	1086.5	1082.2	1097.6	1151.3	1289.6	1513.2	1685.2	1692.0	1663.0
25°	1160.3	1156.0	1154.7	1144.9	1147.9	1179.1	1303.2	1548.6	1794.0	1808.1	1771.8
27.5°	1264.4	1257.6	1252.9	1230.3	1222.6	1236.2	1345.1	1591.3	1915.2	1939.5	1893.4
30°	1400.1	1387.7	1380.9	1341.6	1313.9	1316.0	1408.2	1648.0	2041.9	2081.2	2022.7
32.5°	1585.3	1566.1	1547.8	1483.3	1432.5	1415.9	1489.7	1726.6	2179.3	2242.0	2166.9
35°	1792.7	1777.3	1757.7	1658.3	1580.2	1541.8	1599.8	1836.2	2340.2	2439.6	2341.9
37.5°	1992.4	1979.2	1988.6	1854.6	1753.9	1698.0	1744.0	1983.4	2538.6	2685.4	2561.2
40°	2198.9	2188.7	2190.0	2062.0	1944.6	1881.9	1919.0	2168.2	2766.1	2977.7	2825.0
42.5°	2423.4	2415.7	2390.1	2276.6	2144.8	2086.3	2120.4	2381.6	3010.2	3310.6	3114.3
45°	2674.7	2670.1	2646.2	2516.0	2364.9	2299.2	2345.3	2617.1	3255.5	3623.8	3404.9
47.5°	2892.0	2895.8	2892.8	2783.1	2626.5	2530.1	2585.1	2862.9	3483.8	3918.2	3683.5
50°	2996.5	3016.6	3046.0	3011.9	2914.6	2816.4	2827.1	3100.2	3701.5	4194.3	3950.7
52.5°	2941.9	2979.9	3060.1	3114.7	3152.3	3131.8	3103.2	3335.8	3906.3	4443.5	4203.3
55°	2738.3	2791.7	2924.8	3056.7	3248.3	3397.2	3434.8	3596.9	4106.0	4662.9	4442.3
57.5°	2367.5	2454.1	2573.6	2840.3	3162.9	3525.7	3821.4	3959.2	4317.7	4897.2	4692.3
60°	1731.7	1847.7	1996.2	2393.1	2864.2	3456.9	4150.4	4515.7	4618.5	5200.6	5017.9
62.5°	1108.2	1179.9	1316.5	1690.3	2231.8	3104.9	4251.1	5211.2	5128.5	5698.1	5506.1
65°	758.7	804.8	929.8	1139.8	1442.8	2311.2	3981.4	5732.7	5938.4	6486.7	6340.8
67.5°	551.3	586.3	693.0	876.9	940.1	1367.7	3089.5	5708.8	6725.7	7299.2	7072.2
70°	402.0	426.7	516.3	693.0	723.3	760.9	1871.6	4852.8	6708.6	7515.2	7243.3
72.5°	297.9	314.9	375.1	537.7	585.5	513.8	926.4	3526.9	5764.7	6797.4	6579.3
75°	215.5	228.3	272.7	411.4	468.6	391.3	462.1	2061.1	4021.1	4781.5	4819.9
77.5°	164.7	174.5	203.6	301.3	375.1	293.6	286.8	948.2	1906.6	1916.0	2023.6
80°	132.3	138.7	154.5	212.1	287.6	219.8	186.9	382.8	602.5	509.9	535.1
82.5°	97.3	108.0	130.6	148.9	205.7	151.5	113.9	193.3	229.2	197.1	198.9
85°	55.5	62.7	78.9	106.7	131.4	92.6	65.3	85.8	106.7	87.5	78.1
87.5°	19.6	25.6	27.7	41.8	57.2	38.4	25.2	24.8	35.0	26.0	21.8
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°	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1	1179.1
2.5°	1187.6	1185.5	1176.9	1165.4	1153.5	1141.9	1138.1	1130.0	1124.4	1121.4	1124.9
5°	1211.5	1204.7	1184.6	1159.0	1132.1	1103.1	1082.6	1063.8	1050.2	1037.4	1042.5
7.5°	1245.6	1233.7	1199.1	1154.3	1106.5	1058.3	1022.4	995.1	976.8	964.8	967.4
10°	1285.3	1267.0	1214.0	1147.1	1073.2	1004.1	961.9	938.4	926.9	920.5	922.2
12.5°	1331.0	1304.9	1229.4	1130.4	1022.4	943.5	914.5	907.7	908.1	908.5	909.4
15°	1387.3	1351.0	1241.8	1094.1	956.3	897.0	891.9	903.0	914.5	920.0	919.6
17.5°	1450.9	1399.7	1243.9	1034.4	891.4	867.1	883.3	907.2	924.7	932.4	934.1
20°	1519.2	1449.2	1228.6	949.9	838.1	842.8	871.8	902.5	921.7	931.6	934.1
22.5°	1597.3	1502.1	1191.9	861.1	794.6	816.3	850.5	880.3	900.4	910.2	912.8
25°	1686.4	1561.4	1134.3	786.5	757.0	786.5	820.6	845.4	861.6	870.5	873.1
27.5°	1785.4	1623.3	1057.4	727.1	724.2	755.7	783.9	803.1	811.6	818.5	821.0
30°	1884.9	1679.6	964.4	682.3	695.6	725.4	745.5	754.0	756.6	757.9	760.9
32.5°	1992.4	1728.3	866.7	645.2	668.3	696.0	707.9	711.8	699.8	691.7	694.3
35°	2122.6	1780.3	771.1	615.8	641.4	665.3	669.1	665.7	651.6	635.0	635.8
37.5°	2283.4	1845.2	694.7	594.9	616.2	632.0	627.3	626.4	627.7	608.1	609.4
40°	2480.6	1929.7	638.8	578.6	595.7	599.1	585.9	593.2	599.6	569.7	570.5
42.5°	2699.5	2031.7	603.4	567.6	578.6	570.5	550.1	558.2	557.3	518.1	517.6
45°	2922.7	2142.6	591.0	559.4	562.9	546.6	524.0	526.2	508.2	472.8	474.1
47.5°	3144.6	2261.7	598.7	552.6	543.2	524.9	507.4	498.0	471.5	445.1	445.1
50°	3362.2	2386.7	626.9	539.0	516.3	505.7	492.9	476.2	448.1	425.5	423.7
52.5°	3564.1	2512.6	658.4	516.3	482.6	489.0	480.9	461.7	434.0	410.9	411.4
55°	3755.2	2638.5	670.8	485.2	451.1	474.5	469.8	434.4	401.1	382.4	380.6
57.5°	3963.5	2790.0	657.2	445.5	425.5	457.9	440.0	400.7	381.5	367.4	366.1
60°	4251.9	3027.7	627.7	396.4	401.1	433.1	402.4	386.2	365.3	349.5	348.6
62.5°	4731.2	3471.0	580.4	347.8	372.5	396.4	384.5	368.3	346.9	331.6	331.6
65°	5439.5	4087.2	491.2	309.8	340.5	360.6	365.3	349.1	326.9	310.7	311.5
67.5°	6037.0	4473.8	371.7	278.2	307.7	331.6	344.8	329.0	305.5	289.8	290.2
70°	6004.1	4193.1	283.8	247.1	278.7	303.0	320.0	307.7	282.5	267.6	268.8
72.5°	5332.9	3507.7	229.6	215.5	249.2	273.1	293.6	284.2	258.6	244.1	244.1
75°	3917.8	2490.0	183.5	183.5	212.5	242.0	264.6	258.6	235.1	224.9	221.9
77.5°	1651.4	1044.6	143.8	152.3	176.7	207.8	236.0	238.1	217.6	230.4	209.1
80°	439.1	288.0	109.7	119.9	138.7	171.5	205.3	204.4	182.2	170.3	158.3
82.5°	167.3	113.5	78.1	84.5	100.3	131.4	162.6	167.7	145.5	125.9	125.9
85°	64.4	48.6	48.2	50.8	58.5	87.1	122.9	127.2	109.7	93.0	96.0
87.5°	16.6	14.5	17.9	17.1	26.9	46.5	70.4	73.0	67.0	38.8	55.5
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)