

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: P884659

Luminaire Tested: **NAV-SB5C-827-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884659  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-827-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

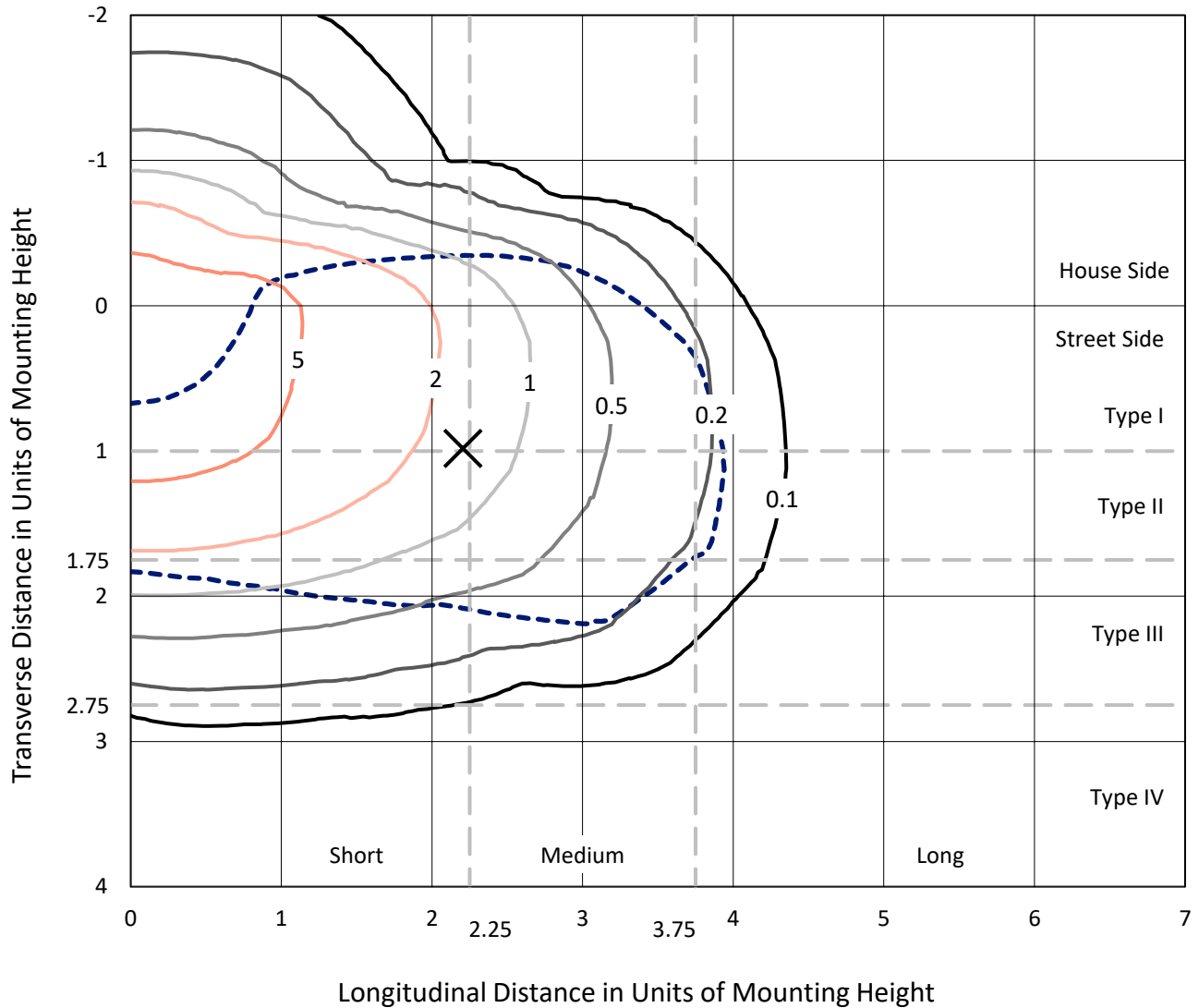
Lumens per Lamp: N/A  
Luminaire Lumens: 30898 lumens  
Efficiency: N/A  
Efficacy: 123.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 2.116  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 7.885  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P884659  
 CATALOG NUMBER: NAV-SB5C-827-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

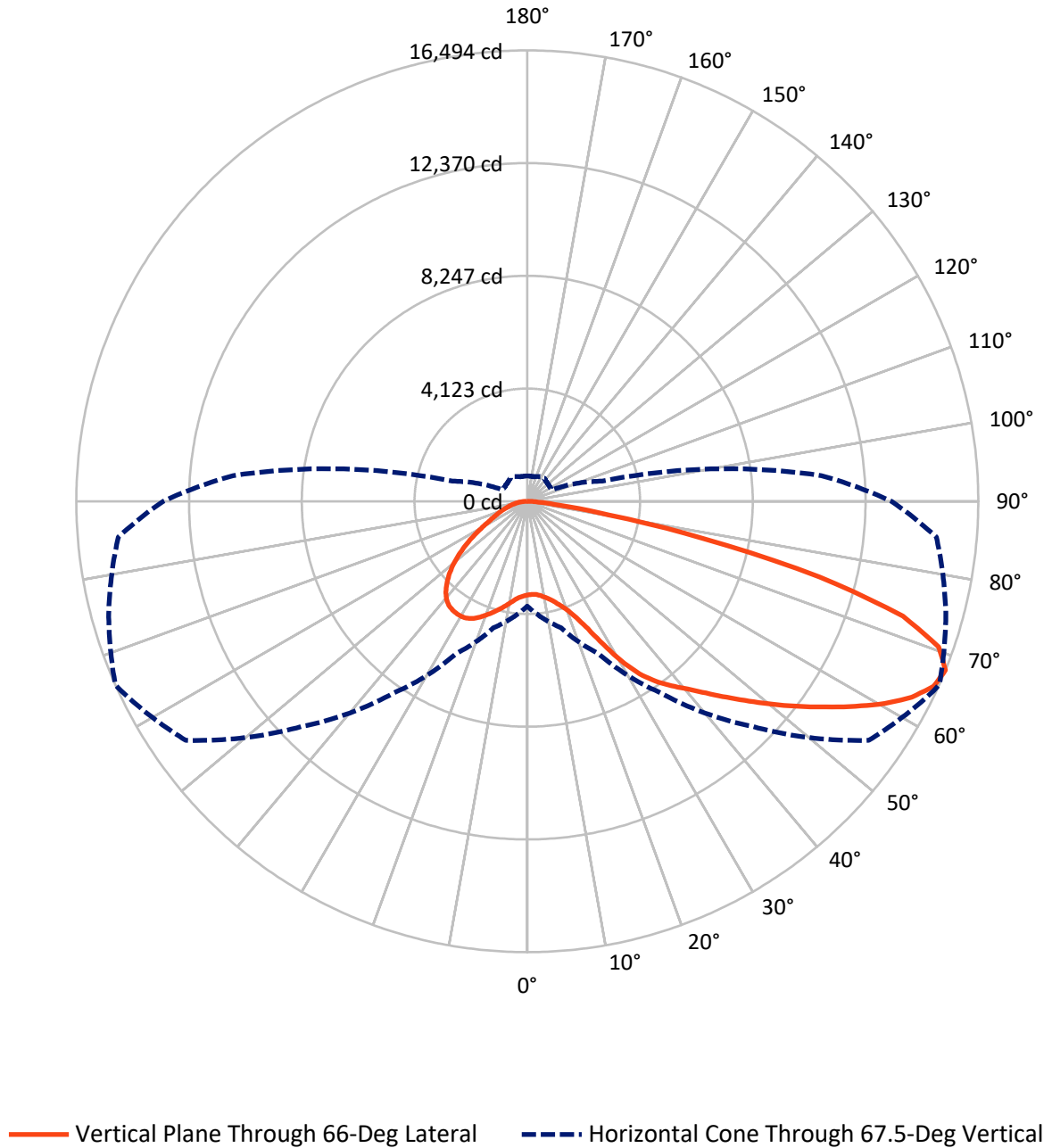
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc  
 Type III - Short - N/A

REPORT NUMBER: P884659  
CATALOG NUMBER: NAV-SB5C-827-U-T3

### Luminous Intensity Polar Plot



REPORT NUMBER: P884659  
 CATALOG NUMBER: NAV-SB5C-827-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7682.7	0.0	7682.7
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	23215.3	0.0	23215.3
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	30898.0	0.0	30898.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	339.8	1.1
10°-20°	1122.6	3.6
20°-30°	2163.7	7.0
30°-40°	3793.7	12.3
40°-50°	5640.0	18.3
50°-60°	7149.3	23.1
60°-70°	6995.4	22.6
70°-80°	3336.9	10.8
80°-90°	356.6	1.2
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°	30898.0	100.0
0°-180°	30898.0	100.0

**Coefficient of Utilization**



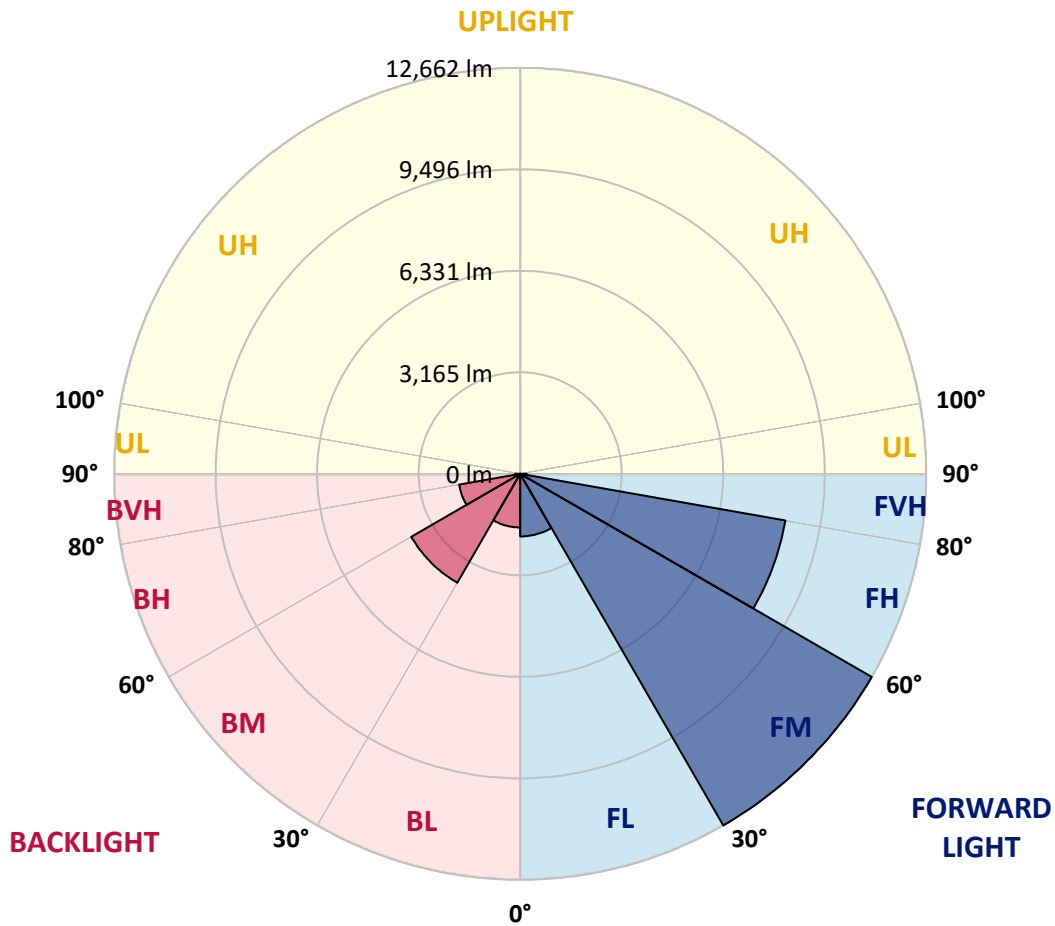
REPORT NUMBER: P884659  
 CATALOG NUMBER: NAV-SB5C-827-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1952.4	6.3			
FM (30°-60°)	12661.7	41.0			
FH (60°-80°)	8398.9	27.2			G4/12000
FVH (80°-90°)	202.2	0.7			G2/225
BL (0°-30°)	1673.6	5.4	B3/2500		
BM (30°-60°)	3921.3	12.7	B3/5000		
BH (60°-80°)	1933.4	6.3	B3/2500		G3/2500
BVH (80°-90°)	154.4	0.5			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 III Short



REPORT NUMBER: P884659  
 CATALOG NUMBER: NAV-SB5C-827-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0
2.5°	3391.3	3410.8	3405.9	3397.8	3396.2	3399.4	3404.3	3409.1	3407.5	3415.6	3428.6
5°	3381.5	3401.0	3399.4	3399.4	3405.9	3418.9	3427.0	3435.1	3427.0	3436.7	3454.6
7.5°	3388.0	3402.6	3409.1	3415.6	3431.9	3456.2	3475.7	3493.6	3483.8	3495.2	3517.9
10°	3470.8	3482.2	3488.7	3488.7	3500.0	3527.6	3547.1	3579.6	3571.5	3589.3	3618.6
12.5°	3621.8	3633.2	3633.2	3626.7	3634.8	3652.6	3659.1	3694.9	3680.2	3709.5	3738.7
15°	3806.9	3829.6	3811.7	3800.4	3803.6	3821.5	3819.9	3847.5	3832.8	3857.2	3883.2
17.5°	4011.4	4040.6	4011.4	4009.8	4003.3	4022.8	4024.4	4048.8	4022.8	4040.6	4058.5
20°	4253.3	4293.9	4269.5	4277.7	4263.0	4271.2	4279.3	4315.0	4274.4	4287.4	4282.5
22.5°	4594.2	4642.9	4616.9	4647.8	4638.1	4631.6	4629.9	4693.2	4629.9	4634.8	4587.7
25°	5091.0	5149.4	5104.0	5146.2	5146.2	5167.3	5191.6	5272.8	5167.3	5136.4	5014.7
27.5°	5824.8	5883.2	5793.9	5819.9	5811.8	5863.7	5837.7	6039.0	5925.4	5875.1	5629.9
30°	6707.9	6811.8	6643.0	6636.5	6628.3	6711.1	6748.5	6881.6	6766.3	6716.0	6420.5
32.5°	7662.4	7771.2	7569.9	7511.5	7480.6	7531.0	7500.1	7607.3	7527.7	7449.8	7084.5
35°	8672.2	8779.3	8587.8	8474.1	8350.8	8245.2	8134.9	8162.5	8087.8	7969.3	7591.0
37.5°	9626.8	9823.2	9620.3	9498.5	9271.2	9065.1	8756.6	8628.4	8558.6	8449.8	8068.3
40°	10599.2	10711.2	10557.0	10453.1	10206.3	9883.3	9389.7	9118.6	9024.5	8919.0	8595.9
42.5°	11315.1	11422.2	11339.4	11268.0	11074.8	10699.8	10061.8	9722.5	9586.2	9467.7	9193.3
45°	11883.3	11962.8	11910.9	11936.9	11854.1	11490.4	10758.3	10370.3	10229.0	10084.6	9868.6
47.5°	12112.2	12196.6	12279.4	12433.6	12574.9	12307.0	11506.7	11071.6	10922.2	10774.5	10561.8
50°	12086.2	12172.3	12412.5	12740.4	13178.8	13089.5	12295.6	11818.3	11680.4	11511.5	11315.1
52.5°	11878.4	11975.8	12284.3	12829.7	13527.8	13675.5	13099.2	12589.5	12459.6	12258.3	12061.9
55°	11333.0	11391.4	11854.1	12626.8	13610.6	14084.6	13886.6	13410.9	13281.0	13000.2	12785.9
57.5°	10321.6	10406.0	11079.7	12079.7	13402.8	14362.2	14578.1	14274.6	14149.6	13745.3	13521.3
60°	9001.8	9136.5	9907.6	11160.9	12873.6	14360.6	15206.4	15123.6	15019.7	14479.1	14245.3
62.5°	7508.2	7664.1	8406.0	9862.2	11948.2	13953.1	15599.2	15834.6	15781.1	15156.1	14857.4
65°	5766.3	5873.5	6612.1	8181.9	10508.3	13078.1	15644.7	16320.0	16329.8	15670.7	15177.2
67.5°	3839.3	4147.8	4789.0	6139.7	8579.7	11647.9	15245.3	16399.6	16493.7	15847.6	15016.4
70°	1873.4	2279.3	2907.5	3990.3	6139.7	9454.7	14201.5	15747.0	15956.4	15331.4	14058.6
72.5°	777.6	909.1	1251.6	1969.2	3524.4	6380.0	12104.1	13977.5	14365.5	13584.6	11820.0
75°	524.4	568.2	715.9	1009.8	1605.5	3146.1	8729.0	10422.2	11047.2	10259.9	8386.5
77.5°	404.2	431.8	521.1	706.2	954.6	1190.0	4672.1	6280.9	6604.0	6113.7	4363.7
80°	318.2	339.3	389.6	514.6	677.0	636.4	1592.6	2845.8	3032.5	2543.9	1402.6
82.5°	276.0	284.1	279.2	349.0	449.7	371.8	522.7	1050.3	1159.1	840.9	457.8
85°	199.7	222.4	232.1	215.9	238.6	188.3	214.3	371.8	409.1	365.3	258.1
87.5°	81.2	120.1	147.7	139.6	87.7	53.6	66.6	108.8	125.0	136.4	84.4
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: P884659  
 CATALOG NUMBER: NAV-SB5C-827-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0	3427.0
2.5°	3430.2	3441.6	3449.7	3459.5	3466.0	3475.7	3495.2	3506.5	3508.2	3516.3	3514.7
5°	3461.1	3477.3	3495.2	3521.2	3550.4	3574.7	3612.1	3638.0	3647.8	3655.9	3654.3
7.5°	3527.6	3550.4	3582.8	3628.3	3670.5	3703.0	3748.4	3779.3	3810.1	3821.5	3823.1
10°	3626.7	3659.1	3706.2	3767.9	3813.4	3855.6	3902.7	3928.6	3959.5	3972.5	3979.0
12.5°	3750.1	3784.1	3845.8	3931.9	3974.1	4003.3	4019.5	4013.0	4019.5	4030.9	4034.1
15°	3891.3	3928.6	3998.4	4091.0	4120.2	4094.2	4058.5	4026.0	4021.2	4024.4	4035.8
17.5°	4058.5	4086.1	4167.3	4245.2	4224.1	4116.9	4039.0	3987.1	3961.1	3953.0	3964.3
20°	4292.3	4292.3	4358.8	4407.5	4266.3	4084.5	3962.7	3878.3	3824.7	3802.0	3797.1
22.5°	4576.4	4550.4	4592.6	4558.5	4258.2	3993.6	3824.7	3678.6	3597.5	3565.0	3560.1
25°	4936.8	4905.9	4894.5	4683.5	4199.7	3849.1	3574.7	3397.8	3326.3	3308.5	3311.7
27.5°	5480.6	5402.7	5254.9	4751.7	4092.6	3621.8	3282.5	3118.6	3078.0	3079.6	3084.5
30°	6204.6	6048.8	5686.8	4763.1	3917.3	3300.4	2983.8	2866.9	2847.4	2855.6	2883.2
32.5°	6875.1	6727.4	6128.3	4711.1	3647.8	2985.4	2715.9	2638.0	2608.8	2618.5	2631.5
35°	7401.1	7360.5	6537.4	4638.1	3316.6	2690.0	2475.7	2409.1	2352.3	2339.3	2349.1
37.5°	7897.8	7881.6	6844.3	4535.8	2988.7	2480.6	2282.5	2194.8	2112.0	2066.6	2068.2
40°	8443.3	8427.1	7045.6	4378.3	2698.1	2298.7	2108.8	1993.5	1891.3	1808.5	1816.6
42.5°	9056.9	8961.2	7141.3	4152.7	2451.3	2144.5	1967.6	1811.7	1677.0	1600.7	1605.5
45°	9727.4	9511.5	7139.7	3865.3	2243.5	2003.3	1816.6	1595.8	1470.8	1399.4	1396.1
47.5°	10438.5	10037.5	7052.0	3547.1	2042.2	1847.4	1582.8	1414.0	1331.2	1287.4	1277.6
50°	11172.2	10529.4	6902.7	3181.9	1836.1	1670.5	1436.7	1321.4	1258.1	1217.5	1202.9
52.5°	11862.2	10975.8	6722.5	2767.9	1626.6	1498.4	1371.8	1282.5	1215.9	1170.5	1151.0
55°	12503.4	11360.6	6467.6	2344.2	1456.2	1383.1	1340.9	1266.3	1190.0	1136.4	1115.3
57.5°	13073.2	11610.6	6027.7	1946.5	1334.4	1303.6	1308.5	1238.7	1151.0	1105.5	1076.3
60°	13547.3	11794.0	5376.7	1577.9	1235.4	1225.7	1258.1	1186.7	1084.4	1032.5	1009.8
62.5°	13831.4	11790.8	4578.0	1292.2	1151.0	1154.2	1191.6	1121.8	1017.9	969.2	954.6
65°	13807.0	11501.8	3701.4	1105.5	1069.8	1073.1	1121.8	1050.3	962.7	933.5	931.8
67.5°	13318.4	10797.2	2839.3	983.8	980.5	995.1	1052.0	1001.6	928.6	925.3	930.2
70°	11995.3	9334.5	2045.5	886.4	888.0	909.1	983.8	970.8	910.7	917.2	915.6
72.5°	9618.6	7117.0	1373.4	784.1	785.7	819.8	918.8	946.4	892.9	978.9	991.9
75°	6405.9	4438.4	883.1	675.3	677.0	720.8	862.0	899.4	844.2	975.7	983.8
77.5°	3078.0	1995.2	639.6	568.2	568.2	608.8	745.1	805.2	719.2	758.1	694.8
80°	1063.3	750.0	503.3	457.8	448.1	475.7	628.3	698.1	620.1	571.4	535.7
82.5°	418.8	389.6	404.2	355.5	323.1	340.9	488.6	576.3	456.2	412.3	410.7
85°	240.3	253.3	285.7	235.4	186.7	209.4	358.8	414.0	344.2	303.6	310.1
87.5°	64.9	89.3	131.5	121.8	84.4	89.3	170.5	228.9	198.1	152.6	157.5
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)