

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: P882039

Luminaire Tested: **NAV-SB1D-722-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882039
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-SB1D-722-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8121 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

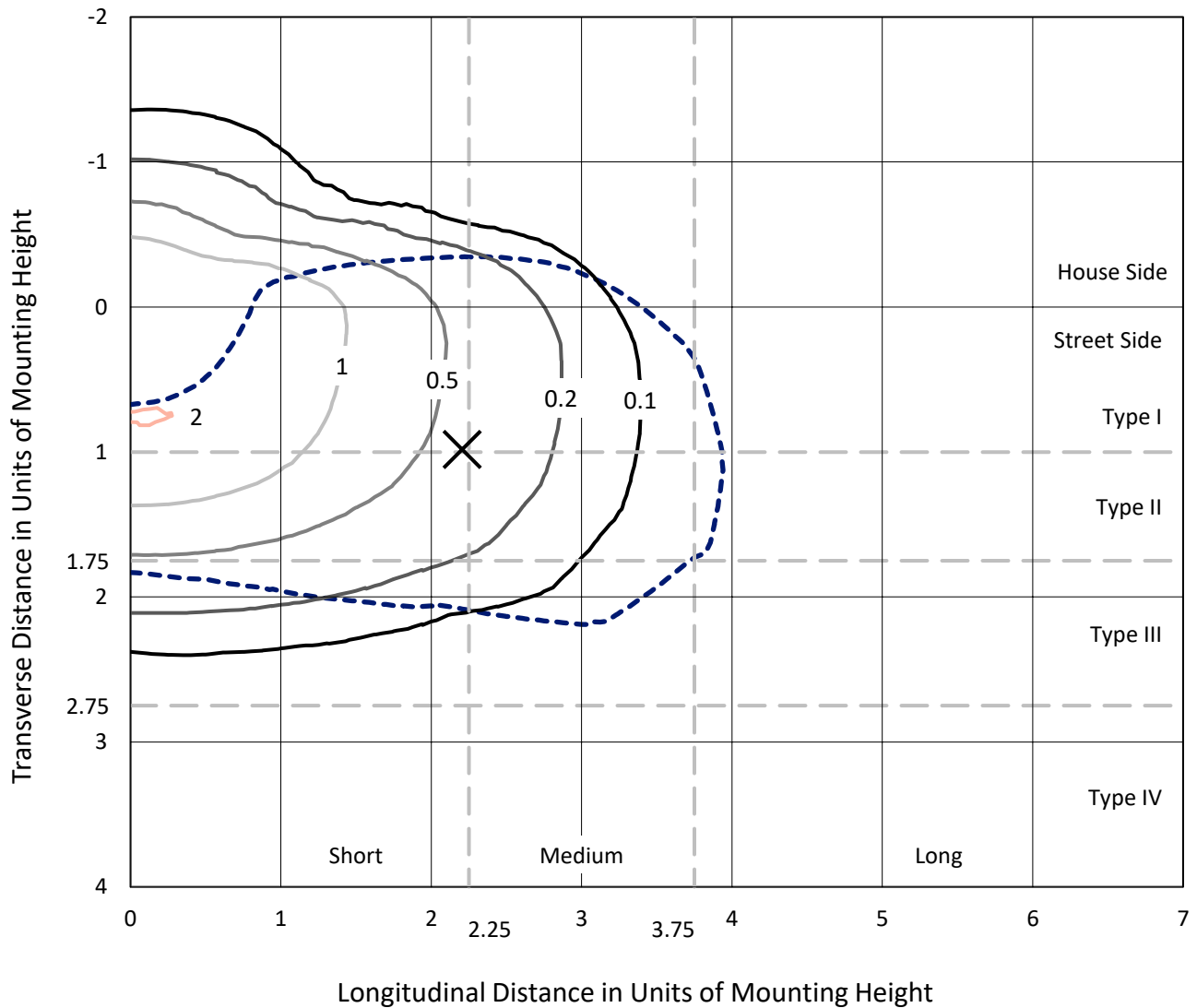
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

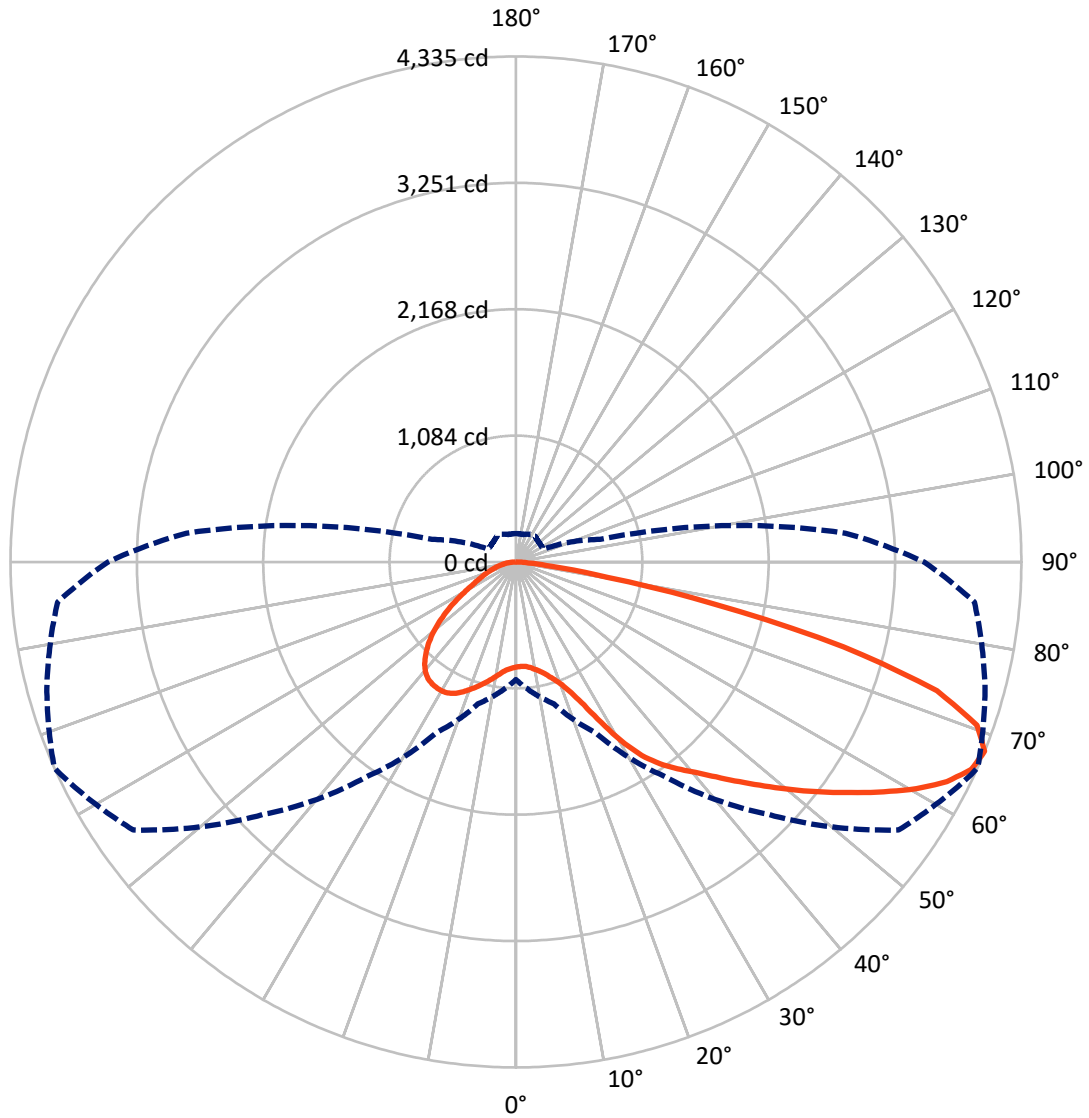
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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
House Side	Lumens	2019.3	0.0	2019.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	6101.7	0.0	6101.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	8121.0	0.0	8121.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	1.1
10°-20°	295.0	3.6
20°-30°	568.7	7.0
30°-40°	997.1	12.3
40°-50°	1482.4	18.3
50°-60°	1879.1	23.1
60°-70°	1838.6	22.6
70°-80°	877.0	10.8
80°-90°	93.7	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°	8121.0	100.0
0°-180°	8121.0	100.0

Coefficient of Utilization



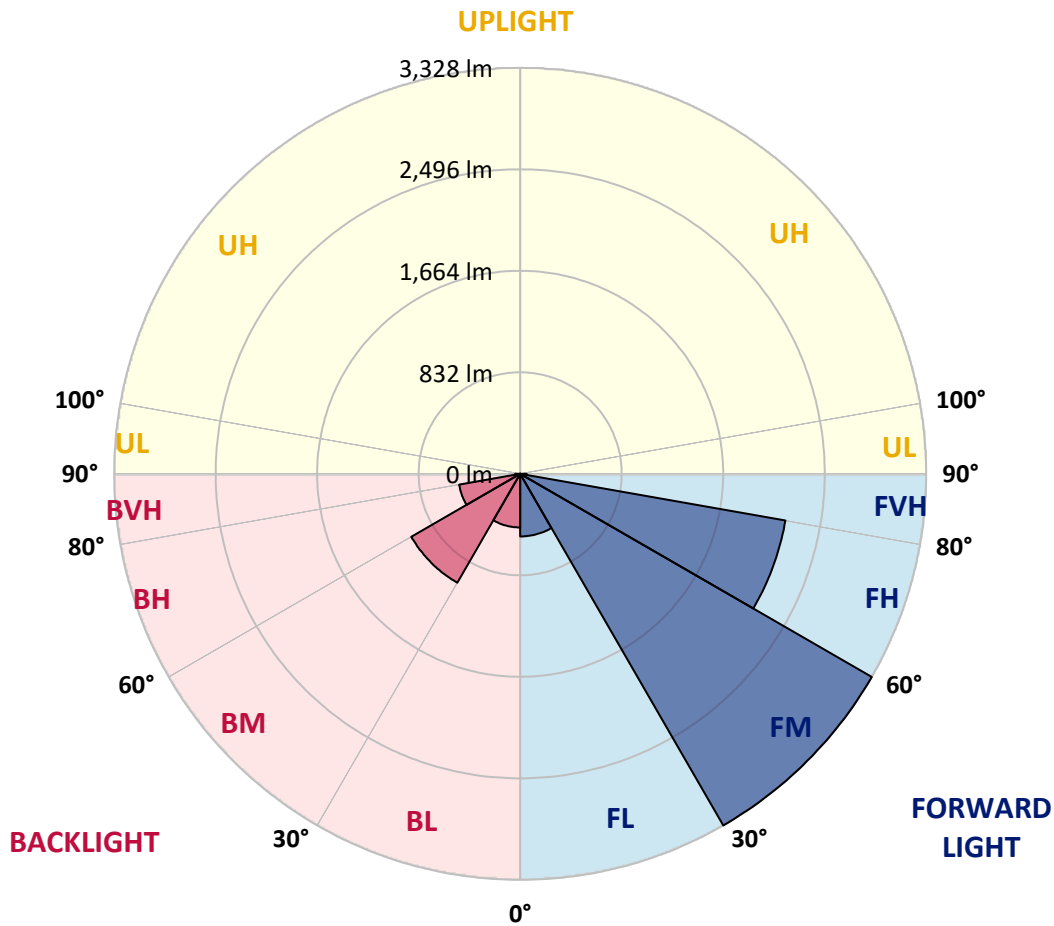
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	513.2	6.3			
FM (30°-60°)	3327.9	41.0			
FH (60°-80°)	2207.5	27.2			G2/5000
FVH (80°-90°)	53.1	0.7			G1/100
BL (0°-30°)	439.9	5.4	B1/500		
BM (30°-60°)	1030.7	12.7	B2/2500		
BH (60°-80°)	508.1	6.3	B2/1000		G2/1000
BVH (80°-90°)	40.6	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°	900.7	900.7	900.7	900.7	900.7	900.7	900.7	900.7	900.7	900.7	900.7
2.5°	891.3	896.5	895.2	893.0	892.6	893.5	894.8	896.0	895.6	897.7	901.2
5°	888.8	893.9	893.5	893.5	895.2	898.6	900.7	902.9	900.7	903.3	908.0
7.5°	890.5	894.3	896.0	897.7	902.0	908.4	913.5	918.2	915.7	918.6	924.6
10°	912.2	915.2	916.9	916.9	919.9	927.2	932.3	940.8	938.7	943.4	951.1
12.5°	951.9	954.9	954.9	953.2	955.3	960.0	961.7	971.1	967.3	975.0	982.6
15°	1000.6	1006.5	1001.8	998.9	999.7	1004.4	1004.0	1011.2	1007.4	1013.8	1020.6
17.5°	1054.3	1062.0	1054.3	1053.9	1052.2	1057.3	1057.7	1064.1	1057.3	1062.0	1066.7
20°	1117.9	1128.6	1122.2	1124.3	1120.5	1122.6	1124.7	1134.1	1123.5	1126.9	1125.6
22.5°	1207.5	1220.3	1213.5	1221.6	1219.0	1217.3	1216.9	1233.5	1216.9	1218.2	1205.8
25°	1338.1	1353.4	1341.5	1352.6	1352.6	1358.1	1364.5	1385.9	1358.1	1350.0	1318.0
27.5°	1530.9	1546.3	1522.8	1529.7	1527.5	1541.2	1534.3	1587.3	1557.4	1544.2	1479.7
30°	1763.1	1790.4	1746.0	1744.3	1742.1	1763.9	1773.7	1808.7	1778.4	1765.2	1687.5
32.5°	2013.9	2042.5	1989.6	1974.3	1966.2	1979.4	1971.3	1999.4	1978.5	1958.0	1862.0
35°	2279.3	2307.5	2257.1	2227.3	2194.9	2167.1	2138.1	2145.4	2125.7	2094.6	1995.2
37.5°	2530.2	2581.9	2528.5	2496.5	2436.8	2382.6	2301.5	2267.8	2249.5	2220.9	2120.6
40°	2785.8	2815.2	2774.7	2747.4	2682.6	2597.6	2467.9	2396.7	2371.9	2344.2	2259.3
42.5°	2974.0	3002.1	2980.4	2961.6	2910.8	2812.3	2644.6	2555.4	2519.6	2488.4	2416.3
45°	3123.3	3144.2	3130.6	3137.4	3115.6	3020.1	2827.6	2725.6	2688.5	2650.6	2593.8
47.5°	3183.5	3205.7	3227.4	3268.0	3305.1	3234.7	3024.3	2910.0	2870.7	2831.9	2776.0
50°	3176.6	3199.3	3262.4	3348.6	3463.8	3440.3	3231.7	3106.2	3070.0	3025.6	2974.0
52.5°	3122.0	3147.6	3228.7	3372.1	3555.5	3594.4	3442.9	3308.9	3274.8	3221.9	3170.2
55°	2978.7	2994.0	3115.6	3318.7	3577.3	3701.9	3649.8	3524.8	3490.7	3416.9	3360.5
57.5°	2712.8	2735.0	2912.1	3174.9	3522.7	3774.9	3831.6	3751.8	3719.0	3612.7	3553.8
60°	2366.0	2401.4	2604.0	2933.4	3383.6	3774.4	3996.7	3975.0	3947.7	3805.6	3744.1
62.5°	1973.4	2014.4	2209.4	2592.1	3140.4	3667.3	4100.0	4161.9	4147.8	3983.5	3905.0
65°	1515.6	1543.7	1737.9	2150.5	2761.9	3437.4	4111.9	4289.4	4292.0	4118.8	3989.1
67.5°	1009.1	1090.2	1258.7	1613.7	2255.0	3061.4	4007.0	4310.3	4335.1	4165.3	3946.8
70°	492.4	599.1	764.2	1048.8	1613.7	2485.0	3732.6	4138.8	4193.9	4029.6	3695.1
72.5°	204.4	238.9	329.0	517.6	926.3	1676.9	3181.3	3673.7	3775.7	3570.5	3106.7
75°	137.8	149.3	188.2	265.4	422.0	826.9	2294.3	2739.3	2903.6	2696.6	2204.2
77.5°	106.2	113.5	137.0	185.6	250.9	312.8	1228.0	1650.8	1735.7	1606.9	1146.9
80°	83.6	89.2	102.4	135.3	177.9	167.3	418.6	748.0	797.0	668.6	368.7
82.5°	72.5	74.7	73.4	91.7	118.2	97.7	137.4	276.1	304.7	221.0	120.3
85°	52.5	58.5	61.0	56.7	62.7	49.5	56.3	97.7	107.5	96.0	67.8
87.5°	21.3	31.6	38.8	36.7	23.0	14.1	17.5	28.6	32.9	35.8	22.2
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°	900.7	900.7	900.7	900.7	900.7	900.7	900.7	900.7	900.7	900.7	900.7
2.5°	901.6	904.6	906.7	909.3	911.0	913.5	918.6	921.6	922.1	924.2	923.8
5°	909.7	914.0	918.6	925.5	933.2	939.6	949.4	956.2	958.8	960.9	960.5
7.5°	927.2	933.2	941.7	953.6	964.7	973.3	985.2	993.3	1001.4	1004.4	1004.8
10°	953.2	961.7	974.1	990.3	1002.3	1013.4	1025.7	1032.6	1040.7	1044.1	1045.8
12.5°	985.6	994.6	1010.8	1033.4	1044.5	1052.2	1056.5	1054.8	1056.5	1059.5	1060.3
15°	1022.8	1032.6	1050.9	1075.2	1082.9	1076.1	1066.7	1058.2	1056.9	1057.7	1060.7
17.5°	1066.7	1074.0	1095.3	1115.8	1110.2	1082.1	1061.6	1047.9	1041.1	1039.0	1042.0
20°	1128.1	1128.1	1145.6	1158.4	1121.3	1073.5	1041.5	1019.3	1005.3	999.3	998.0
22.5°	1202.8	1196.0	1207.1	1198.1	1119.2	1049.6	1005.3	966.9	945.5	937.0	935.7
25°	1297.5	1289.4	1286.4	1231.0	1103.8	1011.7	939.6	893.0	874.3	869.6	870.4
27.5°	1440.5	1420.0	1381.2	1248.9	1075.7	951.9	862.8	819.7	809.0	809.4	810.7
30°	1630.8	1589.8	1494.7	1251.9	1029.6	867.4	784.2	753.5	748.4	750.5	757.8
32.5°	1807.0	1768.2	1610.7	1238.2	958.8	784.7	713.8	693.4	685.7	688.2	691.7
35°	1945.2	1934.6	1718.2	1219.0	871.7	707.0	650.7	633.2	618.3	614.8	617.4
37.5°	2075.8	2071.5	1798.9	1192.2	785.5	652.0	599.9	576.9	555.1	543.2	543.6
40°	2219.2	2214.9	1851.8	1150.8	709.1	604.2	554.3	524.0	497.1	475.3	477.5
42.5°	2380.5	2355.3	1877.0	1091.5	644.3	563.6	517.1	476.2	440.8	420.7	422.0
45°	2556.7	2499.9	1876.5	1015.9	589.7	526.5	477.5	419.4	386.6	367.8	366.9
47.5°	2743.6	2638.2	1853.5	932.3	536.8	485.6	416.0	371.6	349.9	338.4	335.8
50°	2936.4	2767.5	1814.3	836.3	482.6	439.1	377.6	347.3	330.7	320.0	316.2
52.5°	3117.8	2884.8	1766.9	727.5	427.5	393.8	360.5	337.1	319.6	307.6	302.5
55°	3286.3	2985.9	1699.9	616.1	382.7	363.5	352.4	332.8	312.8	298.7	293.1
57.5°	3436.1	3051.6	1584.3	511.6	350.7	342.6	343.9	325.6	302.5	290.6	282.9
60°	3560.7	3099.8	1413.2	414.7	324.7	322.1	330.7	311.9	285.0	271.4	265.4
62.5°	3635.3	3099.0	1203.2	339.6	302.5	303.4	313.2	294.8	267.5	254.7	250.9
65°	3628.9	3023.0	972.8	290.6	281.2	282.0	294.8	276.1	253.0	245.3	244.9
67.5°	3500.5	2837.9	746.3	258.6	257.7	261.6	276.5	263.3	244.1	243.2	244.5
70°	3152.8	2453.4	537.6	233.0	233.4	238.9	258.6	255.2	239.4	241.1	240.6
72.5°	2528.1	1870.6	361.0	206.1	206.5	215.5	241.5	248.8	234.7	257.3	260.7
75°	1683.7	1166.5	232.1	177.5	177.9	189.4	226.6	236.4	221.9	256.4	258.6
77.5°	809.0	524.4	168.1	149.3	149.3	160.0	195.8	211.6	189.0	199.3	182.6
80°	279.5	197.1	132.3	120.3	117.8	125.0	165.1	183.5	163.0	150.2	140.8
82.5°	110.1	102.4	106.2	93.4	84.9	89.6	128.4	151.5	119.9	108.4	108.0
85°	63.1	66.6	75.1	61.9	49.1	55.0	94.3	108.8	90.5	79.8	81.5
87.5°	17.1	23.5	34.6	32.0	22.2	23.5	44.8	60.2	52.1	40.1	41.4
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)