

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: P882211

Luminaire Tested: **NAV-SB2A-722-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882211
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-722-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7201 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

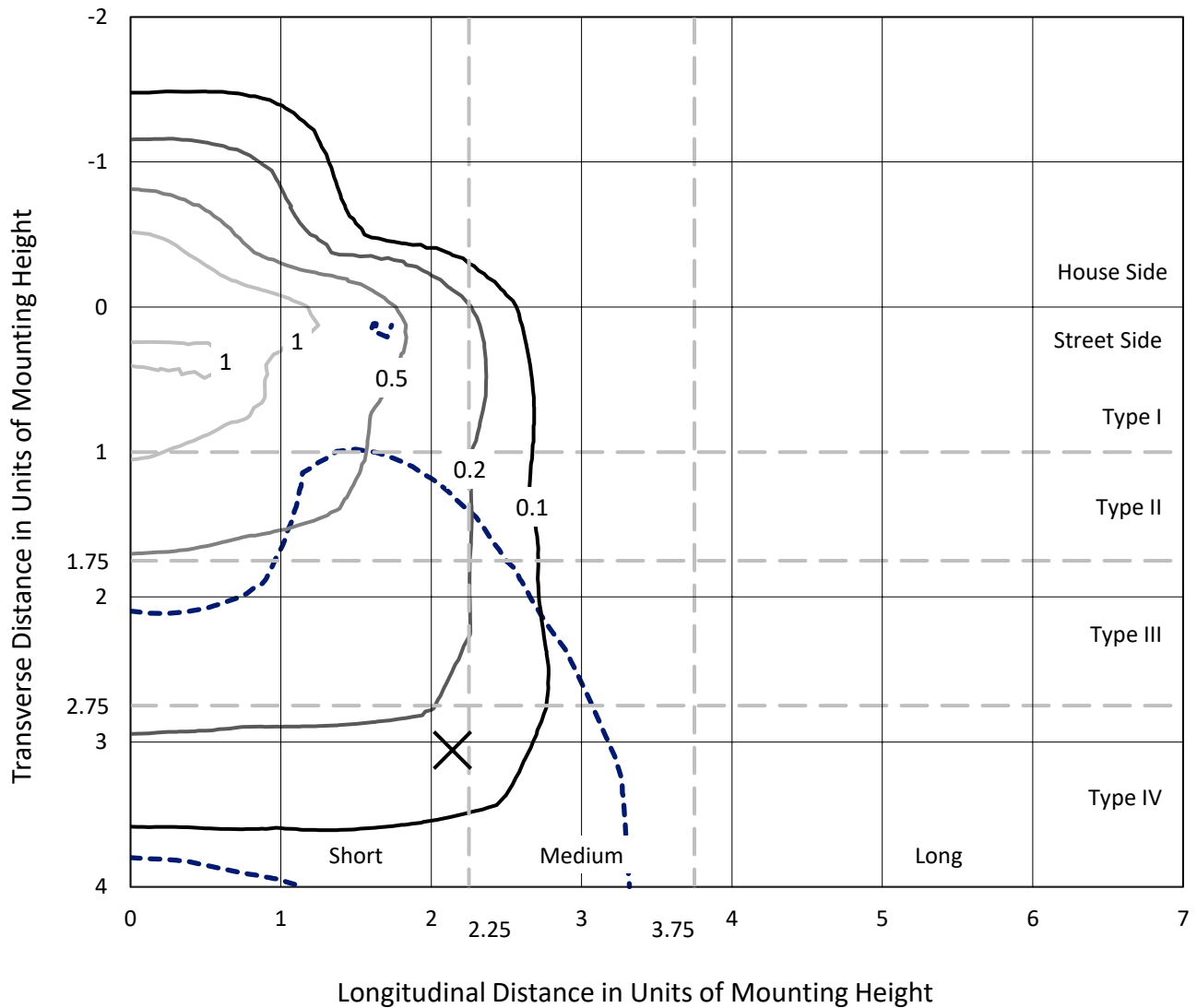
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

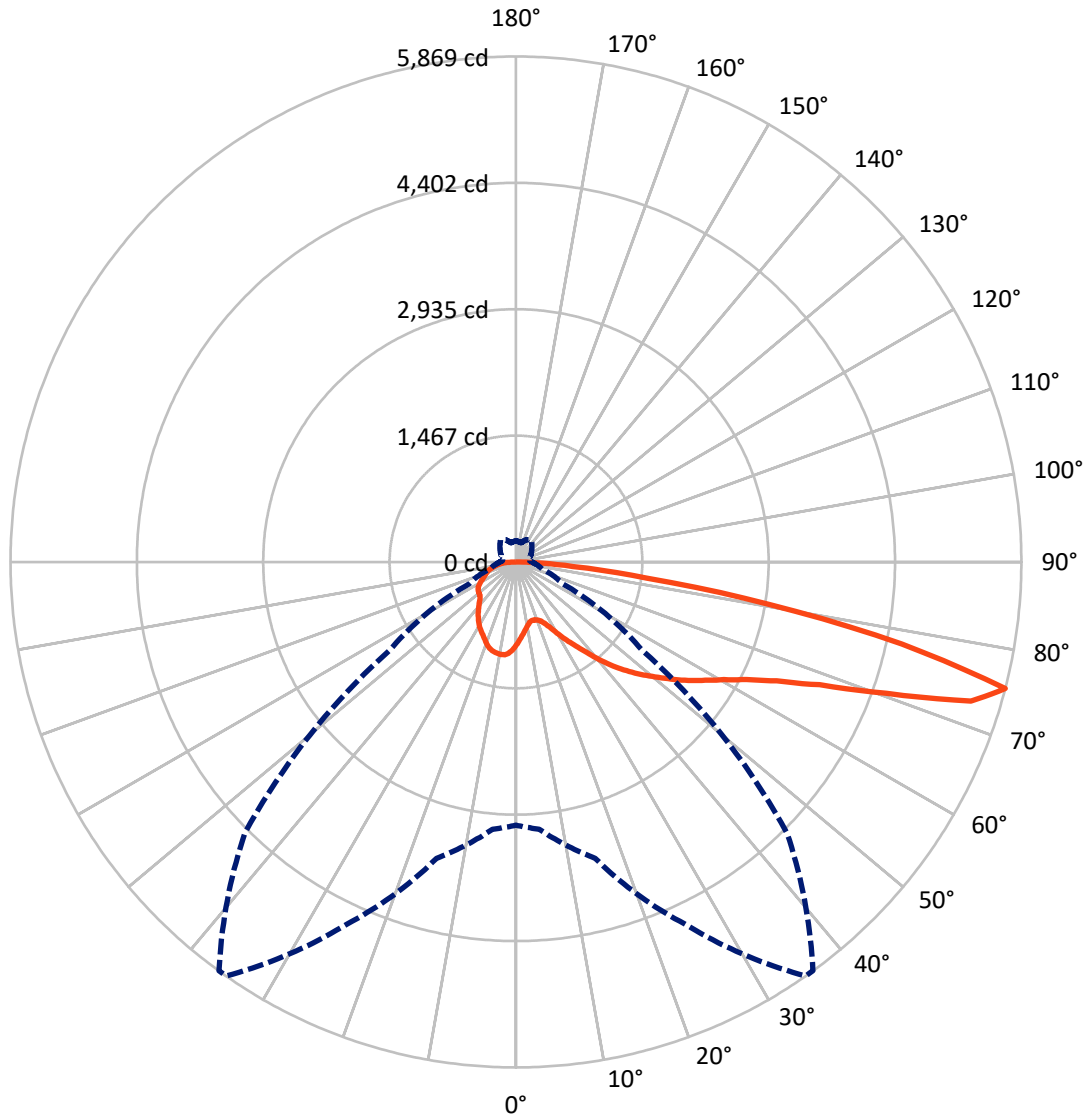
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1713.7	0.0	1713.7
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	5487.3	0.0	5487.3
	% Fixture	76.2	0.0	76.2
Total	Lumens	7201.0	0.0	7201.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	1.3
10°-20°	262.1	3.6
20°-30°	440.1	6.1
30°-40°	683.9	9.5
40°-50°	1015.1	14.1
50°-60°	1401.4	19.5
60°-70°	1700.3	23.6
70°-80°	1405.1	19.5
80°-90°	202.1	2.8
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°	7201.0	100.0
0°-180°	7201.0	100.0

Coefficient of Utilization



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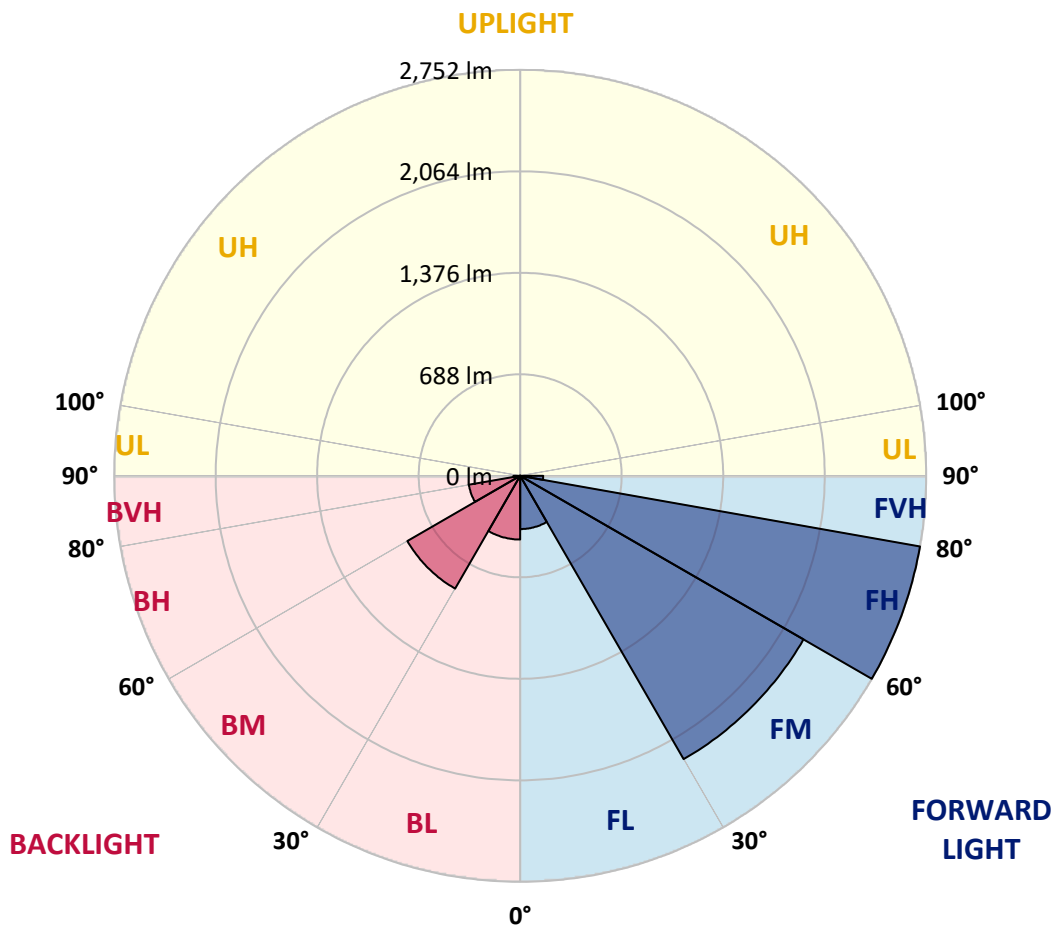
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	361.1	5.0			
FM (30°-60°)	2217.5	30.8			
FH (60°-80°)	2752.1	38.2			G2/5000
FVH (80°-90°)	156.6	2.2			G2/225
BL (0°-30°)	431.9	6.0	B1/500		
BM (30°-60°)	883.0	12.3	B1/1000		
BH (60°-80°)	353.3	4.9	B1/500		G1/500
BVH (80°-90°)	45.5	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6
2.5°	884.8	890.3	892.6	891.5	897.3	896.5	904.7	914.8	928.8	942.5	962.3
5°	816.7	822.6	827.6	832.3	843.6	847.1	859.9	879.4	905.1	931.2	963.9
7.5°	753.3	758.3	766.1	774.7	793.7	797.3	818.7	849.0	884.8	923.0	968.1
10°	701.5	706.5	714.7	724.5	748.2	752.5	779.7	820.2	866.9	915.2	972.8
12.5°	679.3	680.9	685.5	695.3	715.9	718.6	748.6	794.9	849.4	909.4	979.8
15°	678.1	681.2	681.6	686.7	703.8	705.0	732.6	778.6	838.5	908.2	990.3
17.5°	689.8	692.1	688.6	691.8	706.2	708.1	729.9	770.8	835.0	913.3	1008.2
20°	721.0	722.9	712.4	708.1	718.6	720.2	741.6	775.8	838.5	923.8	1032.8
22.5°	787.1	788.3	762.6	745.1	745.9	746.6	765.3	796.5	852.1	942.8	1063.9
25°	890.3	889.5	848.6	814.8	795.3	791.0	803.5	830.0	875.1	968.1	1104.0
27.5°	1011.0	1005.1	964.3	913.6	871.2	865.0	862.3	873.6	907.8	1001.6	1153.1
30°	1147.2	1141.8	1097.8	1031.6	972.8	962.7	937.0	931.2	956.5	1047.2	1221.2
32.5°	1296.7	1293.2	1240.6	1160.5	1081.8	1070.1	1026.9	1011.4	1031.2	1116.1	1316.2
35°	1422.0	1418.9	1375.3	1292.8	1196.7	1182.3	1138.3	1120.7	1130.9	1204.4	1440.3
37.5°	1535.3	1533.8	1496.4	1431.4	1332.1	1314.6	1265.2	1259.3	1257.4	1320.8	1591.0
40°	1640.4	1636.5	1597.6	1563.4	1489.8	1473.8	1430.2	1425.2	1410.4	1464.1	1761.5
42.5°	1756.8	1746.7	1690.3	1674.3	1654.5	1641.2	1615.1	1615.9	1583.2	1625.6	1942.1
45°	1851.8	1846.0	1788.0	1778.6	1800.0	1794.6	1817.2	1823.0	1759.6	1795.0	2129.8
47.5°	1953.8	1948.4	1899.3	1892.7	1950.7	1952.3	2032.1	2034.0	1931.6	1970.9	2317.8
50°	2079.5	2071.8	2023.1	2031.3	2096.3	2102.1	2248.1	2234.9	2090.1	2149.6	2504.3
52.5°	2162.5	2167.1	2156.6	2169.9	2258.6	2264.1	2460.7	2426.8	2246.9	2326.0	2687.2
55°	2223.6	2232.9	2265.6	2296.0	2429.9	2435.4	2661.1	2609.4	2377.0	2489.5	2859.3
57.5°	2302.2	2289.0	2350.1	2409.3	2592.6	2607.0	2856.2	2785.3	2492.2	2630.4	2977.2
60°	2415.1	2405.8	2453.3	2540.8	2774.8	2797.8	3062.5	2943.8	2576.7	2742.1	3000.2
62.5°	2644.0	2620.7	2628.0	2705.5	3004.5	3034.8	3295.3	3082.0	2618.7	2785.7	2877.2
65°	2986.2	2946.1	2908.7	2962.4	3328.0	3358.0	3558.0	3190.6	2603.1	2701.2	2550.6
67.5°	3417.1	3377.4	3331.5	3382.1	3804.5	3828.2	3882.3	3251.7	2480.5	2375.8	1973.3
70°	3772.5	3757.7	3812.6	4020.9	4565.5	4566.3	4298.1	3201.1	2144.6	1684.4	1141.8
72.5°	3725.4	3716.5	4005.7	4649.6	5524.7	5504.1	4691.6	2818.0	1444.6	759.9	427.8
75°	3056.3	3114.3	3562.3	4638.3	5869.2	5866.5	4450.7	1791.5	597.5	314.9	221.1
77.5°	1638.9	1730.8	2312.7	3424.5	4581.9	4650.8	3129.1	626.7	256.5	201.6	153.0
80°	534.5	614.7	921.8	1743.6	2977.2	2964.4	1341.1	246.0	175.6	142.9	105.9
82.5°	227.0	236.3	411.9	823.3	1527.9	1504.2	427.0	141.3	123.4	97.7	65.4
85°	88.8	99.3	181.8	380.7	661.8	647.4	154.2	70.1	79.0	63.8	38.9
87.5°	29.2	35.4	65.0	130.4	205.9	198.5	37.8	24.1	34.3	29.2	14.0
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°	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6
2.5°	967.8	974.0	981.4	992.3	1001.6	1009.4	1017.6	1022.6	1024.6	1030.4	1030.0
5°	974.8	988.4	1006.7	1024.6	1042.1	1052.6	1062.0	1066.6	1070.9	1074.0	1074.8
7.5°	986.4	1004.0	1032.8	1056.1	1070.9	1079.5	1085.7	1084.2	1085.7	1086.5	1087.7
10°	996.6	1021.1	1055.3	1077.5	1088.8	1089.2	1087.7	1082.2	1079.5	1079.9	1080.6
12.5°	1008.6	1035.9	1072.9	1091.5	1094.7	1086.1	1079.5	1070.1	1066.6	1065.1	1064.3
15°	1025.0	1056.1	1091.9	1098.9	1091.2	1080.3	1069.0	1053.8	1046.0	1039.8	1041.7
17.5°	1044.8	1079.1	1106.7	1101.7	1084.9	1067.0	1048.7	1025.8	1009.8	1003.2	1003.6
20°	1072.5	1103.2	1118.0	1095.8	1070.5	1043.3	1012.1	984.1	969.3	962.7	961.9
22.5°	1106.0	1135.5	1128.9	1085.7	1049.9	1006.3	967.4	946.7	939.3	934.7	935.4
25°	1146.0	1171.4	1136.7	1070.9	1016.0	957.2	927.3	920.7	917.2	913.6	913.6
27.5°	1198.2	1211.8	1142.5	1049.1	963.1	905.1	894.2	895.4	894.2	888.3	889.5
30°	1267.1	1264.4	1148.0	1013.7	902.4	858.0	858.8	863.8	864.6	860.7	862.7
32.5°	1357.8	1330.2	1150.7	967.8	844.4	816.7	817.5	822.9	826.8	820.2	823.3
35°	1467.6	1406.9	1146.4	910.1	799.6	777.4	771.6	773.1	774.3	768.1	772.3
37.5°	1595.7	1492.9	1127.4	846.3	762.6	738.9	726.4	715.9	709.7	703.8	707.7
40°	1736.2	1586.7	1092.3	784.0	721.3	698.0	679.3	659.4	638.4	630.6	634.1
42.5°	1883.3	1683.3	1049.9	724.5	673.8	654.8	634.9	606.1	574.6	558.6	560.6
45°	2035.9	1782.1	1008.2	665.7	625.2	617.0	594.0	559.4	525.1	504.9	503.3
47.5°	2185.4	1875.6	947.1	606.5	579.6	588.6	570.7	538.8	500.6	468.7	465.2
50°	2328.3	1963.2	847.1	546.6	542.7	580.0	562.9	517.0	473.4	432.5	429.0
52.5°	2470.0	2034.0	719.0	492.1	522.8	577.7	552.8	502.2	448.8	406.0	401.4
55°	2590.3	2070.6	595.6	445.3	494.0	557.8	540.7	484.7	414.2	368.7	364.8
57.5°	2658.8	2041.0	492.8	399.4	454.3	525.1	520.1	447.3	372.9	337.9	333.2
60°	2629.2	1921.1	408.7	359.3	416.5	489.7	484.3	410.3	341.4	308.3	303.6
62.5°	2466.1	1692.6	342.2	324.3	382.3	453.5	448.5	381.9	317.3	285.3	280.3
65°	2137.6	1376.9	290.4	295.1	347.6	409.9	417.3	358.1	298.2	267.0	262.0
67.5°	1630.3	997.3	249.9	269.8	313.8	367.1	388.5	341.0	282.2	252.6	248.0
70°	929.2	566.4	215.7	245.2	283.8	327.4	366.3	327.4	265.1	240.6	237.5
72.5°	352.3	260.0	186.5	220.7	255.0	293.9	341.8	306.0	245.2	227.0	223.8
75°	188.0	158.4	156.9	191.9	221.9	261.2	311.0	285.0	230.5	239.8	247.6
77.5°	128.1	112.1	131.2	164.3	185.7	225.0	278.3	253.0	199.7	198.9	183.4
80°	88.8	79.4	106.7	132.4	143.6	189.2	242.9	217.2	162.7	151.8	145.2
82.5°	53.3	51.8	79.8	98.9	101.6	146.0	201.3	182.2	133.1	116.0	116.8
85°	29.2	30.8	51.0	58.0	59.2	102.0	157.7	140.9	102.4	86.0	86.8
87.5°	8.2	10.5	18.7	23.0	28.4	52.9	93.8	83.7	51.4	35.8	35.8
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)