

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: P885466

Luminaire Tested: **NAV-SB6D-735-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885466  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6D-735-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

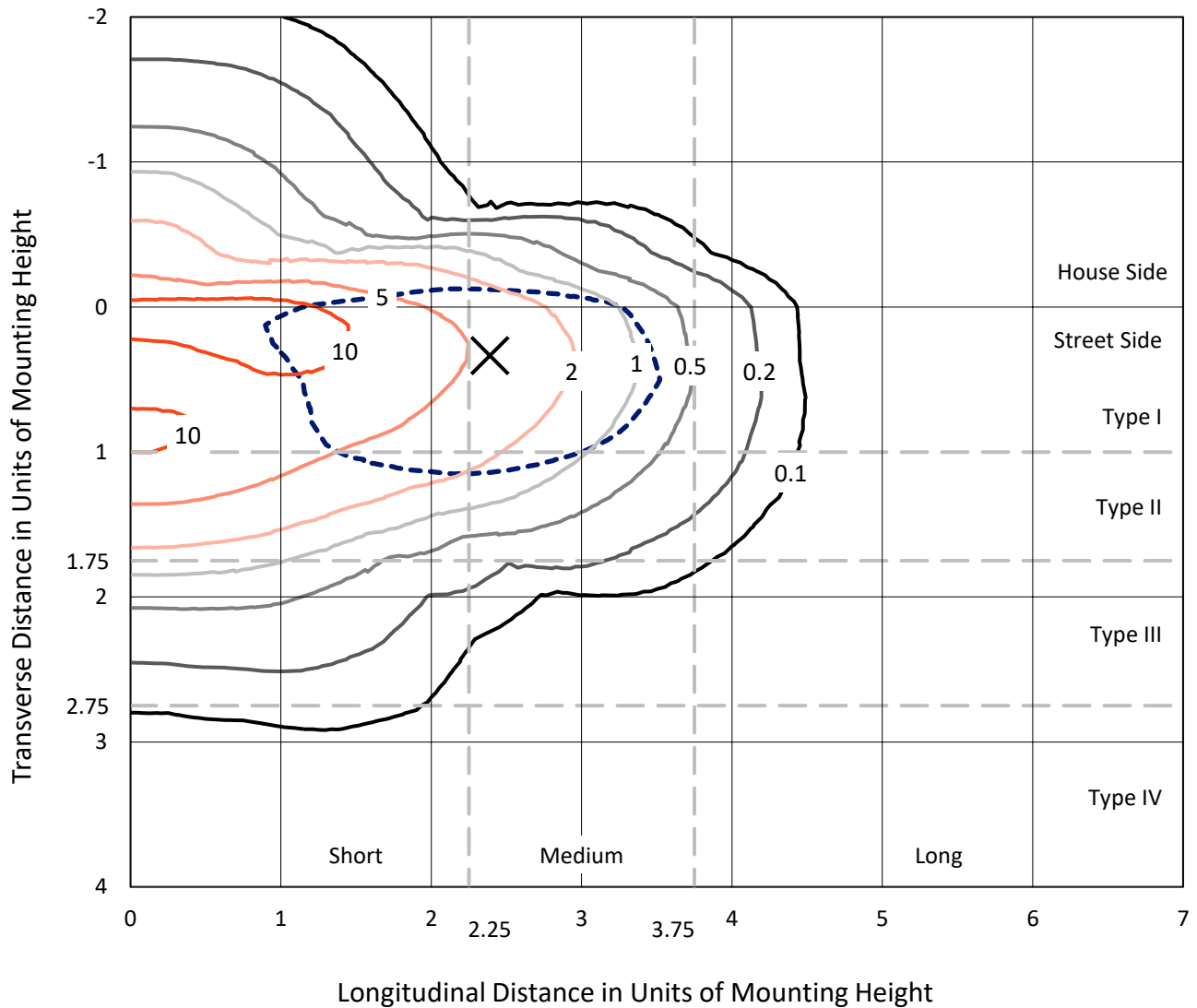
Lumens per Lamp: N/A  
Luminaire Lumens: 45103 lumens  
Efficiency: N/A  
Efficacy: 102.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 440.1  
Input Voltage (V): 120.0  
Input Current (Ain): 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

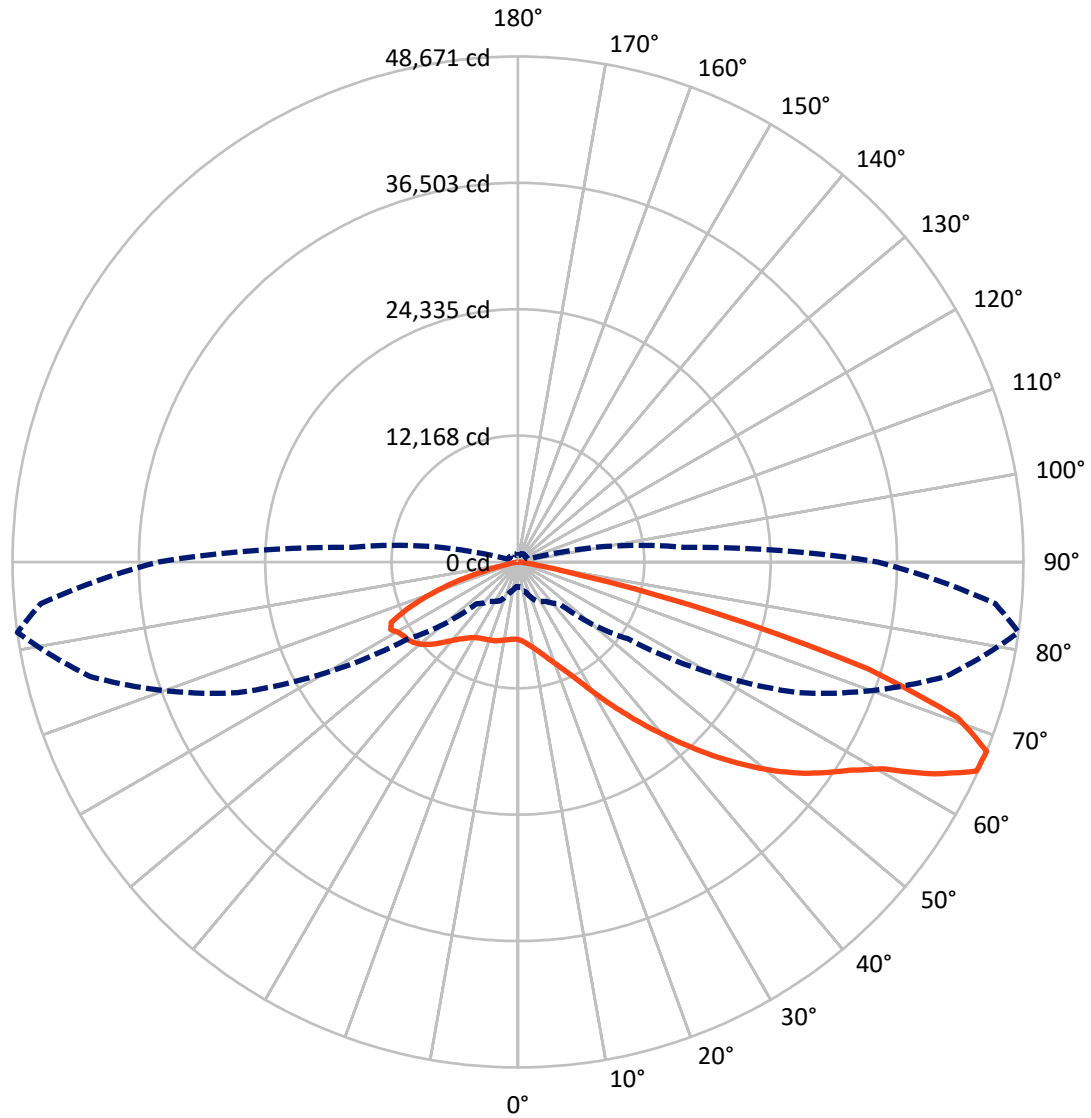
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.8 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8170.0	0.0	8170.0
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	36933.0	0.0	36933.0
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	45103.0	0.0	45103.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	665.7	1.5
10°-20°	1729.9	3.8
20°-30°	2770.7	6.1
30°-40°	4899.5	10.9
40°-50°	8584.4	19.0
50°-60°	11449.2	25.4
60°-70°	10658.6	23.6
70°-80°	4090.8	9.1
80°-90°	254.1	0.6
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°	45103.0	100.0
0°-180°	45103.0	100.0

**Coefficient of Utilization**



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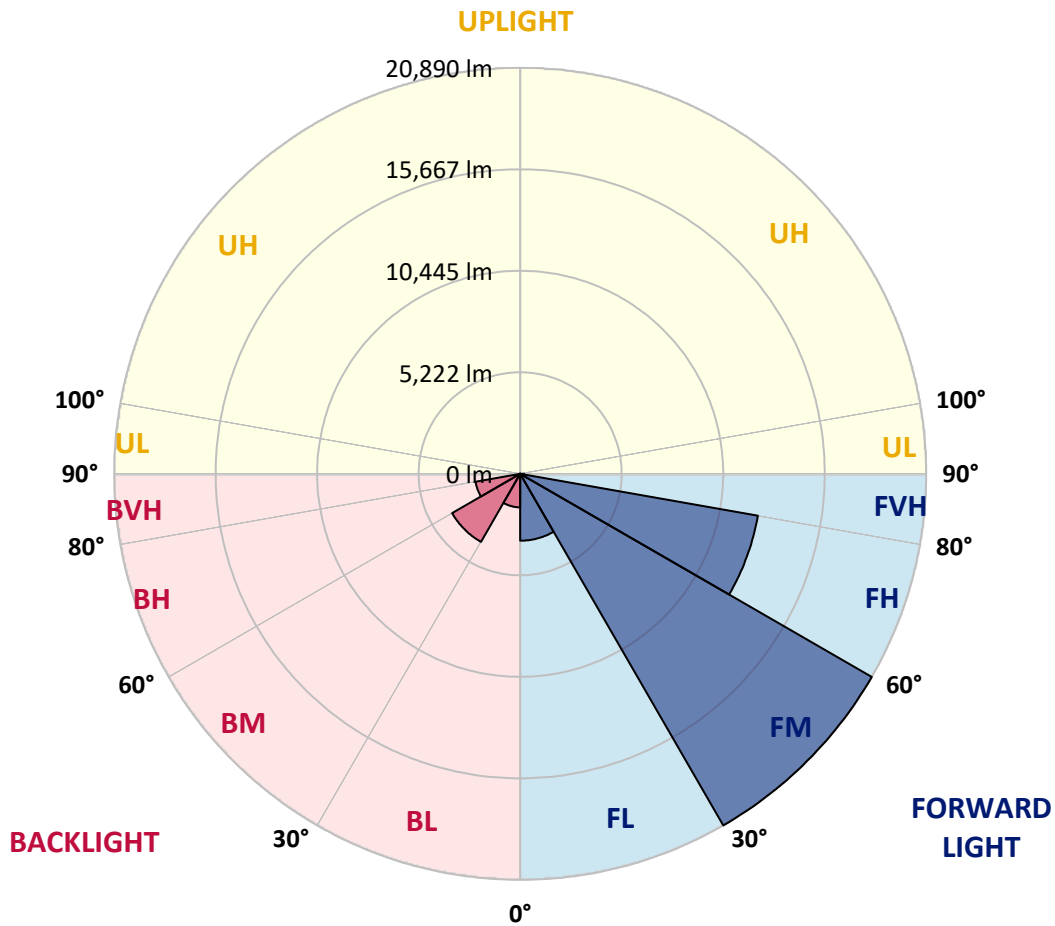
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3440.9	7.6			
FM (30°-60°)	20889.9	46.3			
FH (60°-80°)	12417.5	27.5			G5
FVH (80°-90°)	184.7	0.4			G2/225
BL (0°-30°)	1725.5	3.8	B3/2500		
BM (30°-60°)	4043.3	9.0	B3/5000		
BH (60°-80°)	2331.9	5.2	B3/2500		G3/2500
BVH (80°-90°)	69.4	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0
2.5°	7897.4	7942.9	7916.9	7903.9	7881.2	7848.7	7822.7	7741.6	7657.1	7601.9	7582.4
5°	8056.6	8102.0	8098.8	8111.8	8128.0	8137.7	8131.2	8040.3	7920.2	7826.0	7770.8
7.5°	7920.2	7972.1	8014.3	8079.3	8192.9	8313.1	8371.5	8352.1	8228.7	8098.8	8030.6
10°	7533.7	7588.9	7689.6	7842.2	8082.5	8342.3	8559.9	8660.6	8582.6	8439.7	8345.6
12.5°	6825.8	6881.0	7079.1	7410.3	7813.0	8264.4	8680.0	8949.6	8969.0	8826.2	8715.8
15°	6030.2	6085.4	6296.5	6712.2	7325.9	8050.1	8745.0	9254.8	9426.9	9303.5	9170.4
17.5°	5536.6	5585.4	5744.5	6078.9	6718.7	7621.4	8722.3	9579.5	9972.5	9875.0	9715.9
20°	5387.3	5429.5	5504.2	5738.0	6270.5	7176.5	8572.9	9884.8	10560.2	10505.0	10326.4
22.5°	5546.4	5585.4	5608.1	5712.0	6046.5	6884.3	8384.5	10196.5	11242.2	11248.7	11031.1
25°	5913.3	5952.3	5926.3	5991.3	6137.4	6793.4	8313.1	10563.5	12099.4	12170.9	11924.1
27.5°	6517.3	6520.6	6458.9	6455.6	6478.4	6929.7	8387.8	10956.4	13180.8	13313.9	13008.7
30°	7728.6	7679.9	7442.8	7186.3	7069.4	7338.9	8595.6	11420.8	14457.0	14694.0	14310.9
32.5°	9595.8	9524.3	9089.2	8475.5	7858.5	7998.1	8969.0	11950.1	15846.8	16275.5	15807.9
35°	11622.1	11602.6	11148.0	10235.5	9157.4	8936.6	9576.3	12645.0	17363.3	18045.3	17490.0
37.5°	13505.5	13495.8	13236.0	12161.1	10849.2	10245.2	10550.5	13554.2	18987.0	19974.2	19318.2
40°	15226.6	15255.8	14996.0	14034.8	12713.2	11924.1	11875.4	14677.8	20792.5	22075.2	21295.8
42.5°	16713.9	16746.3	16483.3	15772.1	14554.4	13781.5	13502.3	16054.7	22555.8	24332.0	23409.8
45°	17723.8	17925.1	17886.1	17317.9	16444.3	15642.3	15457.2	17782.2	24565.8	26725.3	25643.9
47.5°	18009.5	18194.6	18486.9	18564.8	18032.3	17243.2	17464.0	19863.7	26598.6	29121.8	27891.1
50°	17304.9	17477.0	18084.2	18892.8	19263.0	19019.4	19415.6	22094.6	28680.2	31511.8	30096.0
52.5°	15915.0	16090.4	16856.7	18136.2	19646.2	20412.5	21373.7	24293.1	30696.7	33775.2	32184.0
55°	13904.9	14090.0	15074.0	16522.3	18915.5	20987.3	23007.1	26488.2	32544.5	35811.2	34067.4
57.5°	11170.7	11307.1	12330.0	14356.3	17077.6	20415.8	24211.9	28884.7	34285.0	37811.6	35934.6
60°	7280.4	7400.6	8589.1	10849.2	14031.6	18506.4	24452.2	31557.3	36597.1	40412.7	38451.3
62.5°	4841.7	4922.9	5627.6	7286.9	9881.5	14840.2	23046.1	33690.8	39987.3	44939.4	42767.0
65°	3322.0	3403.2	4107.8	5263.9	6384.2	9816.6	19003.2	33408.2	43059.2	48534.2	45965.6
67.5°	2370.5	2438.7	3036.2	4127.3	4620.9	5702.3	12882.0	29797.2	42617.6	48670.6	46137.7
70°	1698.3	1737.3	2230.9	3214.8	3672.7	3425.9	7163.5	22789.6	37314.7	44942.7	42624.1
72.5°	1188.5	1201.5	1549.0	2448.5	2958.3	2500.4	3409.7	15194.1	28222.3	35275.4	33044.5
75°	805.3	821.6	1042.4	1795.8	2373.8	1909.4	1805.5	8147.5	16567.7	19526.0	17503.0
77.5°	493.6	500.1	672.2	1227.5	1776.3	1454.8	1162.5	3451.9	6410.2	6293.3	5364.5
80°	279.3	279.3	428.6	763.1	1211.2	938.5	815.1	1467.8	2029.6	1782.8	1571.7
82.5°	155.9	159.1	311.7	474.1	802.1	555.3	448.1	678.7	876.8	776.1	675.4
85°	64.9	71.4	191.6	224.1	383.2	276.0	181.8	285.8	324.7	289.0	211.1
87.5°	6.5	9.7	58.5	42.2	45.5	55.2	26.0	55.2	45.5	45.5	32.5
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°	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0	7472.0
2.5°	7520.8	7472.0	7348.6	7205.8	7017.4	6926.5	6803.1	6718.7	6647.2	6653.7	6588.8
5°	7666.9	7543.5	7267.5	6923.2	6494.6	6189.4	5864.6	5640.6	5458.7	5419.7	5332.1
7.5°	7868.2	7673.4	7189.5	6569.3	5845.1	5296.3	4806.0	4491.0	4267.0	4195.5	4124.1
10°	8128.0	7845.5	7088.9	6124.4	5082.0	4383.9	3857.8	3611.0	3458.4	3406.4	3367.5
12.5°	8430.0	8043.6	6955.7	5582.1	4296.2	3624.0	3289.5	3166.1	3117.4	3101.2	3091.4
15°	8809.9	8290.4	6754.4	4939.1	3630.5	3159.6	3016.7	3000.5	3007.0	3000.5	2997.3
17.5°	9261.3	8559.9	6426.4	4276.7	3182.4	2922.6	2870.6	2883.6	2899.8	2896.6	2890.1
20°	9754.9	8826.2	6007.5	3688.9	2877.1	2753.7	2724.5	2737.5	2750.5	2744.0	2740.7
22.5°	10316.7	9111.9	5543.1	3231.1	2672.5	2597.8	2565.4	2568.6	2568.6	2555.6	2549.1
25°	10988.9	9426.9	5056.0	2906.3	2516.7	2458.2	2419.2	2406.3	2386.8	2347.8	2341.3
27.5°	11791.0	9761.4	4588.4	2679.0	2393.3	2338.1	2292.6	2260.1	2211.4	2146.5	2140.0
30°	12693.7	10167.3	4192.3	2536.1	2295.8	2240.6	2188.7	2140.0	2068.5	1987.3	1980.9
32.5°	13755.6	10602.4	3903.3	2442.0	2208.2	2149.7	2088.0	2029.6	1951.6	1870.4	1873.7
35°	15022.0	11128.5	3734.4	2377.0	2140.0	2062.0	1993.8	1928.9	1870.4	1799.0	1792.5
37.5°	16395.6	11687.0	3682.4	2344.6	2094.5	1974.4	1896.4	1851.0	1844.5	1802.3	1799.0
40°	17899.1	12349.5	3721.4	2325.1	2045.8	1889.9	1805.5	1795.8	1812.0	1737.3	1740.6
42.5°	19490.3	13135.3	3786.4	2302.3	1977.6	1805.5	1724.3	1724.3	1711.3	1607.4	1607.4
45°	21211.4	14041.3	3851.3	2247.1	1896.4	1721.1	1659.4	1636.6	1581.4	1480.8	1477.5
47.5°	22945.4	14963.6	3900.0	2146.5	1799.0	1649.6	1594.4	1542.5	1461.3	1370.4	1367.1
50°	24591.8	15791.6	3848.1	1997.1	1688.6	1581.4	1523.0	1451.5	1363.9	1302.2	1292.4
52.5°	26062.8	16509.3	3627.2	1821.7	1571.7	1510.0	1458.0	1383.4	1311.9	1247.0	1240.5
55°	27342.3	17090.5	3237.6	1656.1	1467.8	1448.3	1396.3	1302.2	1204.7	1149.5	1143.1
57.5°	28569.8	17532.2	2750.5	1519.7	1373.6	1380.1	1302.2	1217.7	1126.8	1068.4	1061.9
60°	30203.2	18123.2	2256.9	1393.1	1272.9	1292.4	1208.0	1146.3	1032.6	958.0	948.2
62.5°	32814.0	19042.2	1792.5	1237.2	1156.0	1162.5	1126.8	1052.1	915.7	828.1	821.6
65°	34885.8	18704.5	1412.6	1068.4	1022.9	1032.6	1032.6	951.5	805.3	704.7	694.9
67.5°	34652.0	16015.7	1126.8	902.7	896.3	902.7	925.5	857.3	714.4	633.2	620.2
70°	31921.0	12739.2	902.7	750.1	779.4	763.1	828.1	782.6	643.0	561.8	552.0
72.5°	26046.6	9176.9	688.4	620.2	597.5	623.5	746.9	704.7	535.8	444.9	435.1
75°	15220.1	4896.9	513.1	490.3	431.9	519.6	662.4	600.8	409.2	328.0	318.2
77.5°	4955.4	1708.1	376.7	360.5	321.5	418.9	565.0	506.6	334.5	259.8	250.0
80°	1328.1	516.3	256.5	237.1	207.8	311.7	448.1	402.7	240.3	168.9	165.6
82.5°	532.6	217.6	149.4	133.1	113.7	214.3	354.0	324.7	178.6	107.2	107.2
85°	172.1	71.4	55.2	42.2	52.0	133.1	211.1	220.8	126.6	55.2	42.2
87.5°	22.7	9.7	9.7	13.0	9.7	22.7	64.9	61.7	35.7	6.5	0.0
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)