

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: P885001

Luminaire Tested: **NAV-SB6A-827-U-T4FT**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885001  
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-SB6A-827-U-T4FT  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

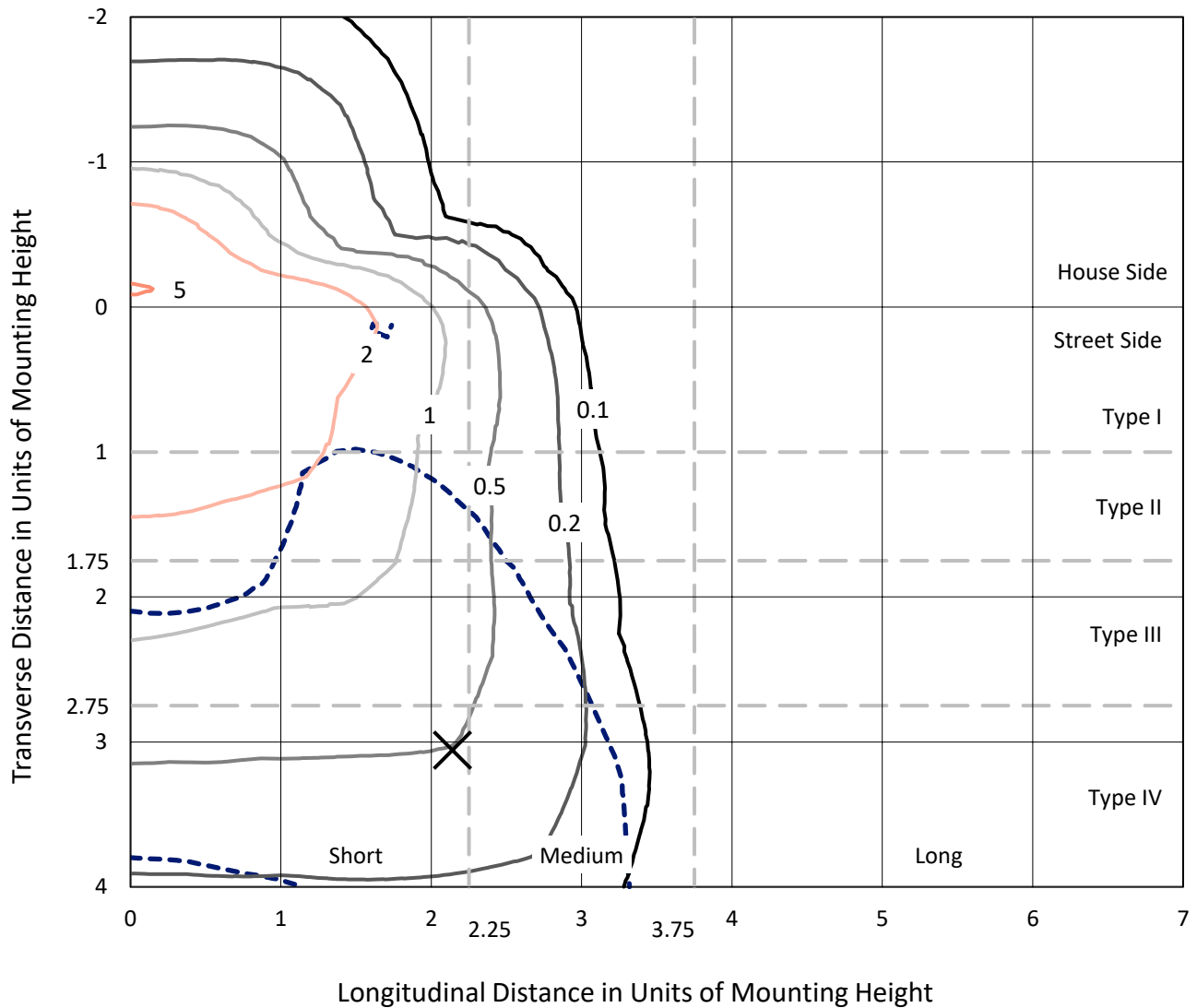
Lumens per Lamp: N/A  
Luminaire Lumens: 21865 lumens  
Efficiency: N/A  
Efficacy: 127.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 170.9  
Input Voltage (V): 120.0  
Input Current (Ain): 1.434  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 11.969  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P885001  
 CATALOG NUMBER: NAV-SB6A-827-U-T4FT

### Iso-Footcandle Lines of Horizontal Illumination

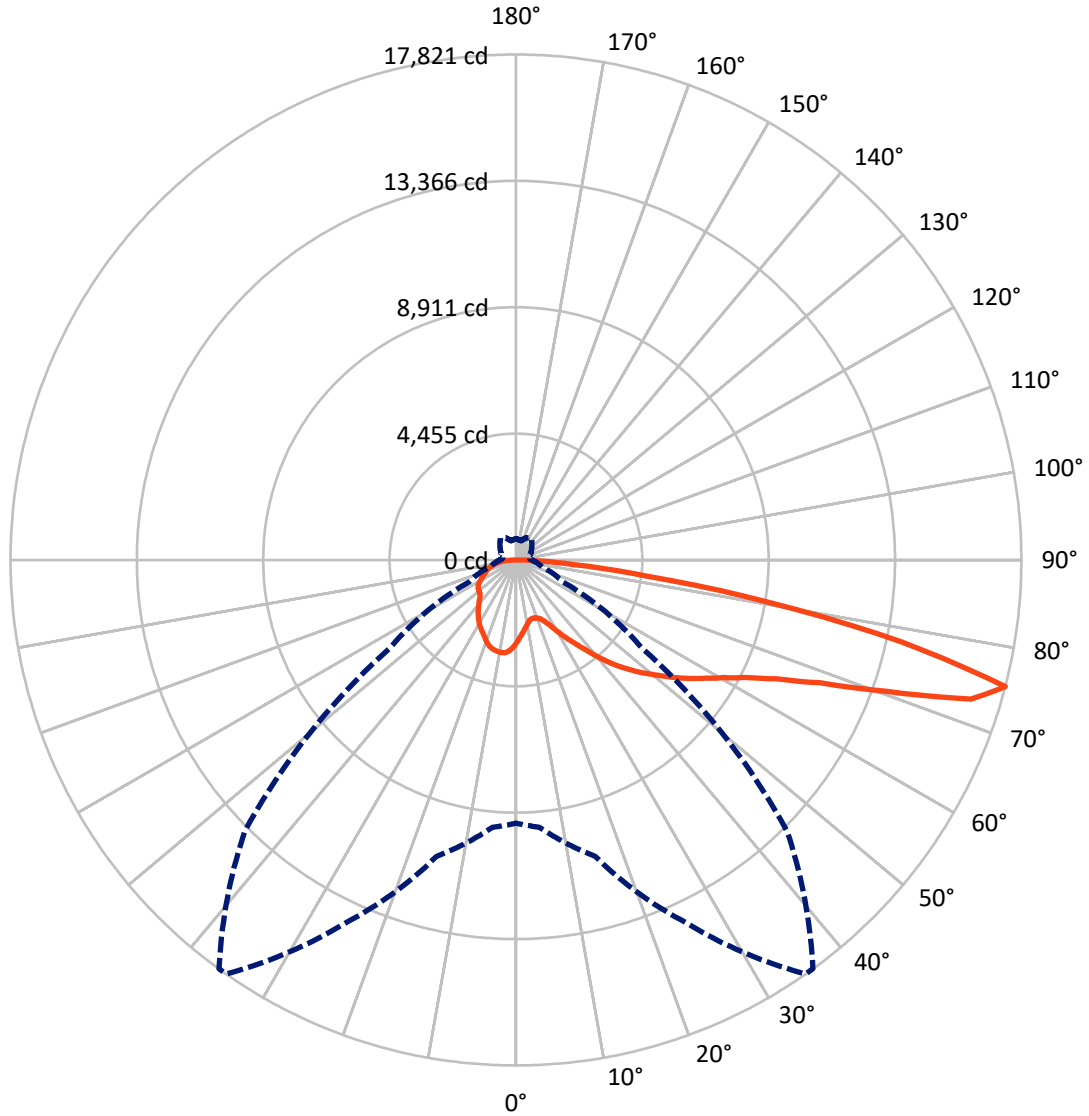
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc  
 Type IV - Short - N/A

REPORT NUMBER: P885001  
CATALOG NUMBER: NAV-SB6A-827-U-T4FT

### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P885001  
 CATALOG NUMBER: NAV-SB6A-827-U-T4FT

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5203.3	0.0	5203.3
	% Fixture	23.8	0.0	23.8
<b>Street Side</b>	Lumens	16661.7	0.0	16661.7
	% Fixture	76.2	0.0	76.2
<b>Total</b>	Lumens	21865.0	0.0	21865.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.9	1.3
10°-20°	795.7	3.6
20°-30°	1336.2	6.1
30°-40°	2076.7	9.5
40°-50°	3082.3	14.1
50°-60°	4255.3	19.5
60°-70°	5162.7	23.6
70°-80°	4266.6	19.5
80°-90°	613.7	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°	21865.0	100.0
0°-180°	21865.0	100.0



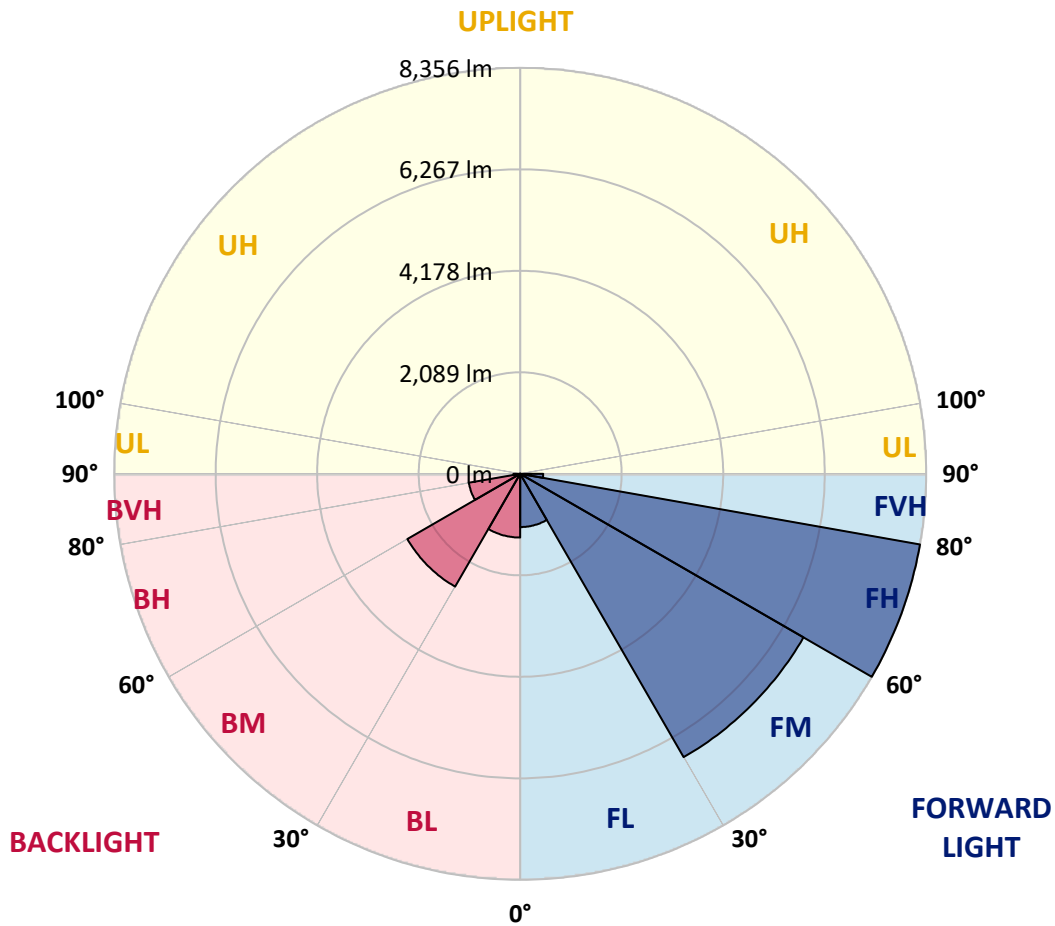
REPORT NUMBER: P885001  
 CATALOG NUMBER: NAV-SB6A-827-U-T4FT

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1096.5	5.0			
FM (30°-60°)	6733.2	30.8			
FH (60°-80°)	8356.5	38.2			G4/12000
FVH (80°-90°)	475.5	2.2			G3/500
BL (0°-30°)	1311.3	6.0	B3/2500		
BM (30°-60°)	2681.1	12.3	B3/5000		
BH (60°-80°)	1072.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	138.2	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 IV Short



REPORT NUMBER: P885001  
 CATALOG NUMBER: NAV-SB6A-827-U-T4FT

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7
2.5°	2686.7	2703.3	2710.4	2706.8	2724.5	2722.2	2747.0	2777.7	2820.3	2861.7	2921.9
5°	2479.9	2497.6	2513.0	2527.1	2561.4	2572.1	2611.1	2670.2	2748.2	2827.4	2926.7
7.5°	2287.2	2302.6	2326.2	2352.2	2410.1	2420.8	2485.8	2578.0	2686.7	2802.6	2939.7
10°	2130.0	2145.4	2170.2	2199.7	2271.8	2284.8	2367.6	2490.5	2632.3	2778.9	2953.8
12.5°	2062.6	2067.3	2081.5	2111.1	2173.7	2182.0	2273.0	2413.7	2579.1	2761.2	2975.1
15°	2059.1	2068.5	2069.7	2085.1	2137.1	2140.6	2224.5	2364.0	2546.1	2757.6	3007.0
17.5°	2094.5	2101.6	2091.0	2100.4	2144.2	2150.1	2216.3	2340.4	2535.4	2773.0	3061.4
20°	2189.1	2195.0	2163.1	2150.1	2182.0	2186.7	2251.7	2355.7	2546.1	2804.9	3135.9
22.5°	2390.0	2393.6	2315.6	2262.4	2264.7	2267.1	2323.8	2418.4	2587.4	2862.8	3230.4
25°	2703.3	2700.9	2576.8	2474.0	2414.9	2401.8	2439.7	2520.0	2657.2	2939.7	3352.2
27.5°	3069.7	3052.0	2927.8	2774.2	2645.3	2626.4	2618.2	2652.4	2756.5	3041.3	3501.1
30°	3483.4	3466.8	3333.3	3132.3	2953.8	2923.1	2845.1	2827.4	2904.2	3179.6	3708.0
32.5°	3937.3	3926.6	3767.1	3523.6	3284.8	3249.4	3118.1	3070.9	3131.1	3388.8	3996.4
35°	4317.9	4308.4	4176.0	3925.5	3633.5	3589.8	3456.2	3403.0	3433.7	3657.1	4373.4
37.5°	4661.9	4657.1	4543.7	4346.3	4044.8	3991.7	3841.5	3823.8	3817.9	4010.6	4830.9
40°	4981.0	4969.2	4851.0	4747.0	4523.6	4475.1	4342.7	4327.3	4282.4	4445.5	5348.6
42.5°	5334.4	5303.7	5132.3	5083.8	5023.6	4983.4	4904.2	4906.5	4807.2	4936.1	5897.1
45°	5622.8	5605.1	5429.0	5400.6	5465.6	5449.1	5517.6	5535.4	5342.7	5450.3	6466.8
47.5°	5932.5	5916.0	5767.0	5746.9	5923.1	5927.8	6170.1	6176.0	5865.1	5984.5	7037.7
50°	6314.3	6290.7	6142.9	6167.7	6365.1	6382.9	6826.1	6785.9	6346.2	6527.1	7603.9
52.5°	6566.1	6580.3	6548.3	6588.5	6858.0	6874.6	7471.5	7368.7	6822.6	7062.5	8159.4
55°	6751.7	6780.0	6879.3	6971.5	7378.1	7394.7	8080.2	7923.0	7217.4	7559.0	8681.9
57.5°	6990.4	6950.2	7135.8	7315.5	7872.2	7915.9	8672.4	8457.3	7567.2	7986.9	9040.0
60°	7333.2	7304.8	7449.0	7715.0	8425.4	8495.1	9298.9	8938.4	7823.7	8326.1	9109.8
62.5°	8028.2	7957.3	7979.8	8215.0	9122.8	9215.0	10005.7	9358.0	7951.4	8458.5	8736.2
65°	9067.2	8945.5	8832.0	8995.1	10105.0	10196.0	10803.6	9687.8	7904.1	8202.0	7744.5
67.5°	10375.7	10255.1	10115.7	10269.3	11551.8	11623.9	11788.2	9873.3	7531.8	7213.8	5991.6
70°	11454.9	11410.0	11576.6	12209.0	13862.6	13865.0	13050.6	9719.7	6511.7	5114.6	3466.8
72.5°	11311.9	11284.7	12162.9	14117.9	16775.1	16712.5	14245.6	8556.6	4386.4	2307.3	1299.0
75°	9280.0	9456.1	10816.6	14083.7	17821.2	17812.9	13513.9	5439.6	1814.4	956.2	671.4
77.5°	4976.3	5255.2	7022.3	10398.2	13912.3	14121.5	9501.0	1903.0	778.9	612.3	464.5
80°	1622.9	1866.4	2799.0	5294.2	9040.0	9001.0	4072.0	747.0	533.1	433.8	321.5
82.5°	689.1	717.5	1250.6	2500.0	4639.4	4567.3	1296.7	429.1	374.7	296.7	198.6
85°	269.5	301.4	552.0	1156.0	2009.4	1965.7	468.1	212.8	239.9	193.8	118.2
87.5°	88.7	107.6	197.4	396.0	625.3	602.8	114.7	73.3	104.0	88.7	42.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P885001  
 CATALOG NUMBER: NAV-SB6A-827-U-T4FT

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7	2913.7
2.5°	2938.5	2957.4	2979.9	3012.9	3041.3	3065.0	3089.8	3105.1	3111.1	3128.8	3127.6
5°	2959.8	3001.1	3056.7	3111.1	3164.2	3196.2	3224.5	3238.7	3251.7	3261.2	3263.5
7.5°	2995.2	3048.4	3135.9	3206.8	3251.7	3277.7	3296.6	3291.9	3296.6	3299.0	3302.5
10°	3026.0	3100.4	3204.4	3271.8	3306.1	3307.3	3302.5	3286.0	3277.7	3278.9	3281.3
12.5°	3062.6	3145.3	3257.6	3314.4	3323.8	3297.8	3277.7	3249.4	3238.7	3234.0	3231.6
15°	3112.2	3206.8	3315.5	3336.8	3313.2	3280.1	3245.8	3199.7	3176.1	3157.2	3163.1
17.5°	3172.5	3276.5	3360.5	3345.1	3294.3	3239.9	3184.3	3114.6	3066.1	3046.0	3047.2
20°	3256.4	3349.8	3394.7	3327.4	3250.5	3167.8	3073.2	2988.1	2943.2	2923.1	2920.8
22.5°	3358.1	3447.9	3427.8	3296.6	3187.9	3055.5	2937.3	2874.7	2852.2	2838.0	2840.4
25°	3479.8	3556.7	3451.5	3251.7	3085.1	2906.6	2815.6	2795.5	2784.8	2774.2	2774.2
27.5°	3638.2	3679.6	3469.2	3185.5	2924.3	2748.2	2715.1	2718.6	2715.1	2697.4	2700.9
30°	3847.4	3839.2	3485.8	3078.0	2739.9	2605.2	2607.5	2622.9	2625.2	2613.4	2619.3
32.5°	4122.9	4038.9	3494.0	2938.5	2563.8	2479.9	2482.2	2498.8	2510.6	2490.5	2500.0
35°	4456.2	4271.8	3481.0	2763.5	2427.9	2360.5	2342.7	2347.5	2351.0	2332.1	2345.1
37.5°	4845.1	4533.0	3423.1	2569.7	2315.6	2243.5	2205.6	2173.7	2154.8	2137.1	2148.9
40°	5271.8	4817.9	3316.7	2380.6	2190.3	2119.3	2062.6	2002.3	1938.5	1914.9	1925.5
42.5°	5718.6	5111.0	3187.9	2199.7	2046.1	1988.1	1927.9	1840.4	1744.6	1696.2	1702.1
45°	6181.9	5411.3	3061.4	2021.2	1898.3	1873.5	1803.8	1698.6	1594.5	1533.1	1528.3
47.5°	6635.8	5694.9	2875.8	1841.6	1760.0	1787.2	1732.8	1635.9	1520.1	1423.1	1412.5
50°	7069.6	5960.9	2572.1	1659.5	1647.7	1761.2	1709.2	1569.7	1437.3	1313.2	1302.6
52.5°	7499.9	6176.0	2183.2	1494.1	1587.4	1754.1	1678.5	1524.8	1362.9	1232.8	1218.7
55°	7865.1	6287.1	1808.5	1352.2	1500.0	1693.8	1641.8	1471.6	1257.7	1119.4	1107.5
57.5°	8073.1	6197.3	1496.4	1212.7	1379.4	1594.5	1579.2	1358.1	1132.4	1026.0	1011.8
60°	7983.3	5833.2	1241.1	1091.0	1264.8	1487.0	1470.4	1245.8	1036.6	936.2	922.0
62.5°	7488.0	5139.4	1039.0	984.6	1160.7	1377.0	1361.7	1159.6	963.3	866.4	851.0
65°	6490.4	4180.8	881.8	896.0	1055.5	1244.7	1267.1	1087.5	905.4	810.9	795.5
67.5°	4950.3	3028.3	758.9	819.1	952.7	1114.6	1179.6	1035.4	857.0	767.1	752.9
70°	2821.5	1719.8	654.8	744.7	861.7	994.1	1112.3	994.1	805.0	730.5	721.0
72.5°	1069.7	789.6	566.2	670.2	774.2	892.4	1037.8	929.1	744.7	689.1	679.7
75°	570.9	481.1	476.4	582.7	673.7	793.1	944.4	865.2	699.8	728.1	751.8
77.5°	388.9	340.4	398.3	498.8	563.8	683.2	845.1	768.3	606.4	604.0	556.7
80°	269.5	241.1	323.9	401.9	436.2	574.5	737.6	659.6	494.1	461.0	440.9
82.5°	161.9	157.2	242.3	300.2	308.5	443.3	611.1	553.2	404.2	352.2	354.6
85°	88.7	93.4	154.8	176.1	179.7	309.7	478.7	427.9	310.9	261.2	263.6
87.5°	24.8	31.9	56.7	69.7	86.3	160.8	284.9	254.1	156.0	108.7	108.7
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)