

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: P884427

Luminaire Tested: **NAV-SB5B-727-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884427
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-SB5B-727-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25658 lumens
Efficiency: N/A
Efficacy: 140.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

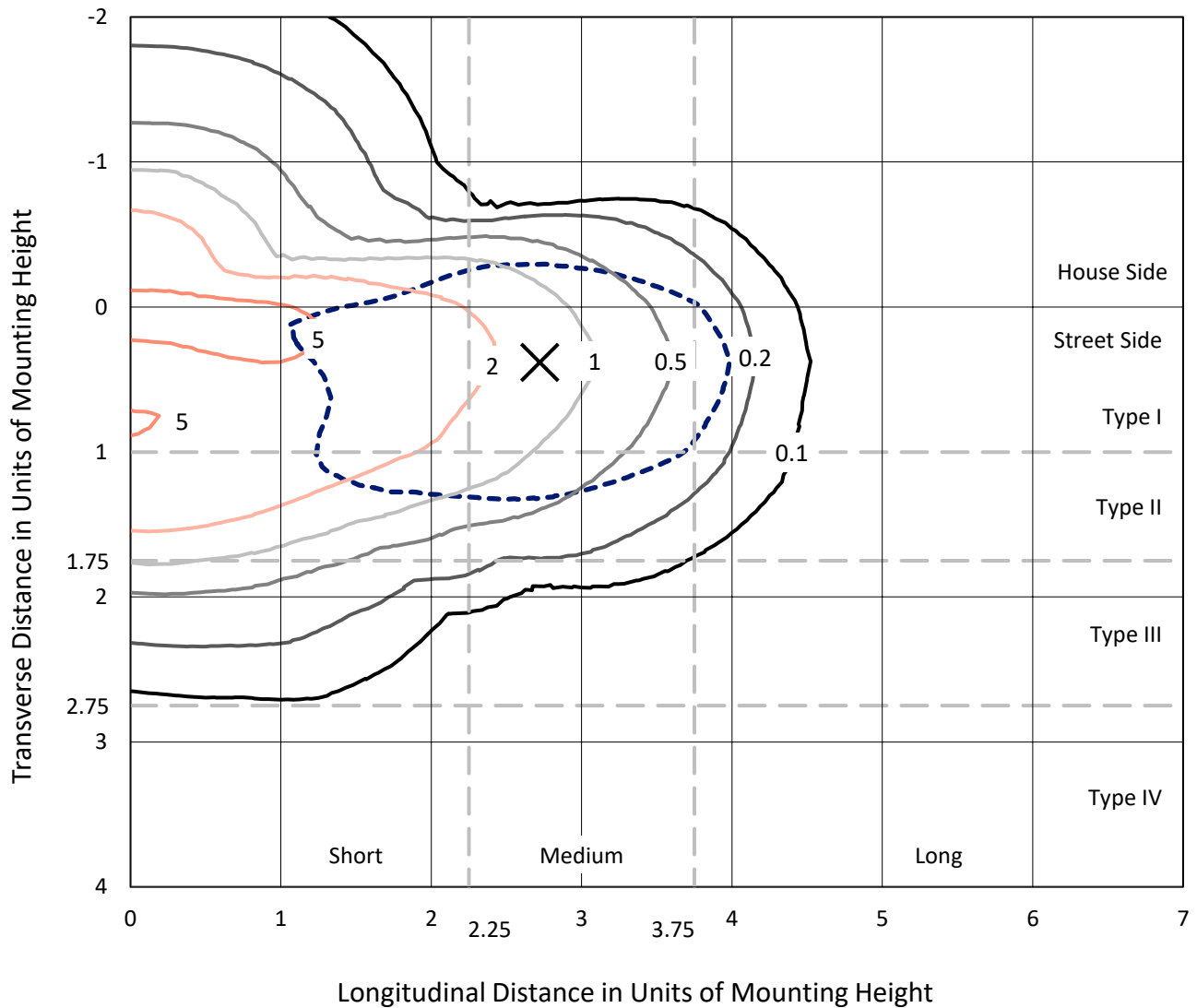
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

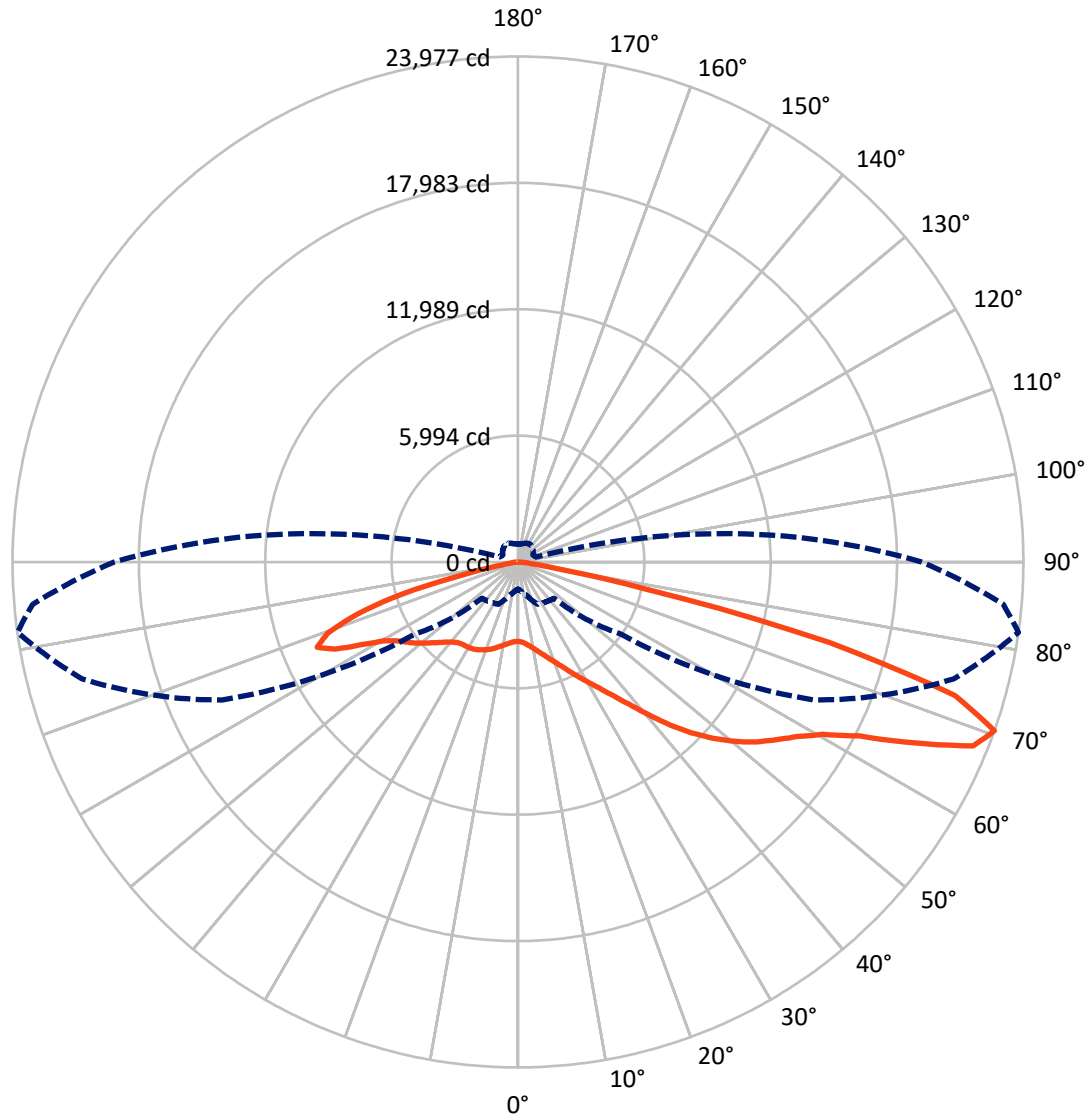
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 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	6325.3	0.0	6325.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	19332.7	0.0	19332.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	25658.0	0.0	25658.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.2	1.4
10°-20°	1020.4	4.0
20°-30°	1707.1	6.7
30°-40°	2666.9	10.4
40°-50°	4247.4	16.6
50°-60°	5910.8	23.0
60°-70°	6183.0	24.1
70°-80°	3231.6	12.6
80°-90°	335.6	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°	25658.0	100.0
0°-180°	25658.0	100.0

Coefficient of Utilization



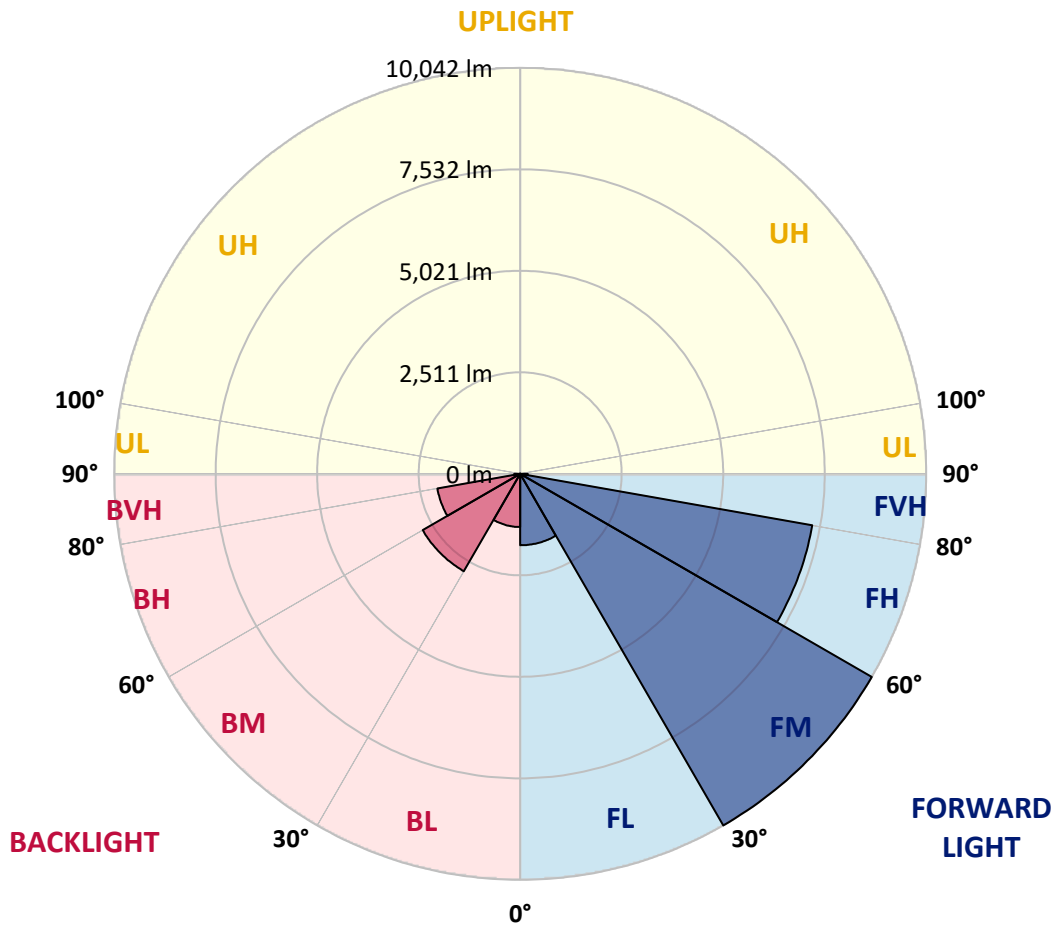
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1766.8	6.9			
FM (30°-60°)	10042.3	39.1			
FH (60°-80°)	7335.7	28.6			G3/7500
FVH (80°-90°)	187.8	0.7			G2/225
BL (0°-30°)	1315.9	5.1	B3/2500		
BM (30°-60°)	2782.9	10.8	B3/5000		
BH (60°-80°)	2078.8	8.1	B3/2500		G3/2500
BVH (80°-90°)	147.7	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8
2.5°	3851.6	3873.4	3866.6	3859.8	3859.8	3850.3	3848.9	3835.3	3824.4	3806.7	3802.6
5°	3900.7	3923.8	3921.1	3926.5	3944.2	3948.3	3952.4	3944.2	3922.4	3900.7	3891.1
7.5°	3857.1	3883.0	3891.1	3923.8	3978.3	4027.3	4064.0	4079.0	4058.6	4027.3	4012.3
10°	3710.0	3738.6	3767.2	3844.8	3941.5	4057.2	4155.3	4213.8	4209.7	4179.8	4153.9
12.5°	3411.9	3441.8	3503.1	3654.2	3831.2	4035.4	4217.9	4340.4	4382.6	4360.8	4315.9
15°	3173.6	3199.5	3245.8	3401.0	3631.1	3941.5	4241.0	4479.3	4586.8	4574.6	4520.1
17.5°	3166.8	3177.7	3206.3	3279.8	3456.8	3794.5	4216.5	4615.4	4821.0	4819.7	4751.6
20°	3286.6	3290.7	3307.0	3322.0	3422.8	3682.8	4153.9	4728.4	5083.8	5083.8	5010.3
22.5°	3452.7	3450.0	3466.3	3452.7	3501.7	3673.3	4114.4	4827.8	5376.5	5398.3	5305.7
25°	3701.9	3688.3	3684.2	3652.9	3662.4	3761.8	4158.0	4940.8	5723.7	5768.6	5652.9
27.5°	4034.1	4012.3	3997.3	3925.2	3900.7	3944.2	4291.4	5077.0	6110.3	6188.0	6040.9
30°	4467.0	4427.5	4405.8	4280.5	4192.0	4198.8	4492.9	5258.1	6514.7	6640.0	6453.4
32.5°	5057.9	4996.7	4938.1	4732.5	4570.5	4517.4	4752.9	5508.6	6953.1	7153.2	6913.6
35°	5719.6	5670.6	5608.0	5290.7	5041.6	4919.0	5104.2	5858.5	7466.4	7783.6	7471.8
37.5°	6356.8	6314.6	6344.5	5917.0	5595.7	5417.3	5564.4	6328.2	8099.5	8567.8	8171.6
40°	7015.7	6983.1	6987.1	6578.7	6204.3	6004.1	6122.6	6917.7	8825.1	9500.4	9013.0
42.5°	7731.9	7707.4	7625.7	7263.5	6842.8	6656.3	6765.2	7598.4	9603.9	10562.4	9936.1
45°	8533.8	8518.8	8442.6	8027.3	7545.4	7335.7	7482.7	8350.0	10386.8	11561.7	10863.3
47.5°	9226.8	9239.0	9229.5	8879.6	8379.9	8072.2	8247.9	9134.2	11115.2	12501.2	11752.3
50°	9560.3	9624.3	9718.3	9609.4	9298.9	8985.8	9019.8	9891.2	11809.5	13382.0	12604.6
52.5°	9386.1	9507.3	9763.2	9937.5	10057.3	9991.9	9900.7	10642.7	12463.0	14177.1	13410.6
55°	8736.7	8906.8	9331.6	9752.3	10363.6	10838.8	10958.6	11476.0	13100.2	14876.9	14173.1
57.5°	7553.5	7829.9	8211.1	9062.0	10091.3	11248.6	12192.1	12631.9	13775.5	15624.4	14970.9
60°	5524.9	5895.2	6369.0	7635.2	9138.3	11029.4	13241.8	14407.2	14735.4	16592.4	16009.7
62.5°	3535.8	3764.5	4200.2	5392.8	7120.6	9906.2	13563.1	16626.5	16362.3	18179.9	17567.2
65°	2420.7	2567.8	2966.7	3636.5	4603.2	7373.8	12702.7	18290.2	18946.4	20695.9	20230.3
67.5°	1759.0	1870.7	2211.1	2797.9	2999.4	4363.6	9857.2	18213.9	21458.4	23288.2	22563.9
70°	1282.5	1361.5	1647.4	2211.1	2307.7	2427.5	5971.5	15482.8	21403.9	23977.1	23109.8
72.5°	950.3	1004.8	1196.7	1715.5	1868.0	1639.2	2955.8	11252.7	18392.3	21687.1	20991.4
75°	687.6	728.4	870.0	1312.5	1494.9	1248.5	1474.5	6576.0	12829.3	15255.4	15378.0
77.5°	525.5	556.8	649.4	961.2	1196.7	936.7	914.9	3025.2	6083.1	6113.1	6456.2
80°	422.1	442.5	492.9	676.7	917.6	701.2	596.3	1221.3	1922.4	1627.0	1707.3
82.5°	310.4	344.5	416.6	475.2	656.2	483.3	363.5	616.8	731.1	629.0	634.5
85°	177.0	200.1	251.9	340.4	419.3	295.4	208.3	273.7	340.4	279.1	249.2
87.5°	62.6	81.7	88.5	133.4	182.4	122.5	80.3	79.0	111.6	83.1	69.4
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°	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8	3761.8
2.5°	3789.0	3782.2	3755.0	3718.2	3680.1	3643.3	3631.1	3605.2	3587.5	3578.0	3588.9
5°	3865.3	3843.5	3779.5	3697.8	3612.0	3519.4	3454.1	3394.2	3350.6	3309.8	3326.1
7.5°	3974.2	3936.1	3825.8	3682.8	3530.3	3376.5	3262.1	3175.0	3116.4	3078.3	3086.5
10°	4100.8	4042.2	3873.4	3659.7	3424.1	3203.6	3068.8	2993.9	2957.1	2936.7	2942.2
12.5°	4246.5	4163.4	3922.4	3606.6	3262.1	3010.2	2917.7	2895.9	2897.2	2898.6	2901.3
15°	4426.2	4310.5	3961.9	3490.8	3051.1	2861.8	2845.5	2880.9	2917.7	2935.4	2934.0
17.5°	4629.0	4465.7	3968.7	3300.2	2844.1	2766.5	2818.3	2894.5	2950.3	2974.8	2980.3
20°	4846.9	4623.6	3919.7	3030.7	2674.0	2688.9	2781.5	2879.5	2940.8	2972.1	2980.3
22.5°	5096.0	4792.4	3802.6	2747.5	2535.1	2604.5	2713.4	2808.7	2872.7	2904.0	2912.2
25°	5380.6	4981.7	3618.8	2509.2	2415.3	2509.2	2618.1	2697.1	2748.8	2777.4	2785.6
27.5°	5696.5	5179.1	3373.8	2320.0	2310.4	2411.2	2501.0	2562.3	2589.5	2611.3	2619.5
30°	6013.7	5358.8	3077.0	2177.0	2219.2	2314.5	2378.5	2405.7	2413.9	2418.0	2427.5
32.5°	6356.8	5514.0	2765.2	2058.6	2132.1	2220.6	2258.7	2271.0	2232.8	2207.0	2215.1
35°	6772.0	5680.1	2460.2	1964.6	2046.3	2122.6	2134.8	2123.9	2079.0	2025.9	2028.6
37.5°	7285.3	5887.1	2216.5	1897.9	1966.0	2016.4	2001.4	1998.7	2002.7	1940.1	1944.2
40°	7914.3	6156.6	2038.1	1846.2	1900.6	1911.5	1869.3	1892.5	1912.9	1817.6	1820.3
42.5°	8612.8	6482.0	1925.1	1810.8	1846.2	1820.3	1755.0	1780.8	1778.1	1652.8	1651.5
45°	9324.8	6836.0	1885.7	1784.9	1795.8	1744.1	1671.9	1678.7	1621.5	1508.5	1512.6
47.5°	10032.8	7215.9	1910.2	1763.1	1733.2	1674.6	1618.8	1588.9	1504.4	1420.0	1420.0
50°	10727.1	7614.8	2000.0	1719.6	1647.4	1613.4	1572.5	1519.4	1429.6	1357.4	1352.0
52.5°	11371.1	8016.4	2100.8	1647.4	1539.8	1560.3	1534.4	1473.1	1384.6	1311.1	1312.5
55°	11981.1	8418.1	2140.3	1548.0	1439.1	1514.0	1499.0	1386.0	1279.8	1219.9	1214.4
57.5°	12645.5	8901.4	2096.7	1421.4	1357.4	1460.9	1403.7	1278.4	1217.2	1172.2	1168.2
60°	13565.8	9659.7	2002.7	1264.8	1279.8	1381.9	1283.9	1232.1	1165.4	1115.1	1112.3
62.5°	15094.8	11074.3	1851.6	1109.6	1188.6	1264.8	1226.7	1175.0	1106.9	1057.9	1057.9
65°	17354.9	13040.3	1567.1	988.4	1086.5	1150.5	1165.4	1113.7	1042.9	991.2	993.9
67.5°	19260.9	14273.8	1185.9	887.7	981.6	1057.9	1100.1	1049.7	974.8	924.4	925.8
70°	19156.1	13378.0	905.4	788.3	889.0	966.7	1021.1	981.6	901.3	853.7	857.7
72.5°	17014.5	11191.4	732.5	687.6	795.1	871.4	936.7	906.7	825.1	778.8	778.8
75°	12499.8	7944.3	585.4	585.4	678.0	772.0	844.1	825.1	750.2	717.5	708.0
77.5°	5268.9	3332.9	458.8	486.1	563.7	663.0	752.9	759.7	694.4	735.2	667.1
80°	1401.0	919.0	349.9	382.6	442.5	547.3	654.9	652.2	581.4	543.2	505.1
82.5°	533.7	362.2	249.2	269.6	319.9	419.3	518.7	535.1	464.3	401.6	401.6
85°	205.6	155.2	153.8	162.0	186.5	277.7	392.1	405.7	349.9	296.8	306.3
87.5°	53.1	46.3	57.2	54.5	85.8	148.4	224.6	232.8	213.8	123.9	177.0
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)