

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: P884996

Luminaire Tested: **NAV-SB6A-827-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884996  
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-SB6A-827-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

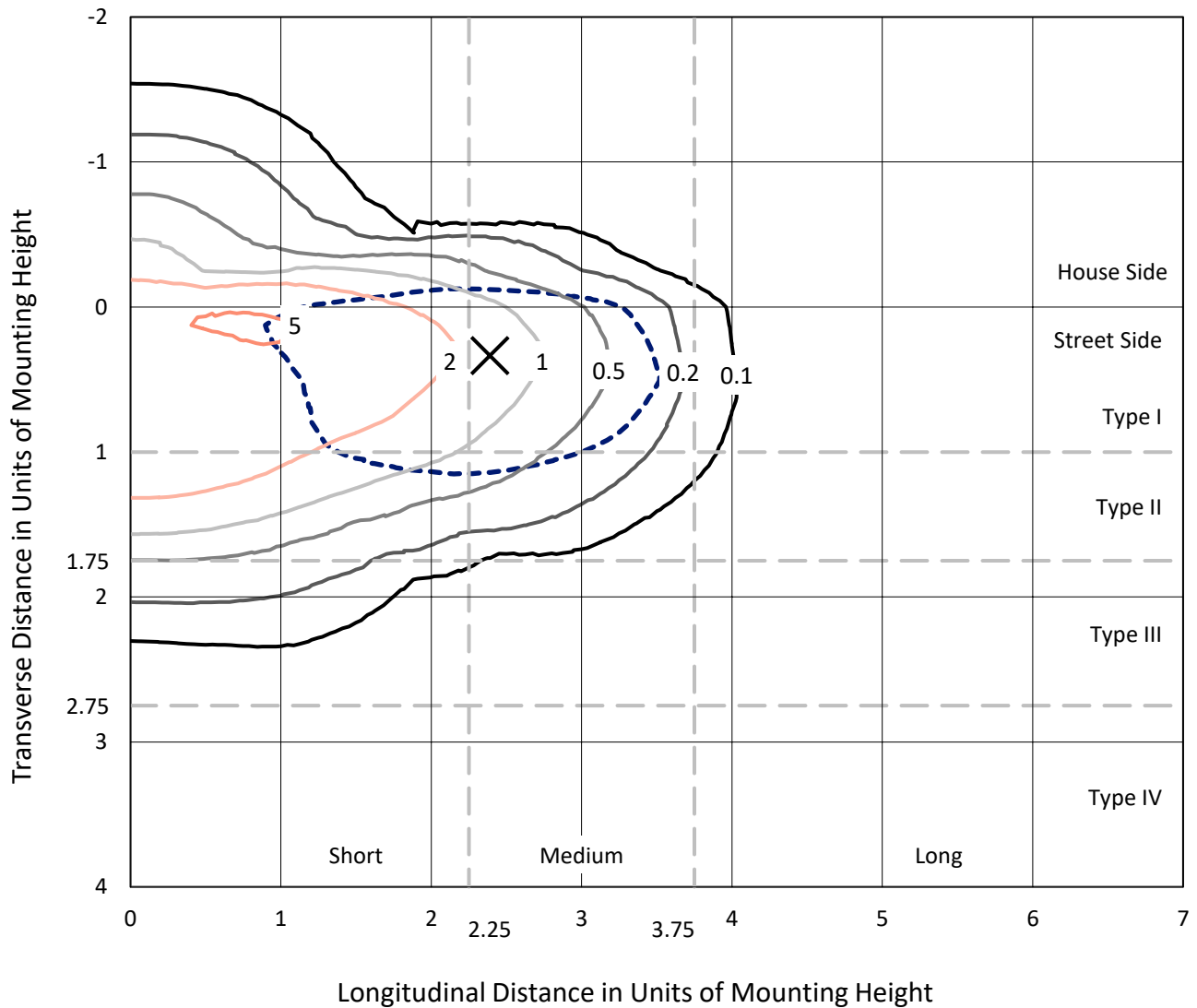
Lumens per Lamp: N/A  
Luminaire Lumens: 16154 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 170.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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: P884996  
 CATALOG NUMBER: NAV-SB6A-827-U-T2-HSS

### Iso-Footcandle Lines of Horizontal Illumination

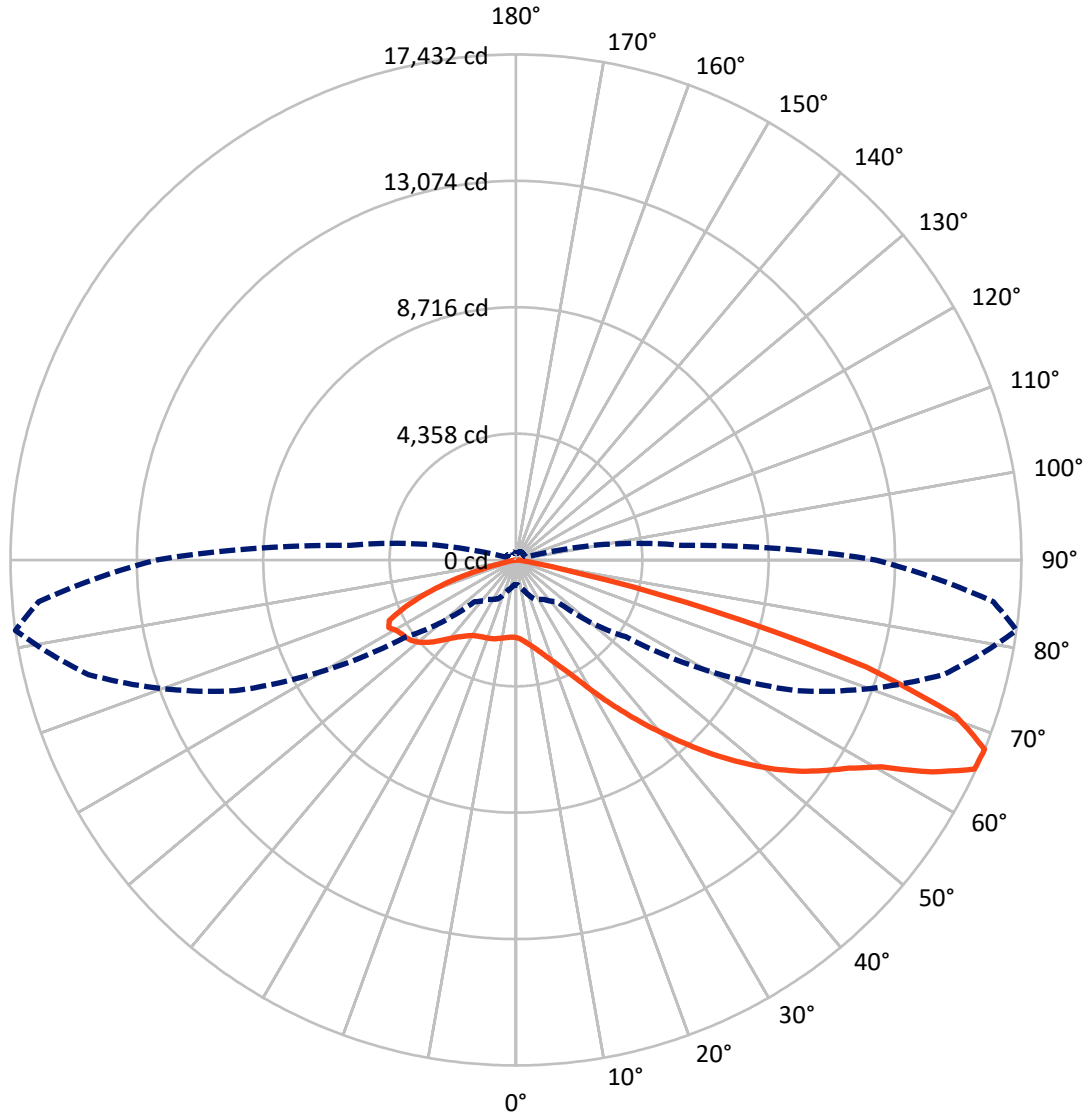
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
 Type II - Medium - N/A

REPORT NUMBER: P884996  
CATALOG NUMBER: NAV-SB6A-827-U-T2-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P884996

CATALOG NUMBER: NAV-SB6A-827-U-T2-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2926.2	0.0	2926.2
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	13227.8	0.0	13227.8
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	16154.0	0.0	16154.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.4	1.5
10°-20°	619.6	3.8
20°-30°	992.4	6.1
30°-40°	1754.8	10.9
40°-50°	3074.6	19.0
50°-60°	4100.6	25.4
60°-70°	3817.5	23.6
70°-80°	1465.1	9.1
80°-90°	91.0	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°	16154.0	100.0
0°-180°	16154.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P884996

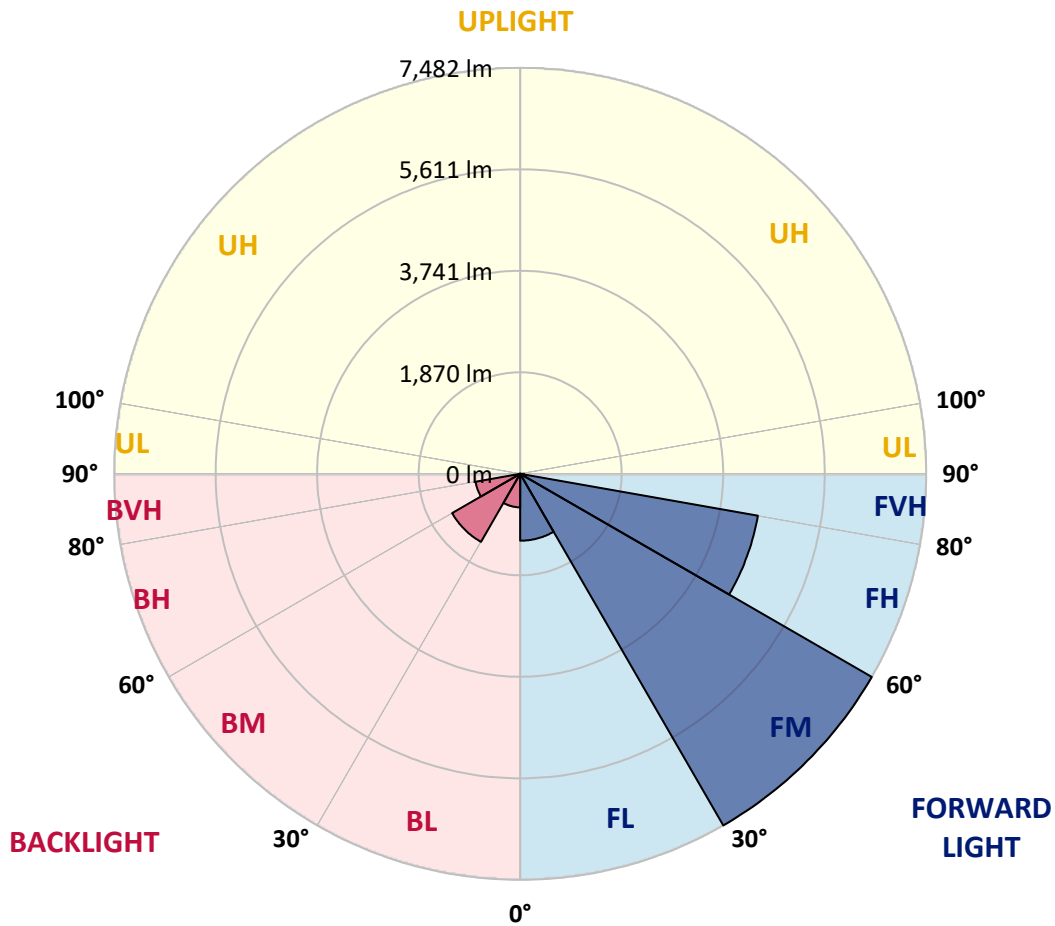
CATALOG NUMBER: NAV-SB6A-827-U-T2-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1232.4	7.6			
FM (30°-60°)	7481.9	46.3			
FH (60°-80°)	4447.4	27.5			G2/5000
FVH (80°-90°)	66.2	0.4			G1/100
BL (0°-30°)	618.0	3.8	B2/1000		
BM (30°-60°)	1448.1	9.0	B2/2500		
BH (60°-80°)	835.2	5.2	B2/1000		G2/1000
BVH (80°-90°)	24.8	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium



REPORT NUMBER: P884996  
 CATALOG NUMBER: NAV-SB6A-827-U-T2-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2
2.5°	2828.5	2844.8	2835.5	2830.9	2822.7	2811.1	2801.8	2772.7	2742.5	2722.7	2715.7
5°	2885.5	2901.8	2900.6	2905.3	2911.1	2914.6	2912.3	2879.7	2836.7	2802.9	2783.2
7.5°	2836.7	2855.3	2870.4	2893.7	2934.4	2977.4	2998.3	2991.4	2947.2	2900.6	2876.2
10°	2698.3	2718.0	2754.1	2808.8	2894.8	2987.9	3065.8	3101.8	3073.9	3022.8	2989.0
12.5°	2444.7	2464.5	2535.4	2654.1	2798.3	2960.0	3108.8	3205.4	3212.3	3161.2	3121.6
15°	2159.8	2179.6	2255.1	2404.0	2623.8	2883.2	3132.1	3314.7	3376.3	3332.1	3284.4
17.5°	1983.0	2000.4	2057.4	2177.2	2406.3	2729.7	3123.9	3431.0	3571.7	3536.8	3479.8
20°	1929.5	1944.6	1971.4	2055.1	2245.8	2570.3	3070.4	3540.3	3782.2	3762.5	3698.5
22.5°	1986.5	2000.4	2008.6	2045.8	2165.6	2465.7	3003.0	3652.0	4026.5	4028.8	3950.9
25°	2117.9	2131.9	2122.6	2145.8	2198.2	2433.1	2977.4	3783.4	4333.5	4359.1	4270.7
27.5°	2334.2	2335.4	2313.3	2312.1	2320.3	2481.9	3004.2	3924.1	4720.8	4768.5	4659.2
30°	2768.1	2750.6	2665.7	2573.8	2532.0	2628.5	3078.6	4090.4	5177.9	5262.8	5125.5
32.5°	3436.8	3411.2	3255.4	3035.6	2814.6	2864.6	3212.3	4280.0	5675.7	5829.2	5661.7
35°	4162.5	4155.6	3992.7	3665.9	3279.8	3200.7	3429.8	4528.9	6218.8	6463.1	6264.2
37.5°	4837.1	4833.6	4740.6	4355.6	3885.7	3669.4	3778.7	4854.6	6800.3	7153.9	6919.0
40°	5453.5	5464.0	5371.0	5026.7	4553.3	4270.7	4253.3	5257.0	7447.0	7906.4	7627.3
42.5°	5986.2	5997.8	5903.6	5648.9	5212.8	4936.0	4835.9	5750.1	8078.5	8714.7	8384.4
45°	6347.9	6420.0	6406.1	6202.5	5889.7	5602.4	5536.1	6368.8	8798.5	9571.9	9184.6
47.5°	6450.3	6516.6	6621.2	6649.1	6458.4	6175.8	6254.9	7114.4	9526.5	10430.2	9989.4
50°	6197.9	6259.5	6477.0	6766.6	6899.2	6812.0	6953.9	7913.4	10272.0	11286.2	10779.1
52.5°	5700.1	5762.9	6037.4	6495.6	7036.4	7310.9	7655.2	8700.8	10994.3	12096.9	11527.0
55°	4980.2	5046.5	5398.9	5917.6	6774.7	7516.8	8240.2	9487.0	11656.1	12826.1	12201.5
57.5°	4000.9	4049.7	4416.1	5141.8	6116.5	7312.1	8671.7	10345.3	12279.5	13542.5	12870.3
60°	2607.6	2650.6	3076.3	3885.7	5025.5	6628.2	8757.7	11302.5	13107.5	14474.1	13771.6
62.5°	1734.1	1763.2	2015.6	2609.9	3539.2	5315.1	8254.1	12066.6	14321.8	16095.4	15317.3
65°	1189.8	1218.9	1471.3	1885.3	2286.6	3515.9	6806.2	11965.4	15422.0	17382.9	16462.9
67.5°	849.0	873.4	1087.4	1478.2	1655.0	2042.3	4613.8	10672.1	15263.8	17431.7	16524.6
70°	608.3	622.2	799.0	1151.4	1315.4	1227.0	2565.7	8162.3	13364.6	16096.6	15266.2
72.5°	425.7	430.3	554.8	876.9	1059.5	895.5	1221.2	5441.9	10108.0	12634.2	11835.2
75°	288.4	294.3	373.3	643.2	850.2	683.9	646.7	2918.1	5933.9	6993.4	6268.8
77.5°	176.8	179.1	240.8	439.6	636.2	521.0	416.4	1236.3	2295.9	2254.0	1921.4
80°	100.0	100.0	153.5	273.3	433.8	336.1	291.9	525.7	726.9	638.5	562.9
82.5°	55.8	57.0	111.7	169.8	287.3	198.9	160.5	243.1	314.0	278.0	241.9
85°	23.3	25.6	68.6	80.3	137.2	98.9	65.1	102.3	116.3	103.5	75.6
87.5°	2.3	3.5	20.9	15.1	16.3	19.8	9.3	19.8	16.3	16.3	11.6
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: P884996  
 CATALOG NUMBER: NAV-SB6A-827-U-T2-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2
2.5°	2693.6	2676.2	2632.0	2580.8	2513.3	2480.8	2436.6	2406.3	2380.8	2383.1	2359.8
5°	2746.0	2701.8	2602.9	2479.6	2326.1	2216.8	2100.5	2020.2	1955.1	1941.1	1909.7
7.5°	2818.1	2748.3	2575.0	2352.8	2093.5	1896.9	1721.3	1608.5	1528.2	1502.7	1477.1
10°	2911.1	2809.9	2538.9	2193.5	1820.2	1570.1	1381.7	1293.3	1238.6	1220.0	1206.1
12.5°	3019.3	2880.9	2491.2	1999.3	1538.7	1298.0	1178.2	1134.0	1116.5	1110.7	1107.2
15°	3155.3	2969.3	2419.1	1769.0	1300.3	1131.6	1080.5	1074.7	1077.0	1074.7	1073.5
17.5°	3317.0	3065.8	2301.7	1531.7	1139.8	1046.7	1028.1	1032.8	1038.6	1037.4	1035.1
20°	3493.8	3161.2	2151.6	1321.2	1030.5	986.3	975.8	980.4	985.1	982.8	981.6
22.5°	3695.0	3263.5	1985.3	1157.2	957.2	930.4	918.8	920.0	920.0	915.3	913.0
25°	3935.8	3376.3	1810.9	1040.9	901.4	880.4	866.5	861.8	854.8	840.9	838.6
27.5°	4223.0	3496.1	1643.4	959.5	857.2	837.4	821.1	809.5	792.0	768.8	766.4
30°	4546.4	3641.5	1501.5	908.3	822.3	802.5	783.9	766.4	740.9	711.8	709.5
32.5°	4926.7	3797.3	1398.0	874.6	790.9	769.9	747.8	726.9	699.0	669.9	671.1
35°	5380.3	3985.8	1337.5	851.4	766.4	738.5	714.1	690.8	669.9	644.3	642.0
37.5°	5872.2	4185.8	1318.9	839.7	750.2	707.1	679.2	662.9	660.6	645.5	644.3
40°	6410.7	4423.1	1332.9	832.7	732.7	676.9	646.7	643.2	649.0	622.2	623.4
42.5°	6980.6	4704.5	1356.1	824.6	708.3	646.7	617.6	617.6	612.9	575.7	575.7
45°	7597.0	5029.0	1379.4	804.8	679.2	616.4	594.3	586.2	566.4	530.3	529.2
47.5°	8218.1	5359.3	1396.8	768.8	644.3	590.8	571.1	552.4	523.4	490.8	489.6
50°	8807.8	5655.9	1378.2	715.3	604.8	566.4	545.5	519.9	488.5	466.4	462.9
52.5°	9334.6	5912.9	1299.1	652.5	562.9	540.8	522.2	495.5	469.9	446.6	444.3
55°	9792.9	6121.1	1159.6	593.2	525.7	518.7	500.1	466.4	431.5	411.7	409.4
57.5°	10232.5	6279.3	985.1	544.3	492.0	494.3	466.4	436.1	403.6	382.6	380.3
60°	10817.5	6491.0	808.3	498.9	455.9	462.9	432.7	410.6	369.8	343.1	339.6
62.5°	11752.6	6820.1	642.0	443.1	414.0	416.4	403.6	376.8	328.0	296.6	294.3
65°	12494.6	6699.2	505.9	382.6	366.4	369.8	369.8	340.8	288.4	252.4	248.9
67.5°	12410.9	5736.1	403.6	323.3	321.0	323.3	331.5	307.0	255.9	226.8	222.1
70°	11432.8	4562.6	323.3	268.7	279.1	273.3	296.6	280.3	230.3	201.2	197.7
72.5°	9328.8	3286.8	246.6	222.1	214.0	223.3	267.5	252.4	191.9	159.3	155.8
75°	5451.2	1753.9	183.8	175.6	154.7	186.1	237.3	215.2	146.5	117.5	114.0
77.5°	1774.8	611.8	134.9	129.1	115.1	150.0	202.4	181.4	119.8	93.0	89.6
80°	475.7	184.9	91.9	84.9	74.4	111.7	160.5	144.2	86.1	60.5	59.3
82.5°	190.7	77.9	53.5	47.7	40.7	76.8	126.8	116.3	64.0	38.4	38.4
85°	61.6	25.6	19.8	15.1	18.6	47.7	75.6	79.1	45.4	19.8	15.1
87.5°	8.1	3.5	3.5	4.7	3.5	8.1	23.3	22.1	12.8	2.3	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)