

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: P884437

Luminaire Tested: **NAV-SB5B-730-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884437
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-730-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27870 lumens
Efficiency: N/A
Efficacy: 152.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

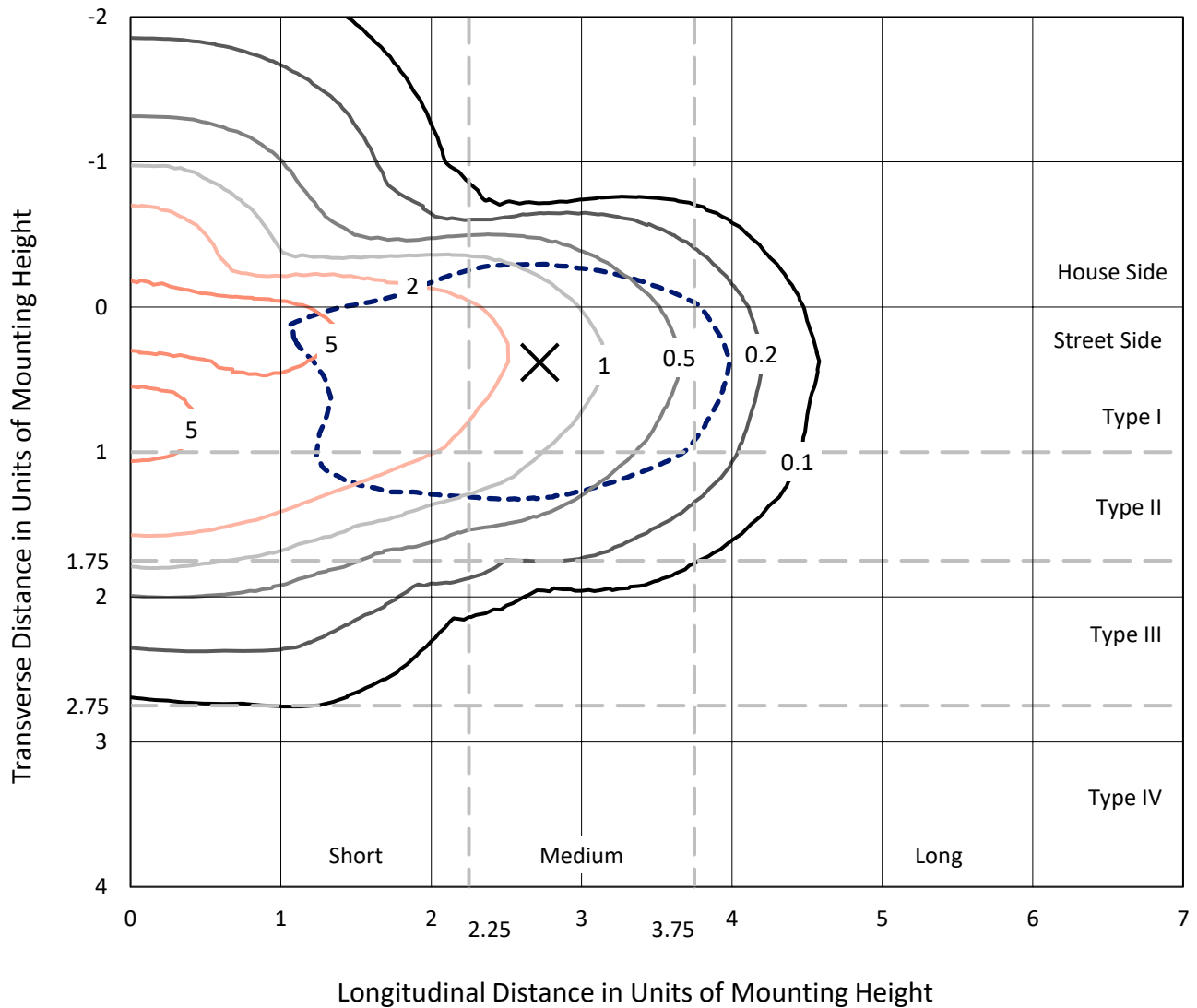
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

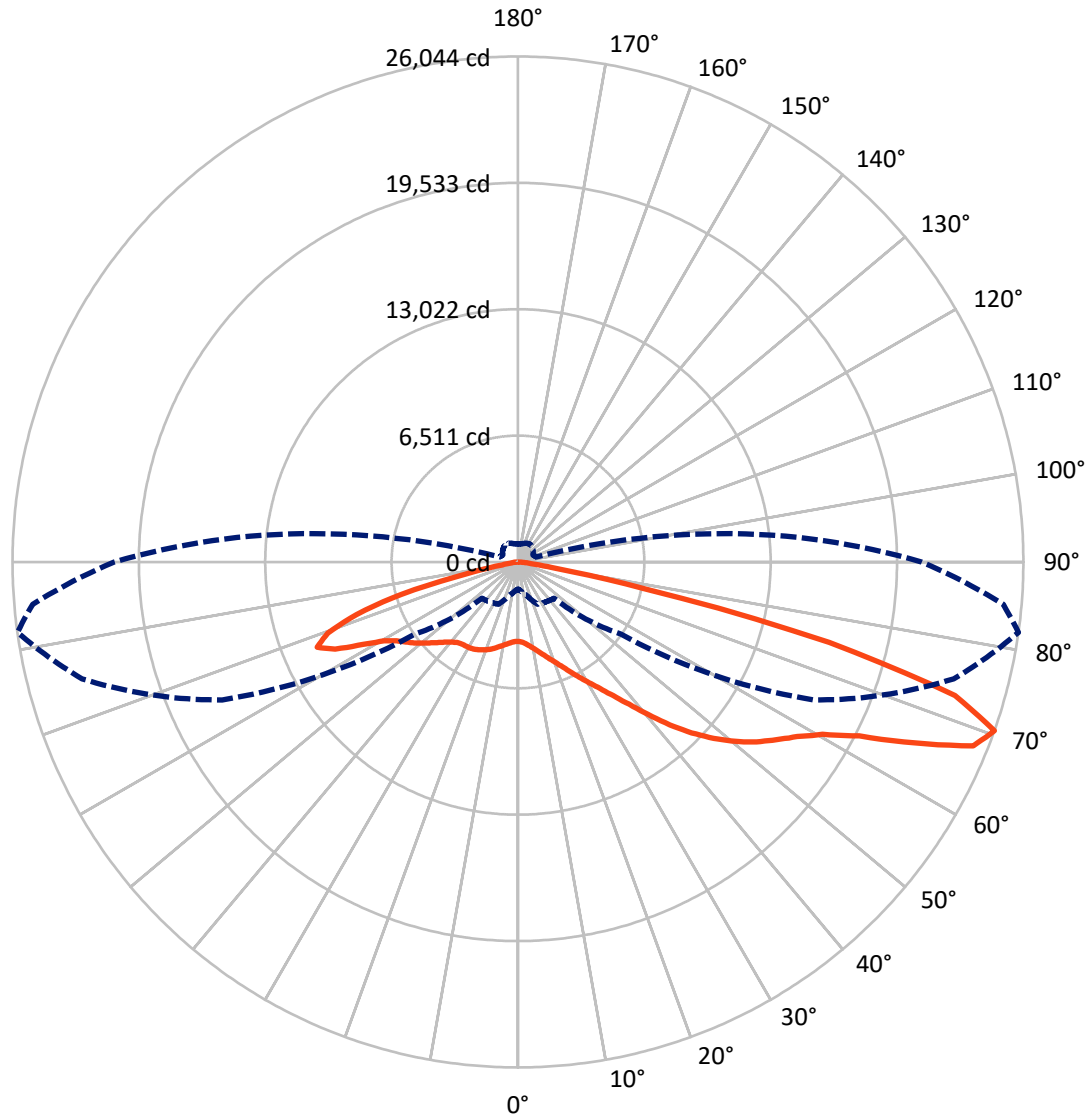
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 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	6870.6	0.0	6870.6
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	20999.4	0.0	20999.4
	% Fixture	75.3	0.0	75.3
Total	Lumens	27870.0	0.0	27870.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.8	1.4
10°-20°	1108.4	4.0
20°-30°	1854.3	6.7
30°-40°	2896.9	10.4
40°-50°	4613.6	16.6
50°-60°	6420.4	23.0
60°-70°	6716.0	24.1
70°-80°	3510.2	12.6
80°-90°	364.5	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°	27870.0	100.0
0°-180°	27870.0	100.0

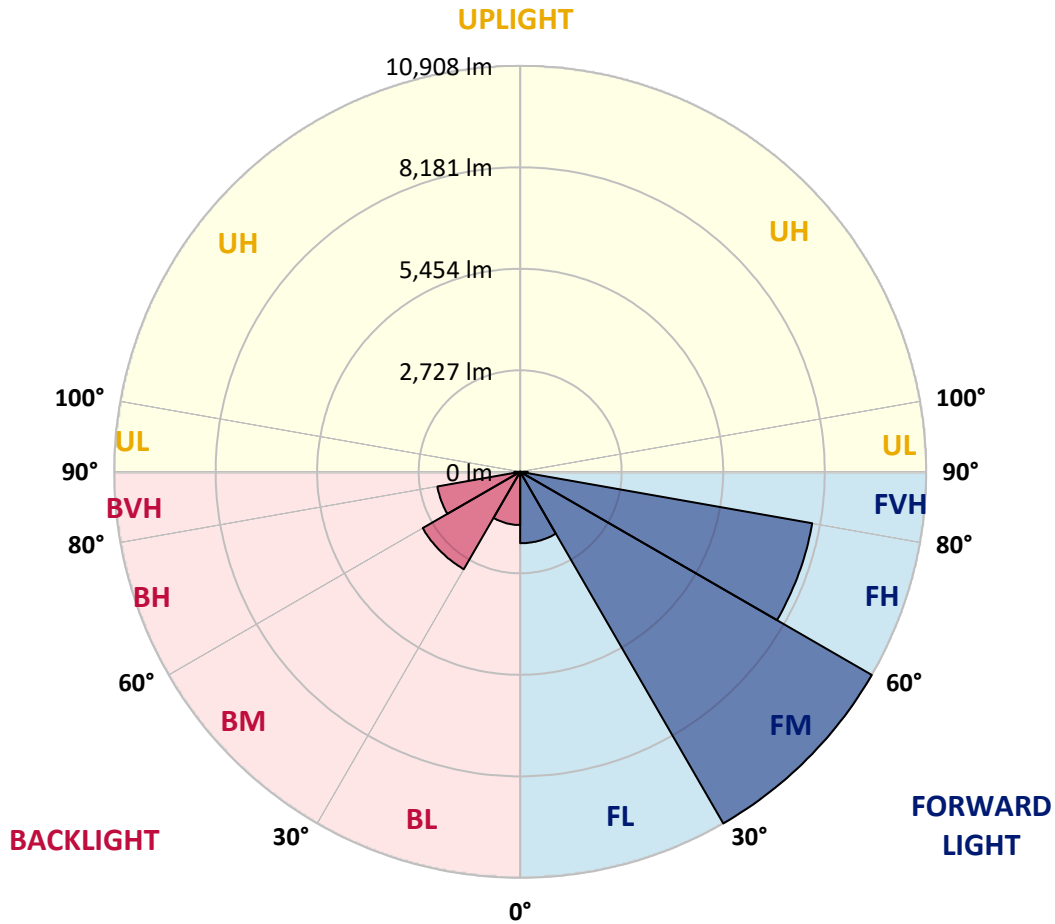


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1919.2	6.9			
FM (30°-60°)	10908.0	39.1			
FH (60°-80°)	7968.1	28.6			G4/12000
FVH (80°-90°)	204.0	0.7			G2/225
BL (0°-30°)	1429.3	5.1	B3/2500		
BM (30°-60°)	3022.8	10.8	B3/5000		
BH (60°-80°)	2258.0	8.1	B3/2500		G3/2500
BVH (80°-90°)	160.4	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-G4
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1
2.5°	4183.7	4207.4	4200.0	4192.6	4192.6	4182.2	4180.7	4165.9	4154.1	4134.9	4130.5
5°	4236.9	4262.1	4259.1	4265.0	4284.3	4288.7	4293.1	4284.3	4260.6	4236.9	4226.6
7.5°	4189.6	4217.7	4226.6	4262.1	4321.2	4374.5	4414.4	4430.7	4408.5	4374.5	4358.2
10°	4029.9	4060.9	4092.0	4176.3	4281.3	4407.0	4513.5	4577.1	4572.6	4540.1	4512.0
12.5°	3706.0	3738.6	3805.1	3969.3	4161.5	4383.3	4581.5	4714.6	4760.5	4736.8	4688.0
15°	3447.2	3475.3	3525.6	3694.2	3944.1	4281.3	4606.6	4865.4	4982.3	4969.0	4909.8
17.5°	3439.8	3451.7	3482.7	3562.6	3754.8	4121.6	4580.0	5013.3	5236.6	5235.2	5161.2
20°	3570.0	3574.4	3592.2	3608.4	3717.9	4000.3	4512.0	5136.1	5522.1	5522.1	5442.2
22.5°	3750.4	3747.4	3765.2	3750.4	3803.6	3990.0	4469.1	5244.0	5840.0	5863.7	5763.1
25°	4021.0	4006.2	4001.8	3967.8	3978.1	4086.1	4516.4	5366.8	6217.1	6265.9	6140.2
27.5°	4381.9	4358.2	4341.9	4263.6	4236.9	4284.3	4661.4	5514.7	6637.1	6721.4	6561.7
30°	4852.1	4809.3	4785.6	4649.5	4553.4	4560.8	4880.2	5711.4	7076.3	7212.4	7009.8
32.5°	5494.0	5427.4	5363.8	5140.5	4964.5	4906.9	5162.7	5983.5	7552.5	7769.9	7509.7
35°	6212.7	6159.5	6091.4	5746.9	5476.2	5343.1	5544.2	6363.5	8110.1	8454.6	8116.0
37.5°	6904.8	6859.0	6891.5	6427.1	6078.1	5884.4	6044.1	6873.7	8797.7	9306.5	8876.1
40°	7620.6	7585.1	7589.5	7145.9	6739.2	6521.8	6650.4	7514.1	9586.0	10319.5	9790.1
42.5°	8398.4	8371.8	8283.1	7889.7	7432.8	7230.1	7348.5	8253.5	10431.9	11473.0	10792.7
45°	9269.5	9253.2	9170.4	8719.4	8195.8	7968.1	8127.8	9069.8	11282.2	12558.5	11799.8
47.5°	10022.2	10035.5	10025.2	9645.1	9102.4	8768.2	8958.9	9921.7	12073.4	13578.9	12765.5
50°	10384.6	10454.1	10556.1	10437.8	10100.6	9760.5	9797.4	10743.9	12827.6	14535.7	13691.3
52.5°	10195.3	10326.9	10604.9	10794.2	10924.3	10853.4	10754.3	11560.2	13537.5	15399.4	14566.8
55°	9489.8	9674.7	10136.1	10593.1	11257.1	11773.2	11903.3	12465.3	14229.6	16159.5	15394.9
57.5°	8204.7	8504.9	8919.0	9843.3	10961.3	12218.3	13243.2	13720.9	14963.1	16971.4	16261.5
60°	6001.2	6403.5	6918.1	8293.4	9926.1	11980.2	14383.4	15649.3	16005.7	18022.9	17389.9
62.5°	3840.6	4089.0	4562.3	5857.8	7734.4	10760.2	14732.4	18059.8	17772.9	19747.2	19081.7
65°	2629.4	2789.1	3222.4	3950.0	5000.0	8009.5	13797.8	19867.0	20579.8	22480.2	21974.4
67.5°	1910.7	2032.0	2401.7	3039.1	3257.9	4739.7	10706.9	19784.2	23308.3	25295.9	24509.1
70°	1393.1	1478.9	1789.4	2401.7	2506.7	2636.8	6486.3	16817.6	23249.2	26044.2	25102.2
72.5°	1032.2	1091.4	1299.9	1863.4	2029.0	1780.5	3210.6	12222.8	19977.9	23556.8	22801.1
75°	746.8	791.2	945.0	1425.6	1623.8	1356.1	1601.6	7142.9	13935.3	16570.6	16703.7
77.5°	570.8	604.9	705.4	1044.1	1299.9	1017.5	993.8	3286.0	6607.5	6640.1	7012.8
80°	458.4	480.6	535.3	735.0	996.8	761.6	647.7	1326.5	2088.2	1767.2	1854.5
82.5°	337.2	374.2	452.5	516.1	712.8	525.0	394.9	669.9	794.1	683.2	689.1
85°	192.3	217.4	273.6	369.7	455.5	320.9	226.3	297.3	369.7	303.2	270.6
87.5°	68.0	88.7	96.1	144.9	198.2	133.1	87.3	85.8	121.3	90.2	75.4
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°	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1	4086.1
2.5°	4115.7	4108.3	4078.7	4038.8	3997.4	3957.4	3944.1	3916.0	3896.8	3886.4	3898.3
5°	4198.5	4174.8	4105.3	4016.6	3923.4	3822.9	3751.9	3686.8	3639.5	3595.1	3612.9
7.5°	4316.8	4275.4	4155.6	4000.3	3834.7	3667.6	3543.3	3448.7	3385.1	3343.7	3352.6
10°	4454.3	4390.7	4207.4	3975.2	3719.3	3479.8	3333.4	3252.0	3212.1	3189.9	3195.8
12.5°	4612.6	4522.4	4260.6	3917.5	3543.3	3269.8	3169.2	3145.5	3147.0	3148.5	3151.5
15°	4807.8	4682.1	4303.5	3791.8	3314.1	3108.6	3090.8	3129.3	3169.2	3188.4	3186.9
17.5°	5028.1	4850.7	4310.9	3584.8	3089.3	3005.0	3061.2	3144.1	3204.7	3231.3	3237.2
20°	5264.7	5022.2	4257.6	3291.9	2904.5	2920.7	3021.3	3127.8	3194.3	3228.4	3237.2
22.5°	5535.4	5205.6	4130.5	2984.3	2753.6	2829.1	2947.4	3050.9	3120.4	3154.4	3163.3
25°	5844.5	5411.1	3930.8	2725.5	2623.5	2725.5	2843.8	2929.6	2985.8	3016.9	3025.7
27.5°	6187.6	5625.6	3664.6	2520.0	2509.6	2619.1	2716.7	2783.2	2812.8	2836.5	2845.3
30°	6532.1	5820.8	3342.2	2364.7	2410.5	2514.1	2583.6	2613.1	2622.0	2626.5	2636.8
32.5°	6904.8	5989.4	3003.6	2236.0	2315.9	2412.0	2453.4	2466.7	2425.3	2397.2	2406.1
35°	7355.9	6169.8	2672.3	2134.0	2222.7	2305.5	2318.9	2307.0	2258.2	2200.5	2203.5
37.5°	7913.4	6394.6	2407.6	2061.5	2135.5	2190.2	2173.9	2171.0	2175.4	2107.4	2111.8
40°	8596.6	6687.4	2213.9	2005.3	2064.5	2076.3	2030.5	2055.6	2077.8	1974.3	1977.2
42.5°	9355.3	7040.9	2091.1	1966.9	2005.3	1977.2	1906.3	1934.3	1931.4	1795.3	1793.9
45°	10128.7	7425.4	2048.2	1938.8	1950.6	1894.4	1816.0	1823.4	1761.3	1638.6	1643.0
47.5°	10897.7	7838.0	2074.8	1915.1	1882.6	1819.0	1758.4	1725.8	1634.1	1542.5	1542.5
50°	11651.9	8271.3	2172.4	1867.8	1789.4	1752.4	1708.1	1650.4	1552.8	1474.4	1468.5
52.5°	12351.4	8707.5	2281.9	1789.4	1672.6	1694.8	1666.7	1600.1	1504.0	1424.1	1425.6
55°	13014.0	9143.8	2324.8	1681.5	1563.2	1644.5	1628.2	1505.5	1390.1	1325.1	1319.1
57.5°	13735.7	9668.8	2277.4	1543.9	1474.4	1586.8	1524.7	1388.6	1322.1	1273.3	1268.9
60°	14735.4	10492.5	2175.4	1373.9	1390.1	1501.0	1394.6	1338.4	1265.9	1211.2	1208.2
62.5°	16396.1	12029.0	2011.2	1205.3	1291.0	1373.9	1332.5	1276.3	1202.3	1149.1	1149.1
65°	18851.0	14164.5	1702.2	1073.7	1180.1	1249.6	1265.9	1209.7	1132.8	1076.6	1079.6
67.5°	20921.4	15504.4	1288.1	964.2	1066.3	1149.1	1194.9	1140.2	1058.9	1004.1	1005.6
70°	20807.6	14531.3	983.4	856.3	965.7	1050.0	1109.1	1066.3	979.0	927.2	931.7
72.5°	18481.3	12156.2	795.6	746.8	863.7	946.5	1017.5	984.9	896.2	845.9	845.9
75°	13577.4	8629.1	635.9	635.9	736.5	838.5	916.9	896.2	814.9	779.4	769.0
77.5°	5723.2	3620.2	498.4	528.0	612.2	720.2	817.8	825.2	754.2	798.6	724.6
80°	1521.7	998.2	380.1	415.6	480.6	594.5	711.3	708.4	631.5	590.1	548.7
82.5°	579.7	393.4	270.6	292.8	347.5	455.5	563.4	581.2	504.3	436.3	436.3
85°	223.3	168.6	167.1	176.0	202.6	301.7	425.9	440.7	380.1	322.4	332.7
87.5°	57.7	50.3	62.1	59.2	93.2	161.2	244.0	252.9	232.2	134.6	192.3
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)