

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: P884781

Luminaire Tested: **NAV-SB5D-730-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884781
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-SB5D-730-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 900mA 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: 50239 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

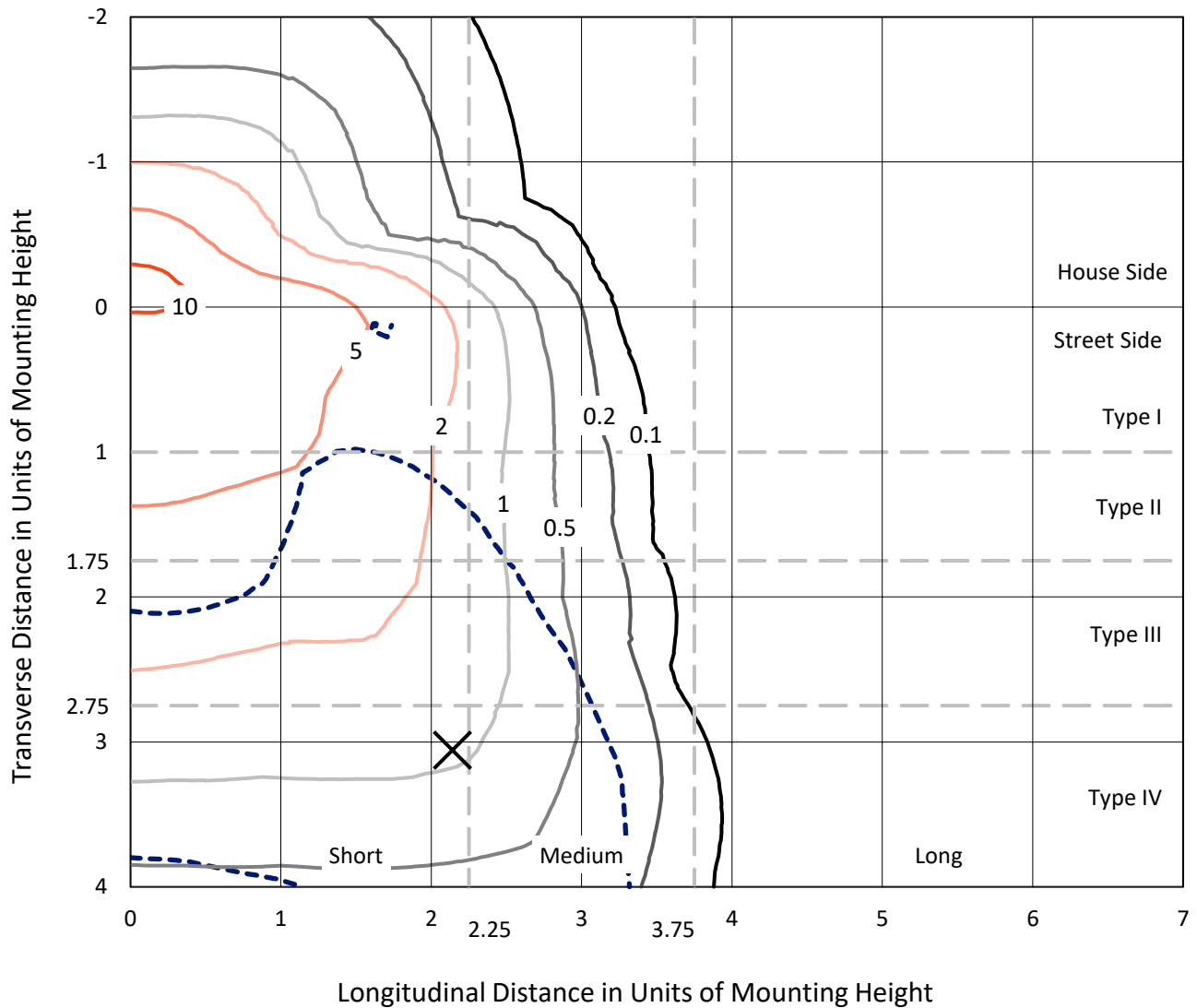
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

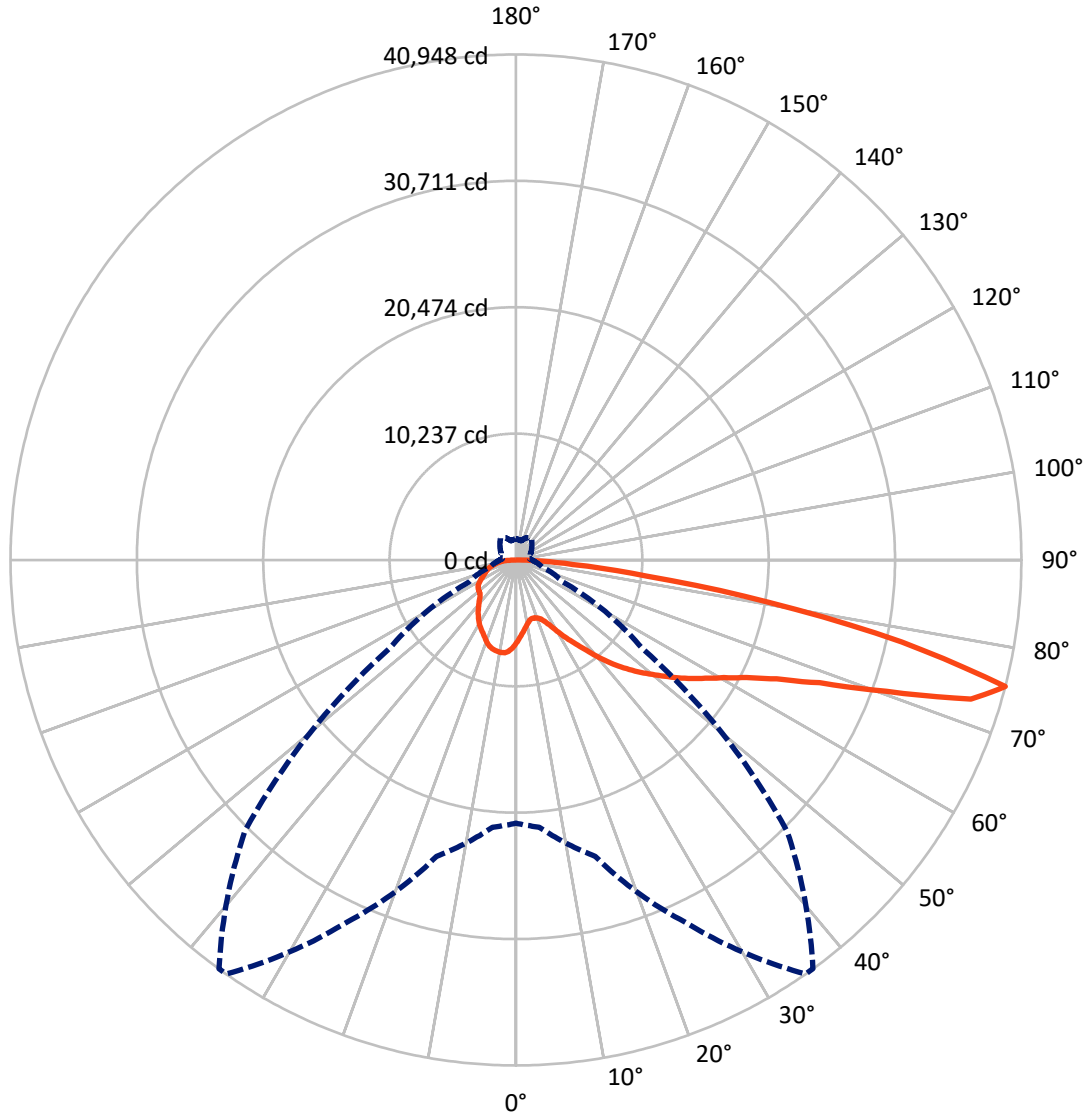
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.8 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	11955.6	0.0	11955.6
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	38283.4	0.0	38283.4
	% Fixture	76.2	0.0	76.2
Total	Lumens	50239.0	0.0	50239.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	633.9	1.3
10°-20°	1828.3	3.6
20°-30°	3070.2	6.1
30°-40°	4771.5	9.5
40°-50°	7082.2	14.1
50°-60°	9777.4	19.5
60°-70°	11862.2	23.6
70°-80°	9803.2	19.5
80°-90°	1410.0	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°	50239.0	100.0
0°-180°	50239.0	100.0

Coefficient of Utilization



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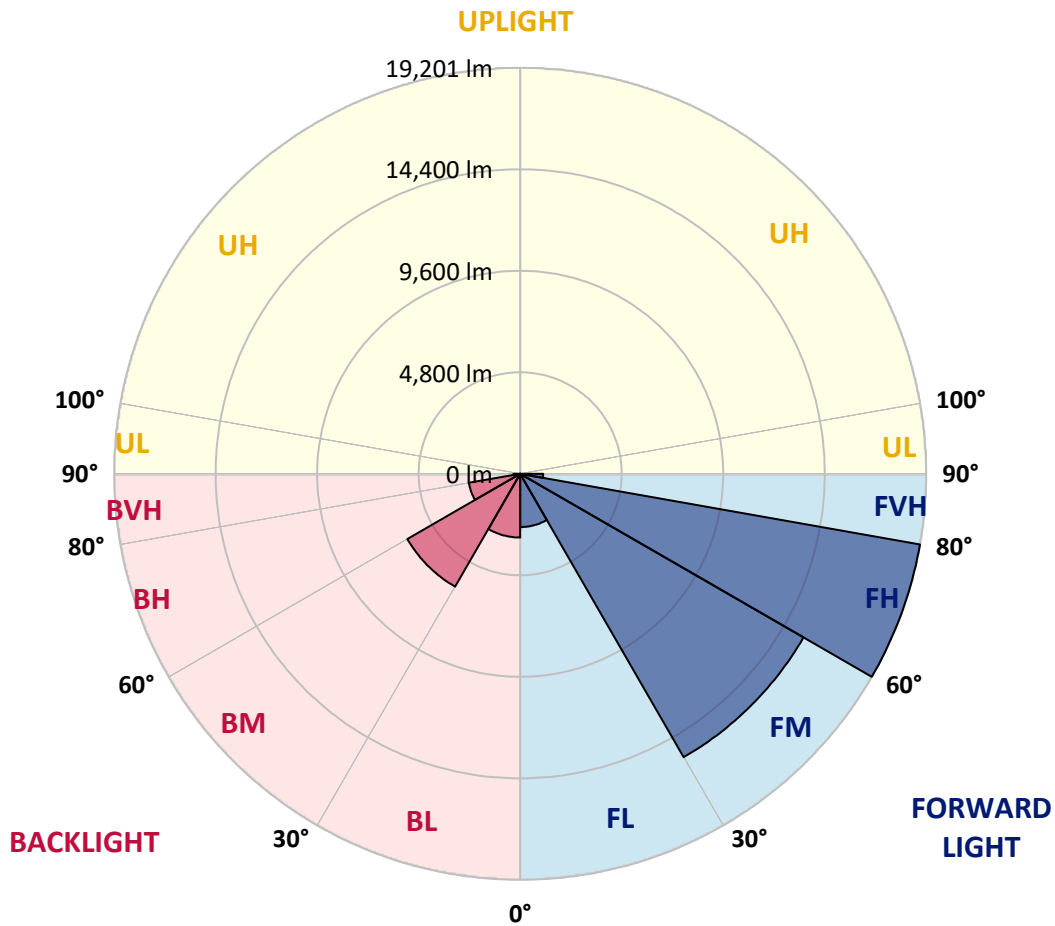
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2519.4	5.0			
FM (30°-60°)	15470.9	30.8			
FH (60°-80°)	19200.6	38.2			G5
FVH (80°-90°)	1092.5	2.2			G5
BL (0°-30°)	3013.0	6.0	B4/5000		
BM (30°-60°)	6160.3	12.3	B4/8500		
BH (60°-80°)	2464.9	4.9	B3/2500		G3/2500
BVH (80°-90°)	317.5	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7
2.5°	6173.2	6211.3	6227.6	6219.4	6260.1	6254.7	6311.7	6382.4	6480.1	6575.2	6713.7
5°	5698.0	5738.7	5774.0	5806.6	5885.3	5909.8	5999.4	6135.2	6314.5	6496.4	6724.6
7.5°	5255.3	5290.6	5344.9	5404.6	5537.7	5562.2	5711.5	5923.4	6173.2	6439.4	6754.4
10°	4894.0	4929.4	4986.4	5054.3	5220.0	5249.8	5439.9	5722.4	6048.3	6385.1	6787.0
12.5°	4739.2	4750.1	4782.7	4850.6	4994.5	5013.5	5222.7	5545.9	5926.1	6344.3	6835.9
15°	4731.1	4752.8	4755.5	4790.8	4910.3	4918.5	5111.3	5431.8	5850.0	6336.2	6909.2
17.5°	4812.6	4828.9	4804.4	4826.1	4926.6	4940.2	5092.3	5377.5	5825.6	6371.5	7034.2
20°	5029.8	5043.4	4970.1	4940.2	5013.5	5024.4	5173.8	5412.8	5850.0	6444.8	7205.3
22.5°	5491.5	5499.7	5320.4	5198.2	5203.7	5209.1	5339.5	5556.7	5945.1	6577.9	7422.5
25°	6211.3	6205.8	5920.7	5684.4	5548.6	5518.7	5605.6	5790.3	6105.3	6754.4	7702.3
27.5°	7053.2	7012.4	6727.3	6374.2	6078.2	6034.7	6015.7	6094.5	6333.5	6988.0	8044.5
30°	8003.7	7965.7	7658.8	7197.1	6787.0	6716.4	6537.2	6496.4	6673.0	7305.8	8519.8
32.5°	9046.7	9022.2	8655.6	8096.1	7547.5	7466.0	7164.5	7055.9	7194.4	7786.5	9182.4
35°	9921.2	9899.4	9595.3	9019.5	8348.7	8248.2	7941.3	7819.1	7889.7	8403.0	10048.8
37.5°	10711.5	10700.6	10439.9	9986.4	9293.8	9171.6	8826.7	8785.9	8772.3	9215.0	11099.9
40°	11444.8	11417.6	11146.0	10907.0	10393.7	10282.4	9978.2	9942.9	9839.7	10214.5	12289.4
42.5°	12256.8	12186.2	11792.4	11681.1	11542.6	11450.2	11268.3	11273.7	11045.6	11341.6	13549.6
45°	12919.5	12878.8	12474.1	12408.9	12558.3	12520.3	12677.8	12718.5	12275.9	12523.0	14858.7
47.5°	13631.1	13593.1	13250.9	13204.7	13609.4	13620.2	14177.0	14190.6	13476.3	13750.6	16170.5
50°	14508.3	14454.0	14114.5	14171.6	14625.1	14665.8	15684.3	15592.0	14581.7	14997.2	17471.4
52.5°	15086.8	15119.4	15046.1	15138.4	15757.6	15795.7	17167.2	16930.9	15676.2	16227.5	18747.8
55°	15513.2	15578.4	15806.5	16018.4	16952.6	16990.7	18565.9	18204.7	16583.3	17368.2	19948.3
57.5°	16061.8	15969.5	16395.9	16808.7	18087.9	18188.4	19926.5	19432.2	17387.2	18351.3	20771.2
60°	16849.4	16784.2	17115.6	17726.7	19358.9	19519.2	21366.0	20537.6	17976.5	19130.8	20931.4
62.5°	18446.4	18283.4	18335.0	18875.5	20961.3	21173.1	22990.1	21501.8	18269.8	19435.0	20073.2
65°	20833.6	20553.9	20293.2	20668.0	23218.2	23427.3	24823.3	22259.5	18161.2	18845.6	17794.6
67.5°	23840.1	23563.1	23242.6	23595.7	26542.5	26708.1	27085.6	22685.9	17305.7	16575.1	13766.9
70°	26319.8	26216.6	26599.5	28052.5	31852.0	31857.5	29986.2	22332.8	14961.9	11751.7	7965.7
72.5°	25991.1	25928.7	27946.6	32438.7	38544.0	38400.1	32732.0	19660.4	10078.7	5301.4	2984.8
75°	21322.5	21727.2	24853.2	32359.9	40947.6	40928.6	31050.9	12498.6	4168.9	2197.2	1542.6
77.5°	11433.9	12074.9	16135.1	23891.7	31966.1	32446.8	21830.4	4372.6	1789.8	1406.8	1067.3
80°	3728.9	4288.4	6431.2	12164.5	20771.2	20681.6	9356.3	1716.4	1224.9	996.7	738.7
82.5°	1583.4	1648.5	2873.4	5744.1	10659.9	10494.2	2979.3	985.9	860.9	681.7	456.3
85°	619.2	692.6	1268.3	2656.1	4617.0	4516.5	1075.5	488.9	551.3	445.4	271.6
87.5°	203.7	247.1	453.6	909.8	1436.7	1385.1	263.4	168.4	239.0	203.7	97.8
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°	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7	6694.7
2.5°	6751.7	6795.2	6846.8	6922.8	6988.0	7042.3	7099.4	7134.7	7148.2	7189.0	7186.3
5°	6800.6	6895.7	7023.3	7148.2	7270.5	7343.8	7409.0	7441.6	7471.4	7493.2	7498.6
7.5°	6882.1	7004.3	7205.3	7368.2	7471.4	7531.2	7574.6	7563.8	7574.6	7580.1	7588.2
10°	6952.7	7123.8	7362.8	7517.6	7596.4	7599.1	7588.2	7550.2	7531.2	7533.9	7539.3
12.5°	7036.9	7227.0	7485.0	7615.4	7637.1	7577.4	7531.2	7466.0	7441.6	7430.7	7425.3
15°	7151.0	7368.2	7618.1	7667.0	7612.7	7536.6	7457.9	7351.9	7297.6	7254.2	7267.7
17.5°	7289.5	7528.5	7721.3	7686.0	7569.2	7444.3	7316.6	7156.4	7045.0	6998.9	7001.6
20°	7482.3	7696.9	7800.1	7645.3	7468.7	7278.6	7061.3	6865.8	6762.6	6716.4	6711.0
22.5°	7715.9	7922.3	7876.1	7574.6	7324.8	7020.6	6749.0	6605.1	6553.5	6520.9	6526.3
25°	7995.6	8172.1	7930.4	7471.4	7088.5	6678.4	6469.3	6423.1	6398.7	6374.2	6374.2
27.5°	8359.5	8454.6	7971.2	7319.3	6719.1	6314.5	6238.4	6246.6	6238.4	6197.7	6205.8
30°	8840.2	8821.2	8009.2	7072.2	6295.4	5985.8	5991.3	6026.6	6032.0	6004.8	6018.4
32.5°	9473.0	9280.2	8028.2	6751.7	5890.8	5698.0	5703.4	5741.4	5768.6	5722.4	5744.1
35°	10238.9	9815.3	7998.3	6349.8	5578.5	5423.6	5382.9	5393.8	5401.9	5358.5	5388.3
37.5°	11132.5	10415.5	7865.2	5904.4	5320.4	5154.8	5067.9	4994.5	4951.1	4910.3	4937.5
40°	12112.9	11070.0	7620.8	5469.8	5032.6	4869.6	4739.2	4600.7	4454.1	4399.8	4424.2
42.5°	13139.5	11743.5	7324.8	5054.3	4701.2	4568.1	4429.6	4228.7	4008.7	3897.3	3910.9
45°	14204.1	12433.4	7034.2	4644.2	4361.7	4304.7	4144.5	3902.7	3663.7	3522.5	3511.7
47.5°	15247.0	13085.2	6607.8	4231.4	4044.0	4106.4	3981.5	3758.8	3492.6	3269.9	3245.5
50°	16243.8	13696.3	5909.8	3813.1	3786.0	4046.7	3927.2	3606.7	3302.5	3017.4	2992.9
52.5°	17232.4	14190.6	5016.3	3432.9	3647.4	4030.4	3856.6	3503.5	3131.4	2832.7	2800.1
55°	18071.6	14445.9	4155.3	3107.0	3446.5	3891.9	3772.4	3381.3	2889.7	2572.0	2544.8
57.5°	18549.6	14239.4	3438.3	2786.5	3169.5	3663.7	3628.4	3120.6	2601.8	2357.4	2324.8
60°	18343.2	13403.0	2851.7	2506.8	2906.0	3416.6	3378.6	2862.6	2381.8	2151.0	2118.4
62.5°	17205.2	11808.7	2387.3	2262.3	2667.0	3164.0	3128.7	2664.3	2213.5	1990.8	1955.4
65°	14913.0	9606.1	2026.1	2058.7	2425.3	2859.8	2911.4	2498.6	2080.4	1863.1	1827.8
67.5°	11374.2	6958.1	1743.6	1882.1	2189.0	2561.1	2710.5	2379.1	1969.0	1762.6	1730.0
70°	6482.8	3951.6	1504.6	1711.0	1979.9	2284.1	2555.7	2284.1	1849.5	1678.4	1656.7
72.5°	2457.9	1814.2	1300.9	1539.9	1778.9	2050.5	2384.6	2134.7	1711.0	1583.4	1561.6
75°	1311.8	1105.4	1094.5	1338.9	1548.1	1822.4	2170.0	1988.0	1607.8	1673.0	1727.3
77.5°	893.5	782.2	915.3	1146.1	1295.5	1569.8	1941.9	1765.3	1393.3	1387.8	1279.2
80°	619.2	554.0	744.2	923.4	1002.2	1319.9	1694.7	1515.5	1135.2	1059.2	1013.0
82.5°	372.1	361.2	556.8	689.8	708.8	1018.5	1404.1	1271.0	928.8	809.3	814.8
85°	203.7	214.6	355.8	404.7	412.8	711.6	1099.9	983.2	714.3	600.2	605.6
87.5°	57.0	73.3	130.4	160.2	198.3	369.4	654.5	583.9	358.5	249.9	249.9
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)