

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: P885517

Luminaire Tested: **NAV-SB6D-830-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885517
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-SB6D-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53550 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

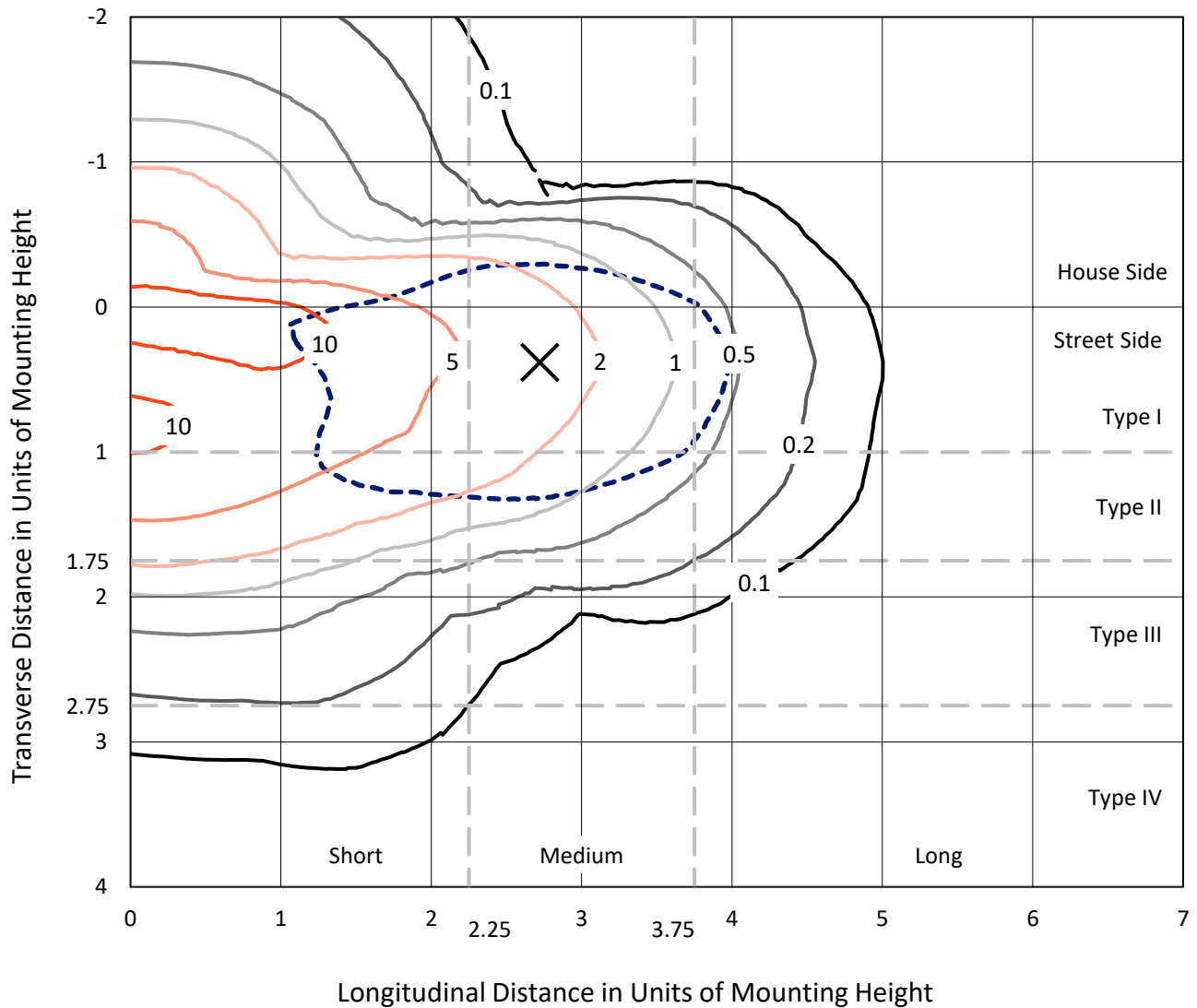
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

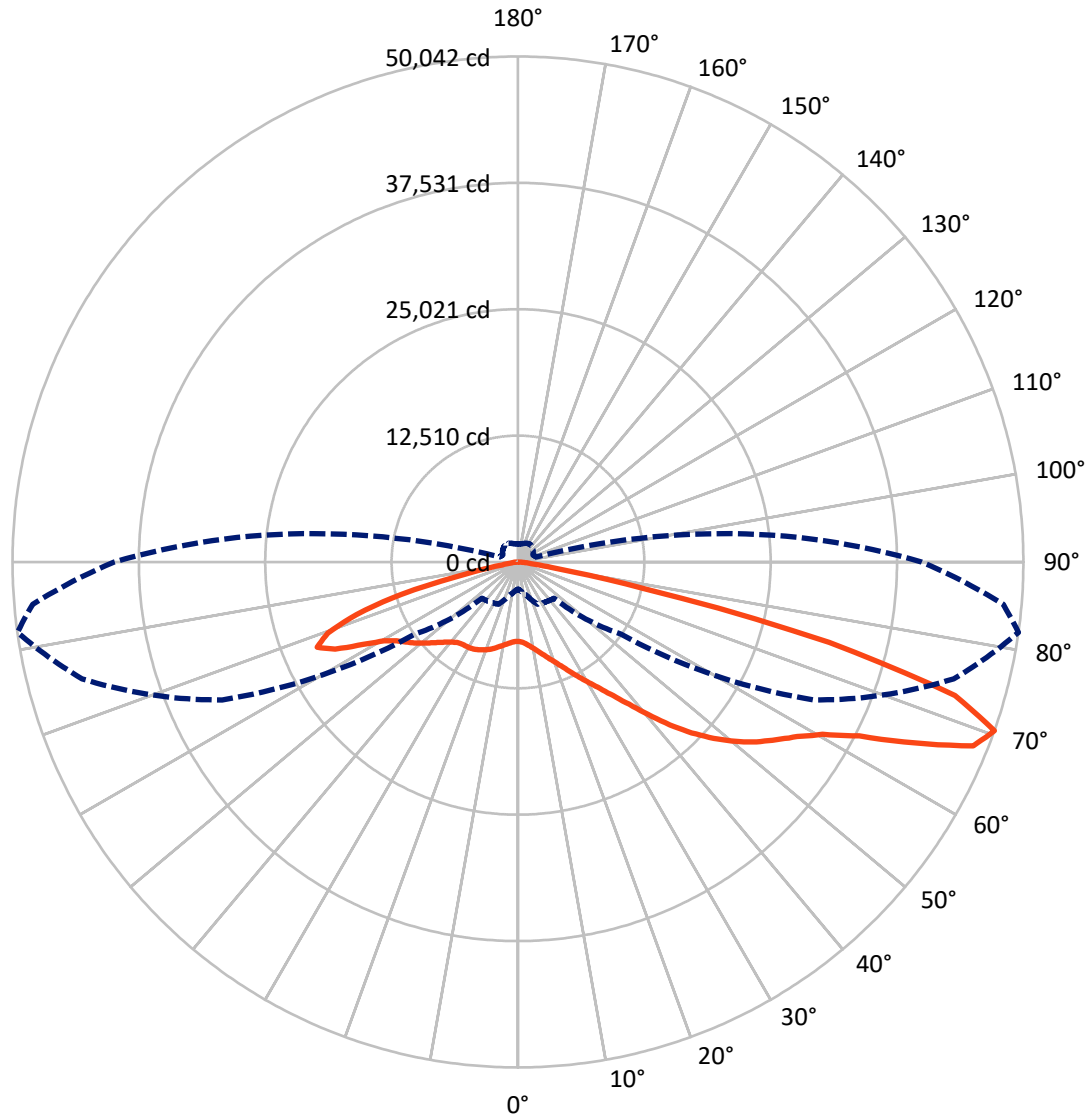
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.3 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	13201.4	0.0	13201.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	40348.6	0.0	40348.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	53550.0	0.0	53550.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	741.3	1.4
10°-20°	2129.7	4.0
20°-30°	3562.9	6.7
30°-40°	5566.1	10.4
40°-50°	8864.7	16.6
50°-60°	12336.3	23.0
60°-70°	12904.3	24.1
70°-80°	6744.5	12.6
80°-90°	700.3	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°	53550.0	100.0
0°-180°	53550.0	100.0

Coefficient of Utilization

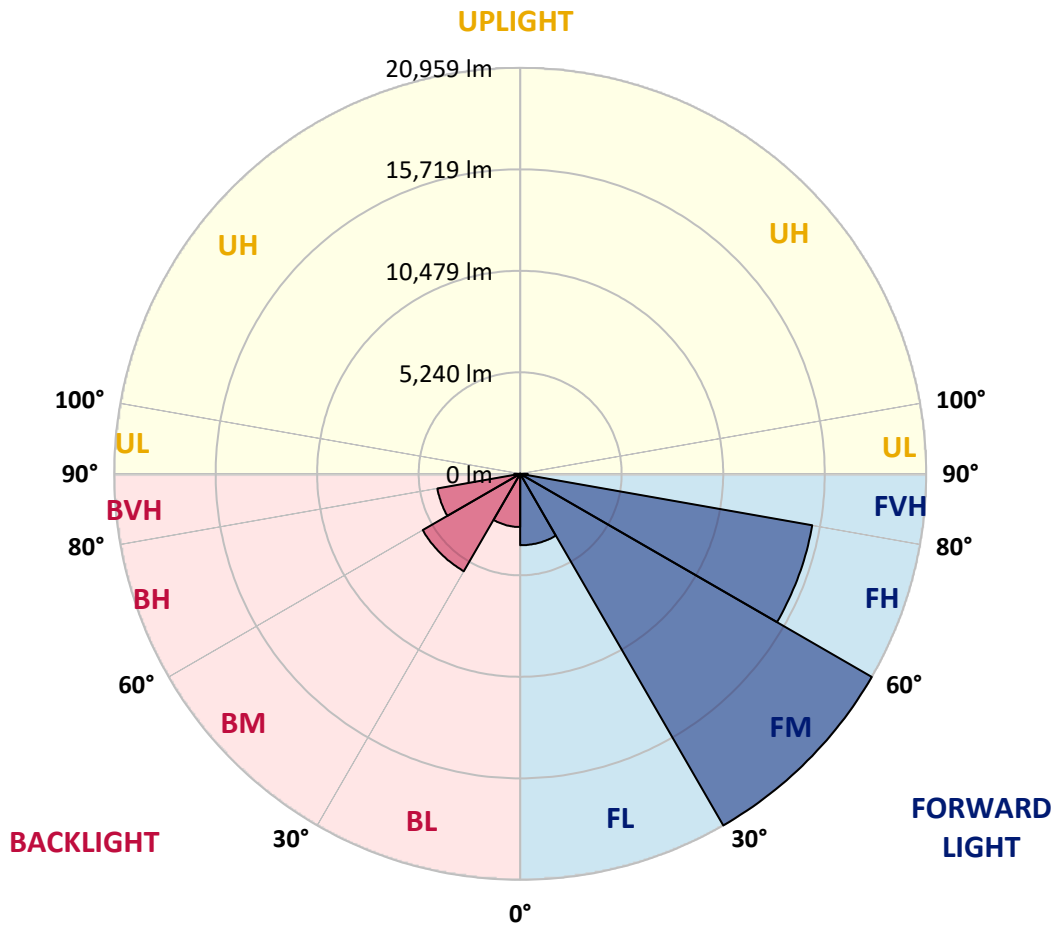


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3687.5	6.9			
FM (30°-60°)	20958.9	39.1			
FH (60°-80°)	15310.1	28.6			G5
FVH (80°-90°)	392.1	0.7			G3/500
BL (0°-30°)	2746.4	5.1	B4/5000		
BM (30°-60°)	5808.1	10.8	B4/8500		
BH (60°-80°)	4338.6	8.1	B4/5000		G4/5000
BVH (80°-90°)	308.3	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1
2.5°	8038.6	8084.1	8069.9	8055.7	8055.7	8035.8	8033.0	8004.5	7981.8	7944.9	7936.3
5°	8140.9	8189.2	8183.6	8194.9	8231.9	8240.4	8248.9	8231.9	8186.4	8140.9	8121.0
7.5°	8050.0	8104.0	8121.0	8189.2	8302.9	8405.2	8481.9	8513.2	8470.5	8405.2	8373.9
10°	7743.1	7802.8	7862.5	8024.4	8226.2	8467.7	8672.3	8794.5	8786.0	8723.4	8669.5
12.5°	7120.8	7183.3	7311.2	7626.6	7996.0	8422.2	8803.0	9058.7	9146.8	9101.4	9007.6
15°	6623.6	6677.6	6774.2	7098.1	7578.3	8226.2	8851.3	9348.6	9573.1	9547.5	9433.8
17.5°	6609.4	6632.1	6691.8	6845.2	7214.6	7919.3	8800.2	9632.7	10061.8	10059.0	9916.9
20°	6859.4	6867.9	6902.0	6933.3	7143.6	7686.3	8669.5	9868.6	10610.2	10610.2	10456.8
22.5°	7206.1	7200.4	7234.5	7206.1	7308.4	7666.4	8587.1	10076.0	11221.1	11266.6	11073.4
25°	7726.1	7697.7	7689.1	7623.8	7643.7	7851.1	8678.0	10311.8	11945.7	12039.5	11798.0
27.5°	8419.4	8373.9	8342.7	8192.1	8140.9	8231.9	8956.4	10596.0	12752.7	12914.7	12607.8
30°	9323.0	9240.6	9195.1	8933.7	8749.0	8763.2	9377.0	10973.9	13596.6	13858.1	13468.8
32.5°	10556.2	10428.4	10306.2	9877.1	9539.0	9428.1	9919.7	11496.8	14511.6	14929.3	14429.2
35°	11937.2	11834.9	11704.2	11042.1	10522.1	10266.4	10652.8	12227.0	15582.9	16244.9	15594.2
37.5°	13267.0	13178.9	13241.4	12349.2	11678.6	11306.4	11613.3	13207.4	16904.2	17881.6	17054.8
40°	14642.3	14574.1	14582.6	13730.2	12948.8	12531.1	12778.3	14437.7	18418.7	19828.1	18810.8
42.5°	16137.0	16085.8	15915.3	15159.5	14281.4	13892.2	14119.5	15858.5	20044.0	22044.5	20737.4
45°	17810.6	17779.3	17620.2	16753.6	15747.7	15310.1	15617.0	17427.0	21677.9	24130.1	22672.4
47.5°	19256.9	19282.5	19262.6	18532.3	17489.5	16847.3	17213.9	19063.7	23198.1	26090.8	24527.9
50°	19953.1	20086.7	20282.7	20055.4	19407.5	18754.0	18825.0	20643.6	24647.3	27929.2	26306.7
52.5°	19589.4	19842.3	20376.5	20740.2	20990.3	20853.9	20663.5	22212.1	26011.2	29588.7	27988.9
55°	18234.0	18589.2	19475.7	20353.8	21629.6	22621.3	22871.3	23951.1	27341.0	31049.2	29580.1
57.5°	15764.7	16341.5	17137.2	18913.1	21061.3	23476.6	25445.7	26363.6	28750.4	32609.2	31245.3
60°	11530.9	12303.8	13292.6	15935.2	19072.2	23019.1	27636.6	30068.9	30753.7	34629.5	33413.3
62.5°	7379.4	7856.8	8766.1	11255.2	14861.1	20674.8	28307.1	34700.6	34149.3	37942.7	36664.0
65°	5052.2	5359.1	6191.7	7589.7	9607.2	15389.6	26511.3	38172.9	39542.5	43193.8	42222.0
67.5°	3671.2	3904.2	4614.6	5839.3	6259.9	9107.0	20572.6	38013.8	44785.1	48604.1	47092.4
70°	2676.7	2841.5	3438.2	4614.6	4816.4	5066.4	12462.9	32313.7	44671.4	50041.9	48231.8
72.5°	1983.4	2097.0	2497.7	3580.3	3898.6	3421.2	6168.9	23485.1	38386.0	45262.5	43810.4
75°	1435.0	1520.2	1815.7	2739.2	3120.0	2605.7	3077.4	13724.5	26775.6	31839.1	32094.9
77.5°	1096.8	1162.2	1355.4	2006.1	2497.7	1955.0	1909.5	6313.8	12695.9	12758.4	13474.5
80°	880.9	923.5	1028.6	1412.2	1915.2	1463.4	1244.6	2548.8	4012.2	3395.6	3563.3
82.5°	647.9	718.9	869.5	991.7	1369.6	1008.7	758.7	1287.2	1525.9	1312.8	1324.1
85°	369.4	417.7	525.7	710.4	875.2	616.6	434.8	571.1	710.4	582.5	520.0
87.5°	130.7	170.5	184.7	278.5	380.8	255.7	167.6	164.8	233.0	173.3	144.9
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°	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1	7851.1
2.5°	7907.9	7893.7	7836.9	7760.2	7680.6	7603.9	7578.3	7524.3	7487.4	7467.5	7490.2
5°	8067.1	8021.6	7888.0	7717.5	7538.5	7345.3	7208.9	7083.9	6993.0	6907.7	6941.8
7.5°	8294.4	8214.8	7984.7	7686.3	7368.0	7047.0	6808.3	6626.4	6504.2	6424.7	6441.7
10°	8558.6	8436.5	8084.1	7638.0	7146.4	6686.1	6404.8	6248.5	6171.8	6129.1	6140.5
12.5°	8862.7	8689.3	8186.4	7527.2	6808.3	6282.6	6089.4	6043.9	6046.7	6049.6	6055.3
15°	9237.8	8996.2	8268.8	7285.6	6367.8	5972.9	5938.8	6012.6	6089.4	6126.3	6123.5
17.5°	9661.1	9320.2	8283.0	6887.8	5935.9	5774.0	5881.9	6041.1	6157.6	6208.7	6220.1
20°	10115.8	9649.8	8180.7	6325.2	5580.7	5612.0	5805.2	6009.8	6137.7	6203.0	6220.1
22.5°	10635.8	10002.1	7936.3	5734.2	5290.9	5435.8	5663.1	5862.0	5995.6	6060.9	6078.0
25°	11229.7	10397.1	7552.7	5236.9	5040.8	5236.9	5464.2	5629.0	5737.0	5796.7	5813.7
27.5°	11888.9	10809.1	7041.3	4841.9	4822.0	5032.3	5219.9	5347.7	5404.6	5450.0	5467.1
30°	12551.0	11184.2	6421.8	4543.6	4631.7	4830.6	4964.1	5021.0	5038.0	5046.5	5066.4
32.5°	13267.0	11508.1	5771.1	4296.4	4449.8	4634.5	4714.1	4739.6	4660.1	4606.1	4623.1
35°	14133.7	11854.8	5134.6	4100.3	4270.8	4429.9	4455.5	4432.8	4339.0	4228.2	4233.9
37.5°	15204.9	12286.7	4626.0	3961.1	4103.1	4208.3	4177.0	4171.3	4179.9	4049.2	4057.7
40°	16517.7	12849.3	4253.7	3853.1	3966.8	3989.5	3901.4	3949.7	3992.3	3793.4	3799.1
42.5°	17975.4	13528.4	4017.9	3779.2	3853.1	3799.1	3662.7	3716.7	3711.0	3449.6	3446.8
45°	19461.5	14267.2	3935.5	3725.2	3748.0	3640.0	3489.4	3503.6	3384.2	3148.4	3156.9
47.5°	20939.1	15060.0	3986.6	3679.8	3617.2	3495.1	3378.6	3316.0	3139.9	2963.7	2963.7
50°	22388.3	15892.6	4174.2	3588.8	3438.2	3367.2	3281.9	3171.1	2983.6	2833.0	2821.6
52.5°	23732.3	16730.8	4384.5	3438.2	3213.8	3256.4	3202.4	3074.5	2889.8	2736.4	2739.2
55°	25005.3	17569.1	4466.9	3230.8	3003.5	3159.8	3128.5	2892.7	2671.0	2546.0	2534.6
57.5°	26392.0	18577.8	4375.9	2966.5	2833.0	3048.9	2929.6	2668.2	2540.3	2446.5	2438.0
60°	28312.8	20160.5	4179.9	2639.8	2671.0	2884.1	2679.5	2571.6	2432.3	2327.2	2321.5
62.5°	31503.9	23112.9	3864.5	2315.8	2480.6	2639.8	2560.2	2452.2	2310.1	2207.9	2207.9
65°	36220.8	27216.0	3270.6	2062.9	2267.5	2401.1	2432.3	2324.4	2176.6	2068.6	2074.3
67.5°	40198.9	29790.4	2475.0	1852.7	2048.7	2207.9	2295.9	2190.8	2034.5	1929.4	1932.2
70°	39980.1	27920.7	1889.6	1645.2	1855.5	2017.5	2131.1	2048.7	1881.1	1781.6	1790.2
72.5°	35510.4	23357.2	1528.7	1435.0	1659.4	1818.6	1955.0	1892.4	1722.0	1625.3	1625.3
75°	26087.9	16580.2	1221.9	1221.9	1415.1	1611.1	1761.7	1722.0	1565.7	1497.5	1477.6
77.5°	10996.7	6956.0	957.6	1014.4	1176.4	1383.8	1571.4	1585.6	1449.2	1534.4	1392.3
80°	2923.9	1918.0	730.3	798.5	923.5	1142.3	1366.8	1361.1	1213.3	1133.8	1054.2
82.5°	1113.9	755.8	520.0	562.6	667.8	875.2	1082.6	1116.7	969.0	838.2	838.2
85°	429.1	323.9	321.1	338.1	389.3	579.7	818.4	846.8	730.3	619.4	639.3
87.5°	110.8	96.6	119.3	113.7	179.0	309.7	468.8	485.9	446.1	258.6	369.4
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)