

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: P884620

Luminaire Tested: **NAV-SB5C-735-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884620  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-735-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

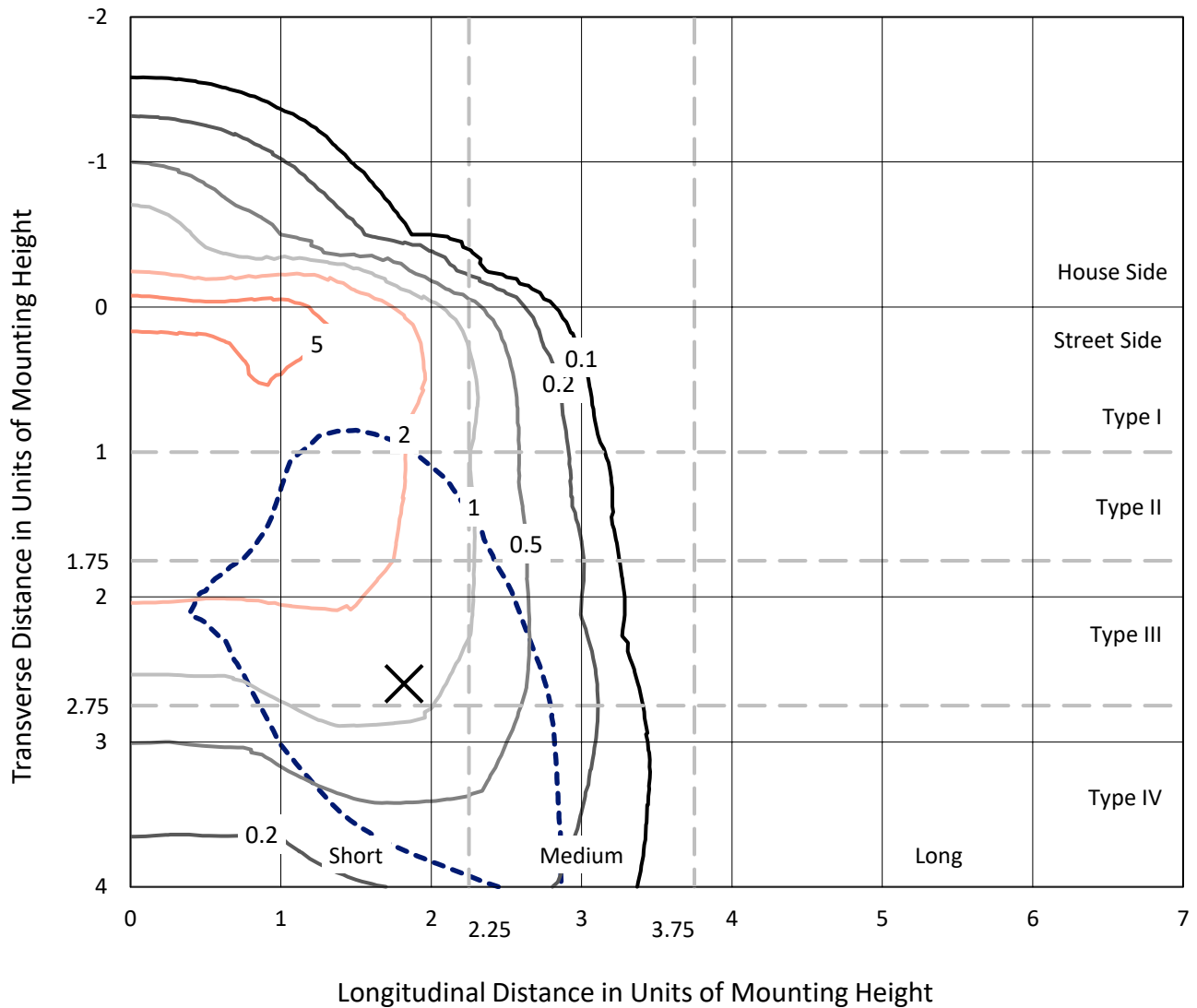
Lumens per Lamp: N/A  
Luminaire Lumens: 28773 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G5  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 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



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### Iso-Footcandle Lines of Horizontal Illumination

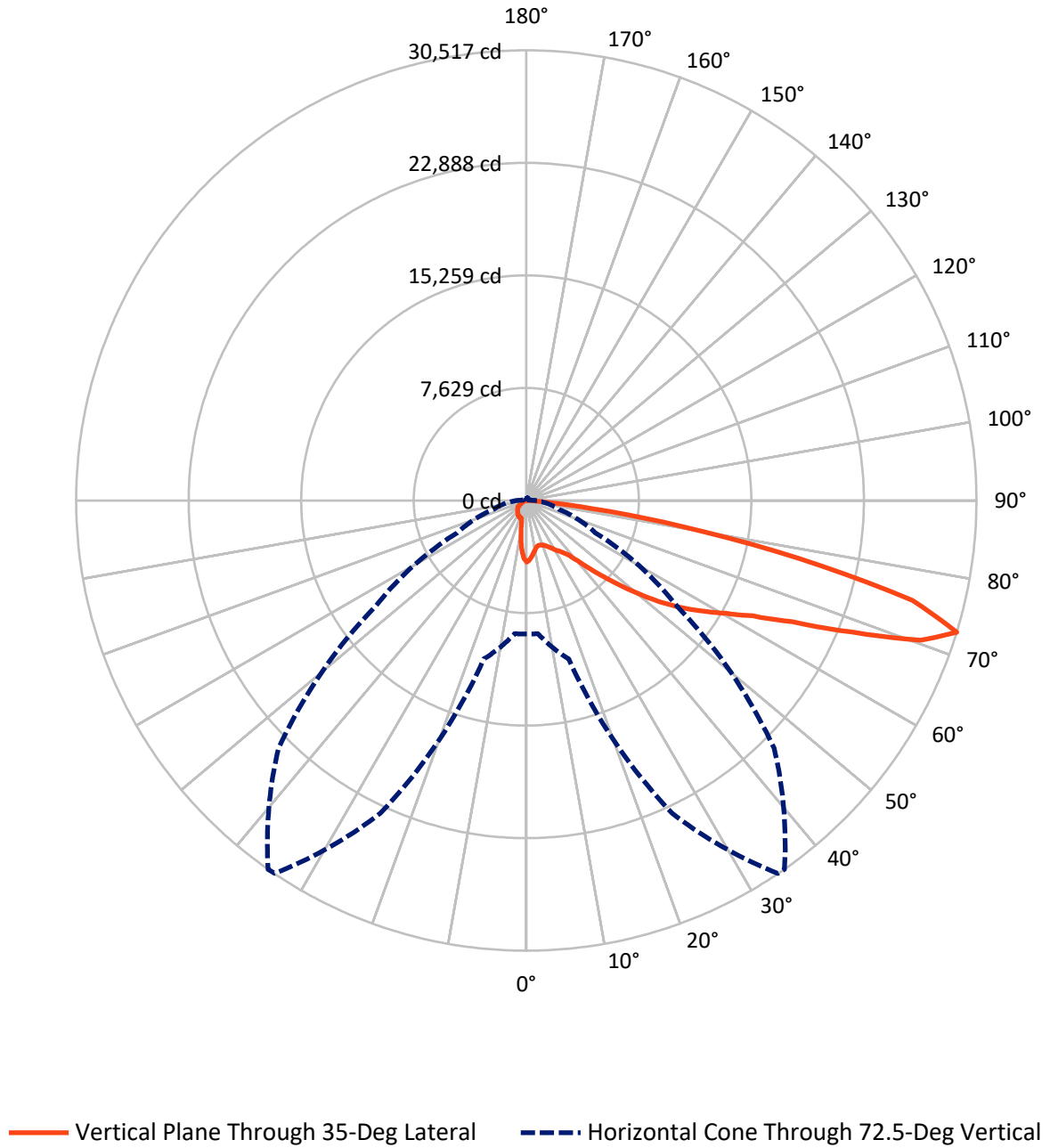
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3238.3	0.0	3238.3
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	25534.7	0.0	25534.7
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	28773.0	0.0	28773.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	342.7	1.2
10°-20°	801.7	2.8
20°-30°	1302.3	4.5
30°-40°	2172.8	7.6
40°-50°	4111.0	14.3
50°-60°	6532.4	22.7
60°-70°	8081.0	28.1
70°-80°	5023.2	17.5
80°-90°	406.0	1.4
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°	28773.0	100.0
0°-180°	28773.0	100.0

**Coefficient of Utilization**



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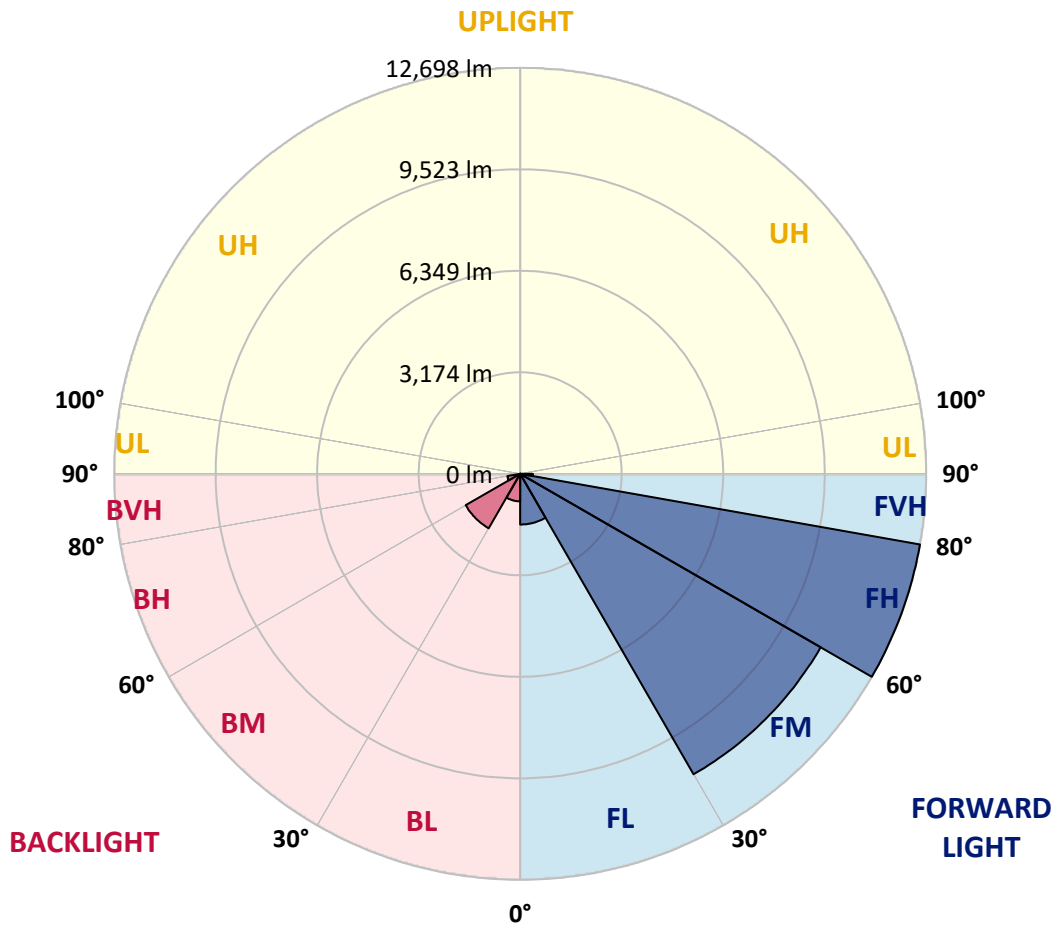
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1586.1	5.5			
FM (30°-60°)	10850.3	37.7			
FH (60°-80°)	12697.9	44.1			G5
FVH (80°-90°)	400.4	1.4			G3/500
BL (0°-30°)	860.5	3.0	B2/1000		
BM (30°-60°)	1965.9	6.8	B2/2500		
BH (60°-80°)	406.3	1.4	B1/500		G1/500
BVH (80°-90°)	5.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2
2.5°	3984.6	4018.4	4024.7	4035.2	4035.2	4047.9	4069.0	4098.5	4147.0	4172.3	4189.1
5°	3672.6	3697.9	3729.5	3754.8	3803.3	3809.7	3891.9	3972.0	4083.7	4168.1	4227.1
7.5°	3358.5	3388.0	3430.2	3491.3	3554.6	3573.5	3697.9	3832.8	4009.9	4168.1	4267.2
10°	3137.1	3139.2	3177.2	3238.3	3339.5	3362.7	3514.5	3706.4	3927.7	4142.8	4305.1
12.5°	3012.7	3027.5	3044.4	3090.7	3187.7	3202.5	3364.8	3590.4	3845.5	4128.0	4349.4
15°	3012.7	3023.3	3033.8	3057.0	3135.0	3147.7	3291.0	3516.6	3803.3	4134.3	4421.1
17.5°	3044.4	3061.2	3052.8	3080.2	3162.4	3170.8	3297.3	3495.5	3801.2	4174.4	4530.7
20°	3120.3	3132.9	3116.0	3132.9	3215.1	3232.0	3362.7	3535.6	3837.1	4244.0	4667.7
22.5°	3240.4	3246.7	3206.7	3219.3	3303.7	3324.8	3476.5	3649.4	3923.5	4355.7	4851.1
25°	3392.2	3404.9	3343.7	3358.5	3438.6	3463.9	3638.9	3820.2	4060.5	4509.6	5085.2
27.5°	3567.2	3573.5	3520.8	3518.7	3622.0	3657.9	3835.0	4031.0	4244.0	4703.6	5380.3
30°	3767.5	3786.5	3735.9	3727.4	3858.1	3887.7	4062.7	4290.3	4513.8	4994.5	5799.9
32.5°	3925.6	3940.4	3910.9	3931.9	4064.8	4087.9	4338.8	4657.2	4937.6	5407.7	6371.2
35°	4153.3	4161.7	4094.3	4132.2	4284.0	4343.1	4716.2	5171.6	5471.0	5926.4	7117.5
37.5°	4977.6	4977.6	4690.9	4503.3	4648.8	4701.5	5232.7	5818.8	6128.8	6622.1	8057.8
40°	6118.2	6099.2	5679.7	5296.0	5277.0	5380.3	5968.5	6634.7	6978.4	7457.0	9116.2
42.5°	7334.7	7305.2	6733.8	6354.3	6291.1	6326.9	6818.2	7640.4	7990.4	8475.3	10254.7
45°	8414.1	8405.7	7882.8	7372.6	7258.8	7372.6	7878.6	8816.8	9067.7	9577.9	11391.0
47.5°	9318.6	9318.6	8937.0	8603.9	8544.8	8612.3	9314.4	10121.8	10098.6	10752.2	12497.9
50°	10360.1	10351.6	9989.0	9845.7	9906.8	10001.7	10967.3	11496.4	11165.4	11905.4	13486.6
52.5°	11089.5	11140.1	11015.7	10992.6	11304.6	11469.0	12645.4	12841.5	12120.5	12999.6	14226.7
55°	11667.2	11726.2	11869.6	12031.9	12632.8	12847.8	14270.9	14117.0	12919.5	13948.4	14652.5
57.5°	12485.2	12400.9	12622.3	12942.7	13914.6	14173.9	15845.8	15320.9	13562.5	14717.9	14698.9
60°	13478.2	13490.9	13528.8	13933.6	15194.4	15527.5	17397.5	16459.3	13975.8	15190.1	14184.5
62.5°	14671.5	14690.5	14768.5	15390.4	16912.6	17226.7	19050.4	17391.2	14165.5	15057.3	12856.3
65°	14589.3	14669.4	15540.1	17667.4	19524.8	19834.7	20979.5	18044.7	13878.8	13842.9	10467.6
67.5°	13290.6	13421.3	14878.1	20387.0	23463.0	23808.8	23311.2	18173.3	12641.2	10764.9	6828.7
70°	11587.1	11633.5	13385.5	22832.6	28023.2	28373.2	25398.4	16758.7	9592.7	6004.4	3059.1
72.5°	9048.7	9059.3	11114.8	23399.8	30498.3	30517.3	23760.3	12440.9	5159.0	2306.5	1062.6
75°	6464.0	6400.7	7444.3	18976.6	26832.0	27047.1	17812.8	5835.7	1971.2	1090.0	529.2
77.5°	3466.0	3535.6	4212.3	11254.0	18536.0	18902.8	9719.2	1682.4	1003.5	742.1	350.0
80°	1071.0	1130.0	1726.7	5152.6	10499.2	10720.6	3603.0	748.4	699.9	529.2	229.8
82.5°	337.3	350.0	805.4	2165.2	4357.8	4459.0	1043.6	423.8	478.6	350.0	134.9
85°	97.0	99.1	358.4	807.5	1077.3	1098.4	293.1	164.4	274.1	217.2	69.6
87.5°	10.5	33.7	134.9	134.9	94.9	92.8	31.6	35.8	78.0	27.4	12.6
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°	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2	4170.2
2.5°	4178.6	4180.7	4153.3	4106.9	4056.3	4014.2	3961.5	3919.3	3889.8	3881.3	3896.1
5°	4208.1	4193.4	4115.4	3974.1	3805.4	3660.0	3497.6	3369.0	3284.7	3248.9	3261.5
7.5°	4252.4	4210.2	4039.5	3761.2	3438.6	3151.9	2860.9	2635.3	2492.0	2420.3	2430.8
10°	4290.3	4206.0	3913.0	3453.4	2960.0	2525.7	2133.6	1861.6	1709.8	1638.1	1640.2
12.5°	4326.2	4203.9	3748.5	3088.6	2420.3	1889.0	1524.3	1389.4	1347.2	1332.4	1328.2
15°	4393.6	4210.2	3541.9	2671.2	1882.7	1427.3	1294.5	1292.4	1300.8	1296.6	1294.5
17.5°	4486.4	4216.6	3307.9	2228.4	1452.6	1258.6	1252.3	1271.3	1283.9	1277.6	1275.5
20°	4606.6	4241.9	3059.1	1789.9	1248.1	1216.5	1231.2	1248.1	1258.6	1248.1	1246.0
22.5°	4775.2	4286.1	2787.1	1437.8	1182.7	1191.2	1203.8	1222.8	1233.3	1218.6	1216.5
25°	4981.9	4355.7	2519.4	1250.2	1151.1	1161.7	1180.6	1201.7	1214.4	1199.6	1197.5
27.5°	5249.6	4467.4	2272.7	1208.0	1119.5	1125.8	1153.2	1184.9	1201.7	1182.7	1182.7
30°	5637.5	4650.9	2059.8	1227.0	1100.5	1085.8	1123.7	1168.0	1187.0	1170.1	1168.0
32.5°	6152.0	4910.2	1929.1	1256.5	1092.1	1039.4	1075.2	1132.1	1163.8	1153.2	1153.2
35°	6826.6	5304.4	1878.5	1290.3	1085.8	990.9	1016.2	1077.3	1132.1	1142.7	1142.7
37.5°	7644.6	5852.6	1893.2	1305.0	1066.8	950.8	963.5	1016.2	1087.9	1121.6	1130.0
40°	8574.4	6491.4	1977.6	1290.3	1045.7	917.1	919.2	959.3	1022.5	1073.1	1090.0
42.5°	9533.6	7237.7	2133.6	1235.5	1026.7	887.6	881.3	908.7	950.8	986.7	1001.4
45°	10446.5	8005.1	2287.5	1159.6	1003.5	858.1	843.3	853.9	862.3	877.0	885.5
47.5°	11243.4	8544.8	2243.2	1090.0	971.9	824.3	799.0	794.8	769.5	767.4	765.3
50°	11793.7	8662.9	1992.3	1020.4	925.5	786.4	746.3	721.0	676.8	655.7	657.8
52.5°	11968.7	8197.0	1627.6	950.8	849.6	735.8	678.9	638.8	584.0	565.0	562.9
55°	11736.8	7284.1	1300.8	866.5	744.2	668.3	605.1	552.4	508.1	484.9	484.9
57.5°	11169.7	6122.4	1028.8	767.4	632.5	592.4	529.2	476.5	438.5	415.3	411.1
60°	10229.4	4861.7	813.8	649.3	539.7	510.2	444.8	411.1	377.4	350.0	343.6
62.5°	8802.1	3470.2	638.8	514.4	451.2	417.4	379.5	354.2	314.1	276.2	269.9
65°	6868.8	2123.0	493.3	377.4	362.6	345.8	322.6	299.4	250.9	212.9	206.6
67.5°	4332.5	1005.6	352.1	284.6	286.7	278.3	267.8	248.8	212.9	179.2	175.0
70°	1908.0	487.0	231.9	217.2	212.9	212.9	221.4	215.0	181.3	149.7	143.4
72.5°	649.3	261.4	172.9	164.4	153.9	151.8	185.5	179.2	145.5	116.0	109.6
75°	339.4	175.0	126.5	118.1	92.8	111.7	147.6	139.1	103.3	75.9	69.6
77.5°	221.4	124.4	86.4	75.9	52.7	73.8	109.6	97.0	61.1	37.9	33.7
80°	139.1	82.2	50.6	35.8	25.3	40.1	59.0	42.2	23.2	8.4	6.3
82.5°	73.8	42.2	19.0	12.6	10.5	12.6	14.8	10.5	4.2	0.0	0.0
85°	29.5	14.8	6.3	4.2	2.1	0.0	4.2	2.1	0.0	0.0	0.0
87.5°	10.5	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)