

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: P885447

Luminaire Tested: **NAV-SB6D-727-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885447  
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-727-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

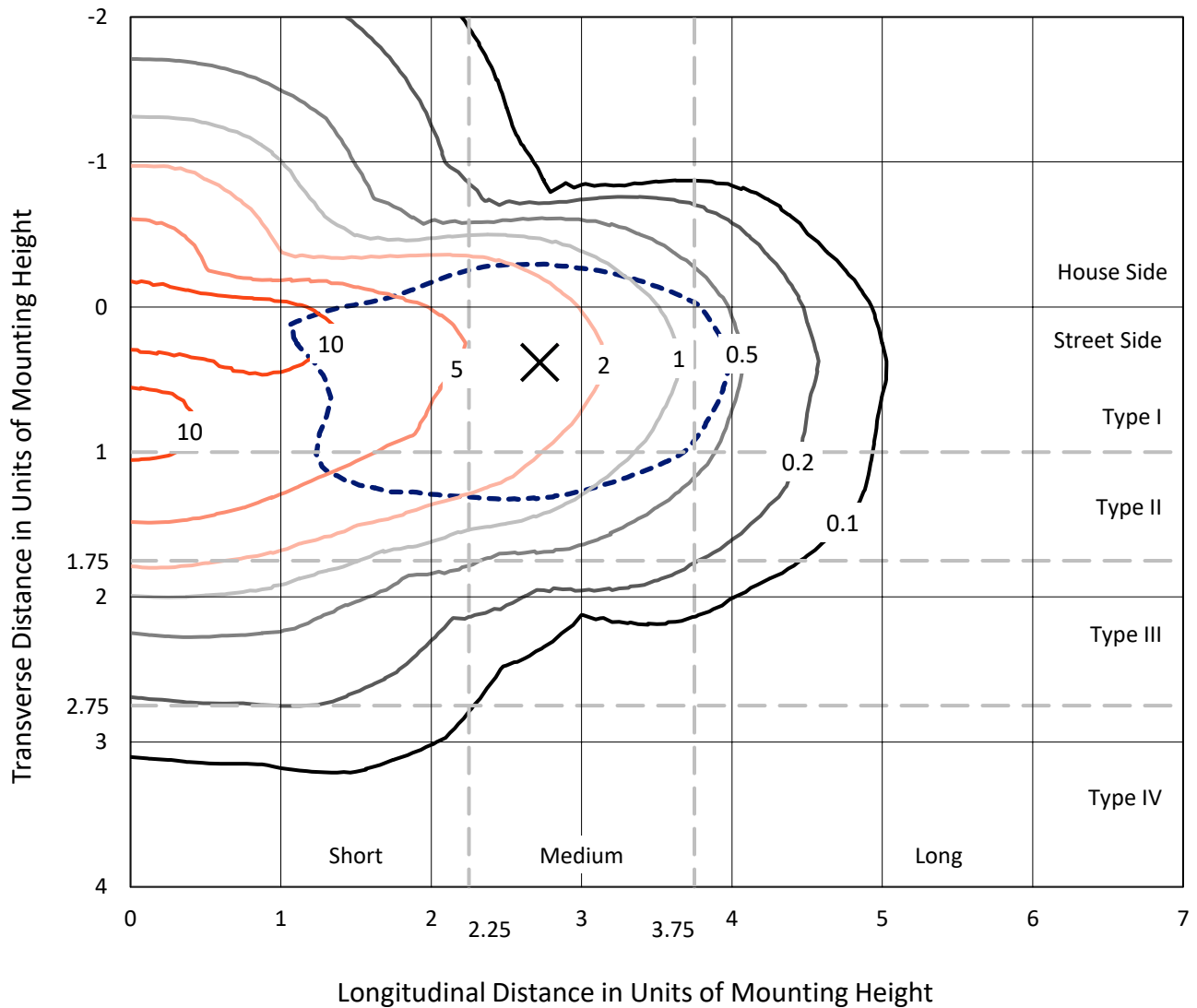
Lumens per Lamp: N/A  
Luminaire Lumens: 55462 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 440.1  
Input Voltage (V): 120.0  
Input Current (Ain): 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

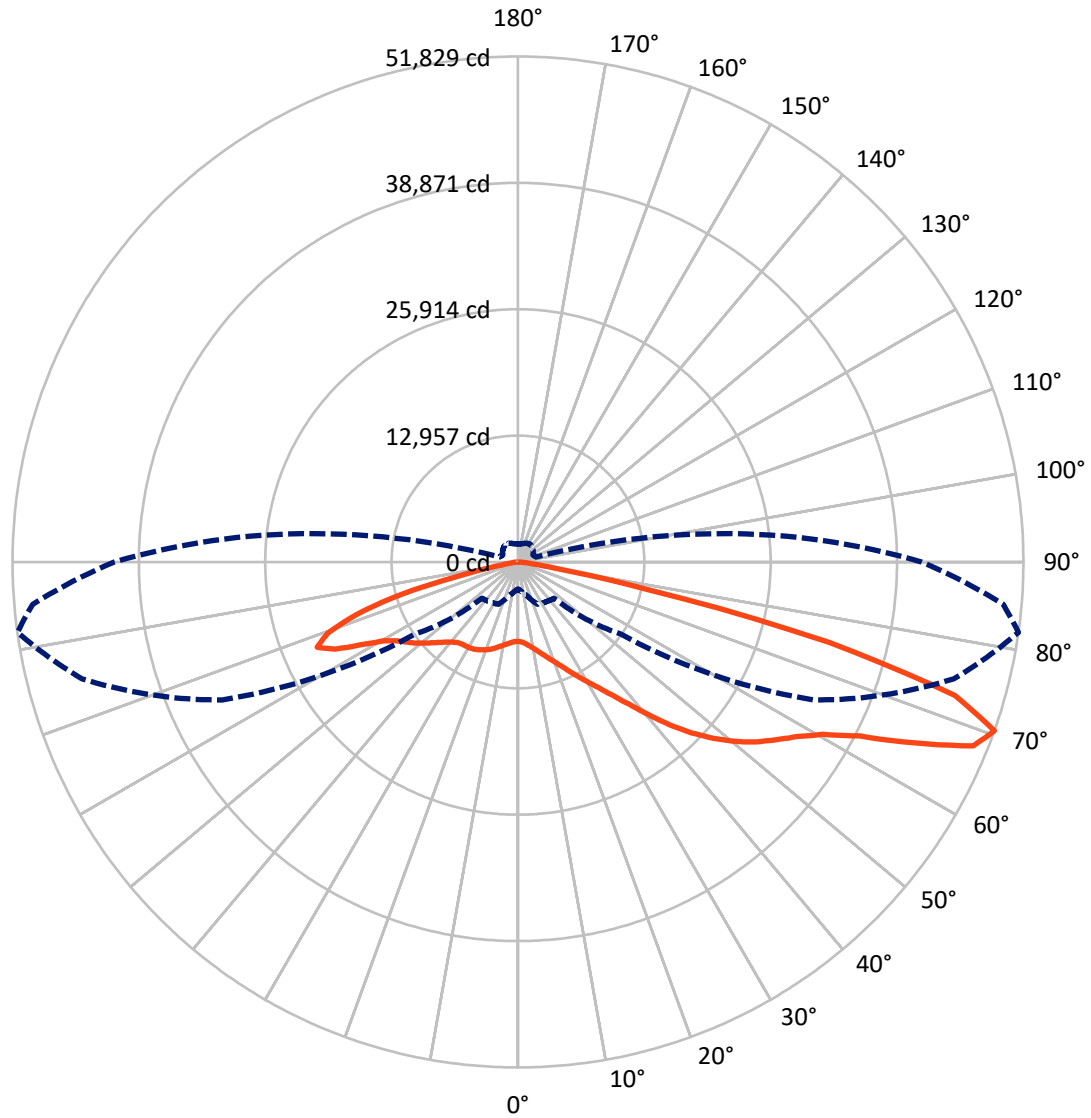
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.8 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
<b>House Side</b>	Lumens	13672.7	0.0	13672.7
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	41789.3	0.0	41789.3
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	55462.0	0.0	55462.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	767.8	1.4
10°-20°	2205.8	4.0
20°-30°	3690.1	6.7
30°-40°	5764.8	10.4
40°-50°	9181.2	16.6
50°-60°	12776.7	23.0
60°-70°	13365.0	24.1
70°-80°	6985.3	12.6
80°-90°	725.3	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°	55462.0	100.0
0°-180°	55462.0	100.0

**Coefficient of Utilization**

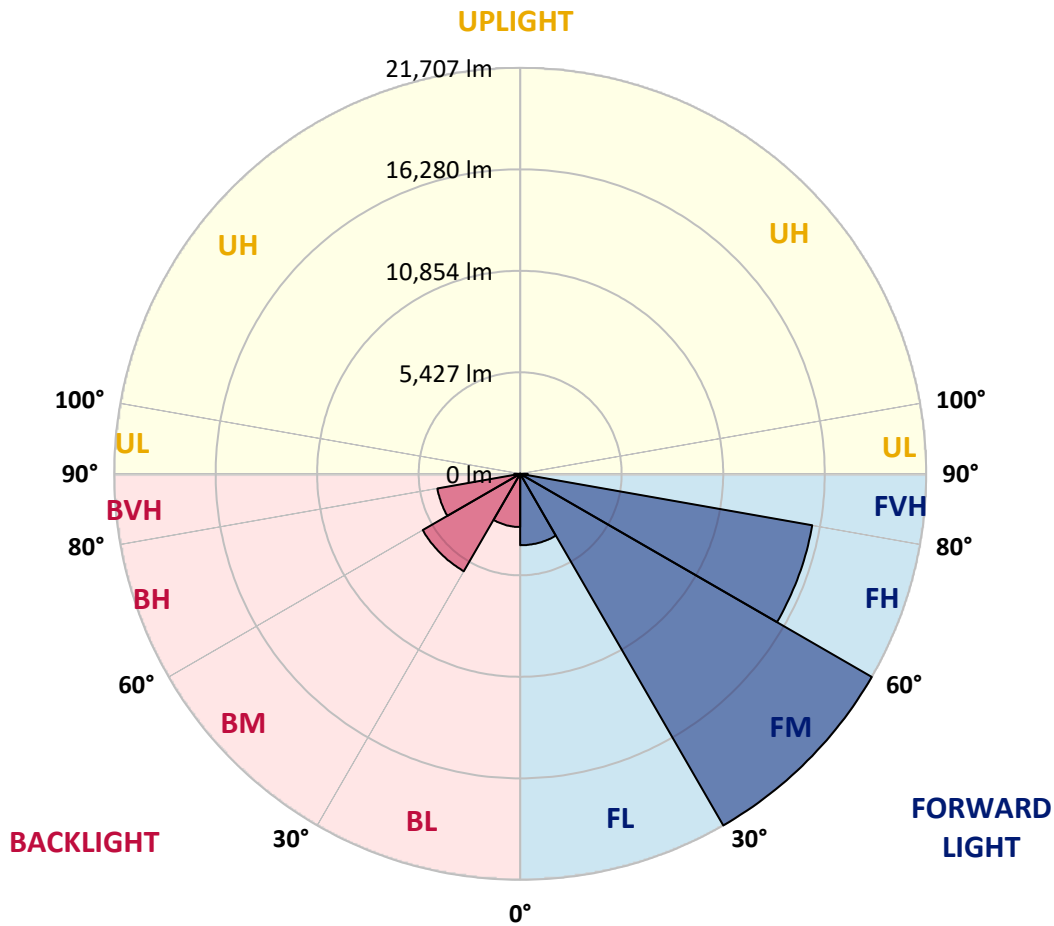


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3819.2	6.9			
FM (30°-60°)	21707.3	39.1			
FH (60°-80°)	15856.8	28.6			G5
FVH (80°-90°)	406.1	0.7			G3/500
BL (0°-30°)	2844.4	5.1	B4/5000		
BM (30°-60°)	6015.5	10.8	B4/8500		
BH (60°-80°)	4493.6	8.1	B4/5000		G4/5000
BVH (80°-90°)	319.3	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°	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4
2.5°	8325.7	8372.7	8358.0	8343.3	8343.3	8322.7	8319.8	8290.3	8266.8	8228.5	8219.7
5°	8431.6	8481.6	8475.8	8487.5	8525.8	8534.6	8543.4	8525.8	8478.7	8431.6	8411.0
7.5°	8337.4	8393.3	8411.0	8481.6	8599.4	8705.3	8784.8	8817.1	8773.0	8705.3	8672.9
10°	8019.6	8081.4	8143.2	8310.9	8519.9	8770.0	8981.9	9108.5	9099.7	9034.9	8979.0
12.5°	7375.1	7439.8	7572.3	7898.9	8281.5	8723.0	9117.3	9382.2	9473.4	9426.3	9329.2
15°	6860.1	6916.0	7016.0	7351.5	7848.9	8519.9	9167.3	9682.4	9914.9	9888.4	9770.7
17.5°	6845.3	6868.9	6930.7	7089.6	7472.2	8202.1	9114.4	9976.7	10421.1	10418.1	10271.0
20°	7104.3	7113.2	7148.5	7180.8	7398.6	7960.7	8979.0	10220.9	10989.0	10989.0	10830.1
22.5°	7463.4	7457.5	7492.8	7463.4	7569.3	7940.1	8893.7	10435.8	11621.8	11668.9	11468.7
25°	8001.9	7972.5	7963.7	7896.0	7916.6	8131.4	8987.8	10680.0	12372.2	12469.4	12219.2
27.5°	8720.0	8672.9	8640.6	8484.6	8431.6	8525.8	9276.2	10974.3	13208.0	13375.8	13058.0
30°	9655.9	9570.5	9523.4	9252.7	9061.4	9076.1	9711.8	11365.7	14082.1	14352.9	13949.7
32.5°	10933.1	10800.7	10674.1	10229.8	9879.5	9764.8	10273.9	11907.3	15029.7	15462.4	14944.4
35°	12363.4	12257.5	12122.1	11436.4	10897.8	10632.9	11033.2	12663.6	16139.2	16825.0	16151.0
37.5°	13740.7	13649.5	13714.2	12790.1	12095.6	11710.1	12027.9	13678.9	17507.7	18520.1	17663.7
40°	15165.1	15094.5	15103.3	14220.4	13411.1	12978.5	13234.5	14953.2	19076.3	20536.0	19482.5
42.5°	16713.1	16660.1	16483.6	15700.7	14791.4	14388.2	14623.6	16424.7	20759.7	22831.6	21477.8
45°	18446.5	18414.2	18249.3	17351.7	16309.9	15856.7	16174.6	18049.2	22451.9	24991.7	23481.9
47.5°	19944.5	19971.0	19950.4	19194.0	18114.0	17448.9	17828.5	19744.4	24026.4	27022.3	25403.7
50°	20665.5	20803.8	21006.9	20771.5	20100.5	19423.6	19497.2	21380.7	25527.3	28926.4	27246.0
52.5°	20288.8	20550.8	21104.0	21480.7	21739.7	21598.4	21401.3	23005.2	26939.9	30645.1	28988.2
55°	18885.0	19252.9	20171.1	21080.5	22401.9	23429.0	23688.0	24806.3	28317.2	32157.8	30636.3
57.5°	16327.6	16925.0	17749.0	19588.4	21813.3	24314.8	26354.3	27304.9	29777.0	33773.5	32360.9
60°	11942.6	12743.1	13767.2	16504.2	19753.2	23841.0	28623.3	31142.5	31851.8	35866.0	34606.4
62.5°	7642.9	8137.3	9079.1	11657.1	15391.7	21413.0	29317.9	35939.5	35368.6	39297.5	37973.1
65°	5232.6	5550.4	6412.7	7860.7	9950.2	15939.1	27457.9	39535.8	40954.4	44736.1	43729.6
67.5°	3802.3	4043.6	4779.4	6047.8	6483.4	9432.2	21307.1	39371.0	46384.1	50339.5	48773.8
70°	2772.3	2943.0	3561.0	4779.4	4988.3	5247.3	12907.9	33467.4	46266.4	51828.6	49954.0
72.5°	2054.2	2171.9	2586.9	3708.1	4037.8	3543.3	6389.2	24323.6	39756.6	46878.5	45374.7
75°	1486.2	1574.5	1880.6	2837.0	3231.4	2698.7	3187.2	14214.5	27731.6	32976.0	33240.8
77.5°	1136.0	1203.7	1403.8	2077.7	2586.9	2024.8	1977.7	6539.3	13149.2	13213.9	13955.6
80°	912.3	956.5	1065.4	1462.7	1983.6	1515.6	1289.0	2639.8	4155.5	3516.8	3690.5
82.5°	671.0	744.6	900.5	1027.1	1418.5	1044.8	785.8	1333.2	1580.4	1359.7	1371.4
85°	382.6	432.6	544.4	735.7	906.4	638.6	450.3	591.5	735.7	603.3	538.6
87.5°	135.4	176.6	191.3	288.4	394.4	264.9	173.6	170.7	241.3	179.5	150.1
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°	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4	8131.4
2.5°	8190.3	8175.6	8116.7	8037.2	7954.8	7875.4	7848.9	7793.0	7754.7	7734.1	7757.7
5°	8355.1	8308.0	8169.7	7993.1	7807.7	7607.6	7466.3	7336.8	7242.6	7154.4	7189.7
7.5°	8590.5	8508.1	8269.7	7960.7	7631.1	7298.6	7051.4	6863.0	6736.5	6654.1	6671.7
10°	8864.2	8737.7	8372.7	7910.7	7401.6	6924.8	6633.5	6471.6	6392.1	6348.0	6359.8
12.5°	9179.1	8999.6	8478.7	7795.9	7051.4	6506.9	6306.8	6259.7	6262.6	6265.6	6271.5
15°	9567.6	9317.4	8564.0	7545.8	6595.2	6186.1	6150.8	6227.3	6306.8	6345.0	6342.1
17.5°	10006.1	9652.9	8578.8	7133.8	6147.9	5980.1	6091.9	6256.8	6377.4	6430.4	6442.2
20°	10477.0	9994.3	8472.8	6551.0	5780.0	5812.4	6012.5	6224.4	6356.8	6424.5	6442.2
22.5°	11015.5	10359.3	8219.7	5938.9	5479.8	5629.9	5865.3	6071.3	6209.7	6277.4	6295.0
25°	11630.6	10768.3	7822.4	5423.9	5220.8	5423.9	5659.3	5830.0	5941.9	6003.7	6021.3
27.5°	12313.4	11195.1	7292.7	5014.8	4994.2	5212.0	5406.2	5538.7	5597.5	5644.6	5662.3
30°	12999.1	11583.5	6651.1	4705.8	4797.0	5003.0	5141.4	5200.2	5217.9	5226.7	5247.3
32.5°	13740.7	11919.0	5977.2	4449.8	4608.7	4800.0	4882.4	4908.9	4826.5	4770.6	4788.2
35°	14638.3	12278.1	5317.9	4246.7	4423.3	4588.1	4614.6	4591.0	4493.9	4379.1	4385.0
37.5°	15747.8	12725.4	4791.2	4102.5	4249.6	4358.5	4326.2	4320.3	4329.1	4193.7	4202.6
40°	17107.5	13308.1	4405.6	3990.7	4108.4	4131.9	4040.7	4090.7	4134.9	3928.9	3934.7
42.5°	18617.2	14011.5	4161.4	3914.1	3990.7	3934.7	3793.5	3849.4	3843.5	3572.8	3569.8
45°	20156.4	14776.6	4076.0	3858.2	3881.8	3769.9	3614.0	3628.7	3505.1	3260.8	3269.6
47.5°	21686.7	15597.7	4129.0	3811.1	3746.4	3619.9	3499.2	3434.4	3252.0	3069.5	3069.5
50°	23187.7	16460.0	4323.2	3717.0	3561.0	3487.4	3399.1	3284.4	3090.1	2934.1	2922.4
52.5°	24579.7	17328.2	4541.0	3561.0	3328.5	3372.6	3316.7	3184.3	2993.0	2834.1	2837.0
55°	25898.1	18196.4	4626.3	3346.2	3110.7	3272.6	3240.2	2995.9	2766.4	2636.9	2625.1
57.5°	27334.3	19241.1	4532.2	3072.5	2934.1	3157.8	3034.2	2763.4	2631.0	2533.9	2525.1
60°	29323.7	20880.4	4329.1	2734.0	2766.4	2987.1	2775.2	2663.4	2519.2	2410.3	2404.4
62.5°	32628.7	23938.1	4002.4	2398.5	2569.2	2734.0	2651.6	2539.8	2392.6	2286.7	2286.7
65°	37514.0	28187.8	3387.4	2136.6	2348.5	2486.8	2519.2	2407.3	2254.3	2142.5	2148.4
67.5°	41634.2	30854.1	2563.3	1918.8	2121.9	2286.7	2377.9	2269.0	2107.2	1998.3	2001.2
70°	41407.6	28917.6	1957.1	1704.0	1921.8	2089.5	2207.2	2121.9	1948.2	1845.2	1854.1
72.5°	36778.3	24191.2	1583.3	1486.2	1718.7	1883.5	2024.8	1960.0	1783.4	1683.4	1683.4
75°	27019.4	17172.2	1265.5	1265.5	1465.6	1668.7	1824.6	1783.4	1621.6	1550.9	1530.3
77.5°	11389.3	7204.4	991.8	1050.6	1218.4	1433.2	1627.5	1642.2	1500.9	1589.2	1442.1
80°	3028.3	1986.5	756.3	827.0	956.5	1183.1	1415.6	1409.7	1256.6	1174.2	1091.8
82.5°	1153.6	782.8	538.6	582.7	691.6	906.4	1121.3	1156.6	1003.6	868.2	868.2
85°	444.4	335.5	332.6	350.2	403.2	600.4	847.6	877.0	756.3	641.6	662.2
87.5°	114.8	100.1	123.6	117.7	185.4	320.8	485.6	503.2	462.0	267.8	382.6
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)