

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: P884591

Luminaire Tested: **NAV-SB5C-722-U-T4FT**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884591  
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-SB5C-722-U-T4FT  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

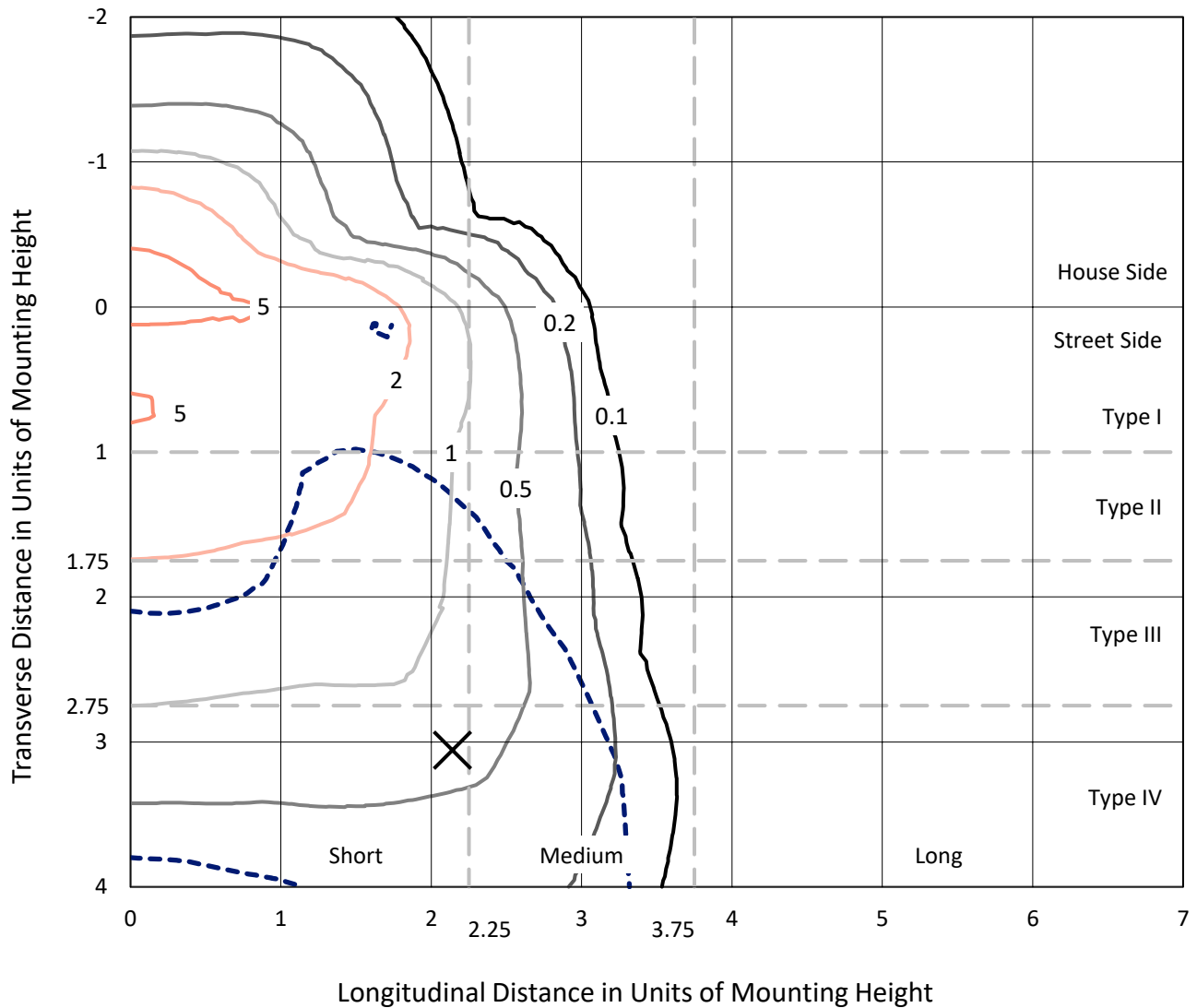
Lumens per Lamp: N/A  
Luminaire Lumens: 29931 lumens  
Efficiency: N/A  
Efficacy: 120.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 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

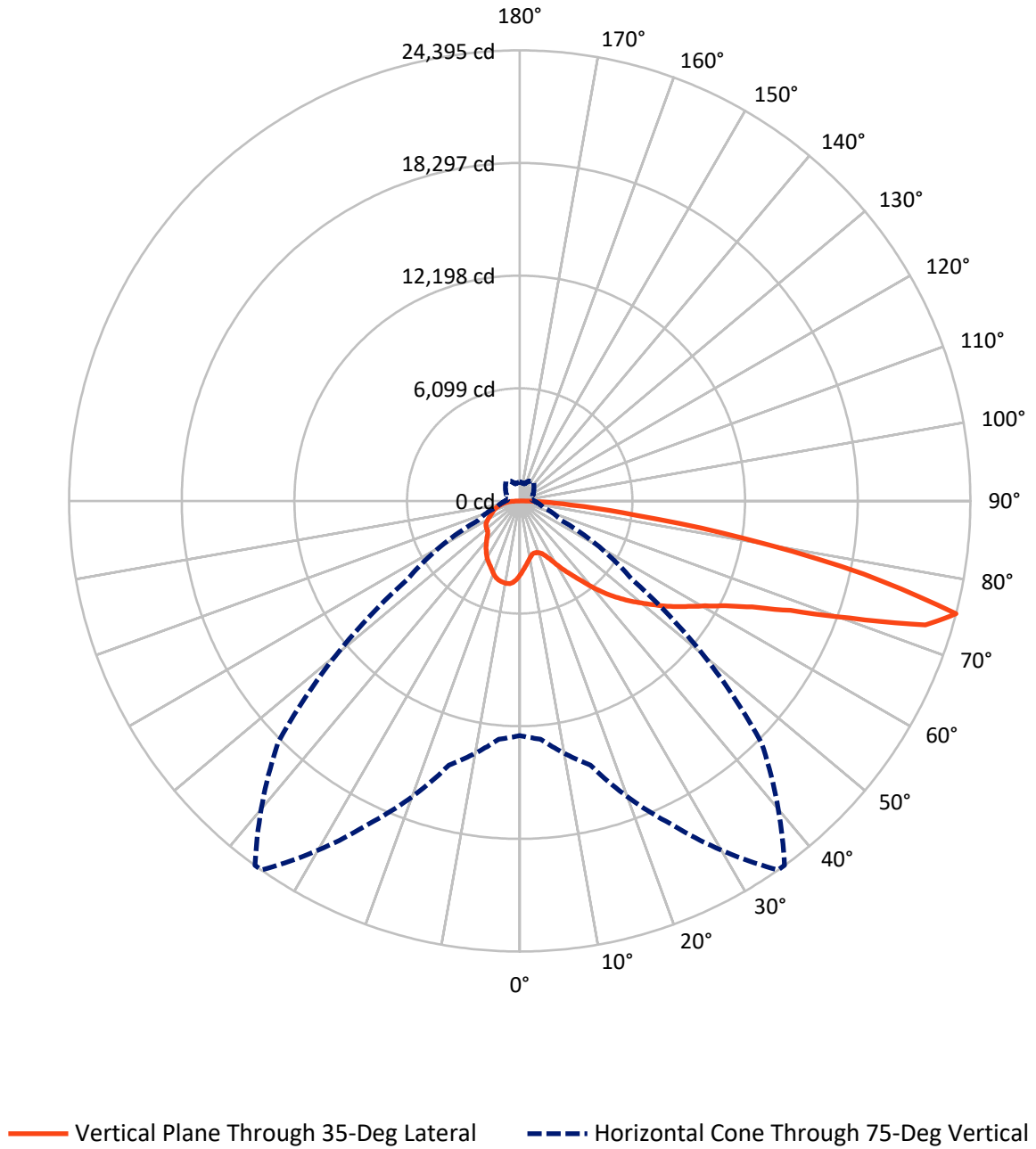
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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	7122.8	0.0	7122.8
	% Fixture	23.8	0.0	23.8
<b>Street Side</b>	Lumens	22808.2	0.0	22808.2
	% Fixture	76.2	0.0	76.2
<b>Total</b>	Lumens	29931.0	0.0	29931.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	377.6	1.3
10°-20°	1089.3	3.6
20°-30°	1829.1	6.1
30°-40°	2842.7	9.5
40°-50°	4219.4	14.1
50°-60°	5825.1	19.5
60°-70°	7067.2	23.6
70°-80°	5840.5	19.5
80°-90°	840.0	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°	29931.0	100.0
0°-180°	29931.0	100.0



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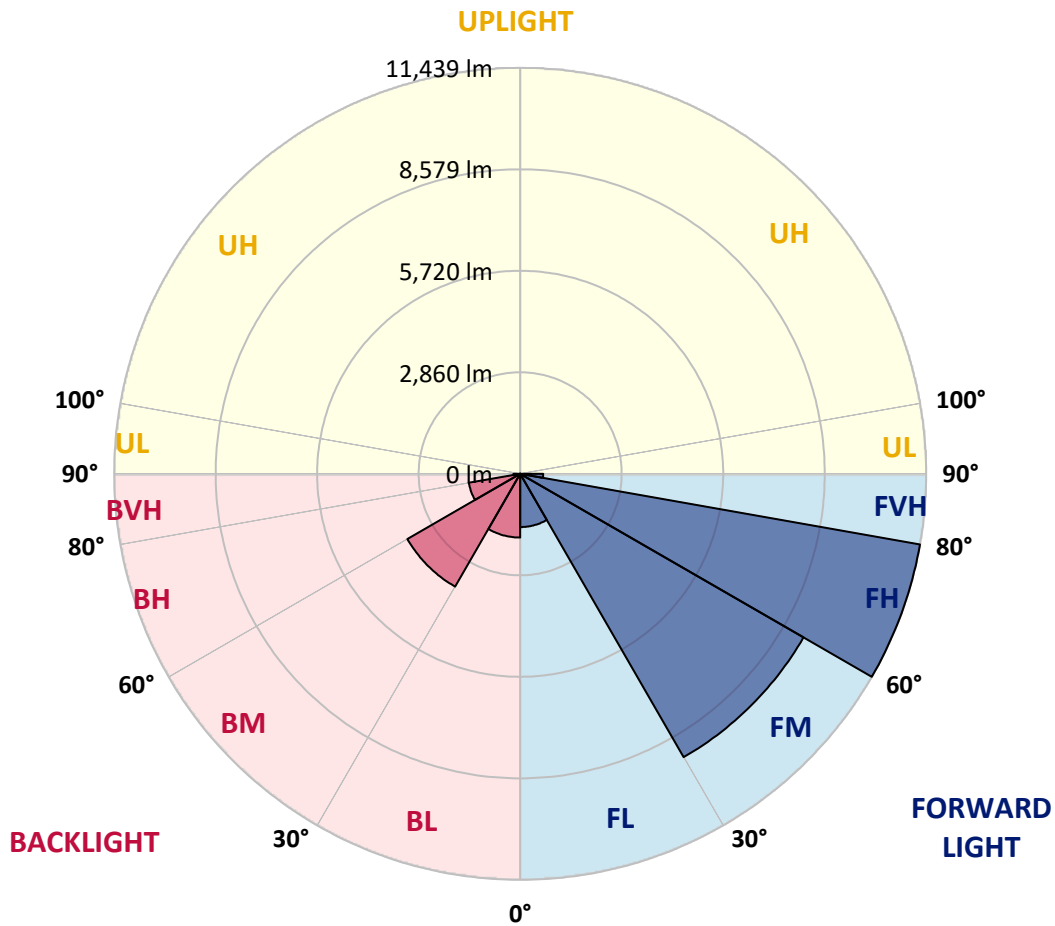
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1501.0	5.0			
FM (30°-60°)	9217.1	30.8			
FH (60°-80°)	11439.2	38.2			G4/12000
FVH (80°-90°)	650.9	2.2			G4/750
BL (0°-30°)	1795.1	6.0	B3/2500		
BM (30°-60°)	3670.1	12.3	B3/5000		
BH (60°-80°)	1468.5	4.9	B3/2500		G3/2500
BVH (80°-90°)	189.2	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5
2.5°	3677.8	3700.5	3710.2	3705.3	3729.6	3726.4	3760.4	3802.4	3860.7	3917.3	3999.8
5°	3394.7	3419.0	3440.0	3459.4	3506.3	3520.9	3574.3	3655.2	3762.0	3870.4	4006.3
7.5°	3130.9	3152.0	3184.3	3219.9	3299.2	3313.8	3402.8	3529.0	3677.8	3836.4	4024.1
10°	2915.7	2936.8	2970.8	3011.2	3109.9	3127.7	3241.0	3409.2	3603.4	3804.0	4043.5
12.5°	2823.5	2830.0	2849.4	2889.8	2975.6	2986.9	3111.5	3304.1	3530.6	3779.8	4072.6
15°	2818.7	2831.6	2833.2	2854.3	2925.4	2930.3	3045.2	3236.1	3485.3	3774.9	4116.3
17.5°	2867.2	2876.9	2862.3	2875.3	2935.2	2943.2	3033.9	3203.8	3470.7	3796.0	4190.8
20°	2996.6	3004.7	2961.0	2943.2	2986.9	2993.4	3082.4	3224.8	3485.3	3839.6	4292.7
22.5°	3271.7	3276.6	3169.8	3097.0	3100.2	3103.4	3181.1	3310.5	3541.9	3918.9	4422.1
25°	3700.5	3697.3	3527.4	3386.6	3305.7	3287.9	3339.7	3449.7	3637.4	4024.1	4588.8
27.5°	4202.1	4177.8	4007.9	3797.6	3621.2	3595.3	3584.0	3630.9	3773.3	4163.3	4792.7
30°	4768.4	4745.8	4562.9	4287.8	4043.5	4001.5	3894.7	3870.4	3975.6	4352.6	5075.8
32.5°	5389.7	5375.2	5156.7	4823.4	4496.6	4448.0	4268.4	4203.7	4286.2	4639.0	5470.6
35°	5910.8	5897.8	5716.6	5373.6	4973.9	4914.0	4731.2	4658.4	4700.5	5006.3	5986.8
37.5°	6381.6	6375.1	6219.8	5949.6	5537.0	5464.2	5258.7	5234.4	5226.3	5490.1	6613.0
40°	6818.5	6802.3	6640.5	6498.1	6192.3	6126.0	5944.7	5923.7	5862.2	6085.5	7321.7
42.5°	7302.3	7260.2	7025.6	6959.3	6876.7	6821.7	6713.3	6716.6	6580.6	6757.0	8072.5
45°	7697.1	7672.8	7431.7	7392.9	7481.9	7459.2	7553.1	7577.4	7313.6	7460.9	8852.4
47.5°	8121.0	8098.4	7894.5	7867.0	8108.1	8114.6	8446.3	8454.3	8028.8	8192.2	9633.9
50°	8643.7	8611.3	8409.0	8443.0	8713.2	8737.5	9344.3	9289.3	8687.3	8934.9	10409.0
52.5°	8988.3	9007.7	8964.0	9019.0	9388.0	9410.6	10227.7	10087.0	9339.4	9667.9	11169.4
55°	9242.3	9281.2	9417.1	9543.3	10099.9	10122.6	11061.0	10845.8	9879.9	10347.5	11884.6
57.5°	9569.2	9514.2	9768.2	10014.1	10776.3	10836.1	11871.7	11577.2	10358.8	10933.2	12374.9
60°	10038.4	9999.6	10197.0	10561.1	11533.5	11629.0	12729.2	12235.7	10709.9	11397.6	12470.4
62.5°	10989.8	10892.8	10923.5	11245.5	12488.2	12614.4	13696.8	12810.1	10884.7	11578.8	11959.1
65°	12412.1	12245.4	12090.1	12313.4	13832.8	13957.4	14789.0	13261.6	10819.9	11227.7	10601.5
67.5°	14203.3	14038.3	13847.3	14057.7	15813.3	15912.0	16136.9	13515.6	10310.3	9875.0	8201.9
70°	15680.6	15619.1	15847.2	16712.9	18976.6	18979.8	17865.0	13305.3	8913.9	7001.3	4745.8
72.5°	15484.8	15447.6	16649.8	19326.1	22963.5	22877.7	19500.8	11713.1	6004.6	3158.4	1778.2
75°	12703.4	12944.4	14806.8	19279.1	24395.4	24384.1	18499.2	7446.3	2483.7	1309.0	919.1
77.5°	6812.0	7193.9	9612.9	14234.0	19044.5	19330.9	13005.9	2605.1	1066.3	838.2	635.9
80°	2221.6	2554.9	3831.6	7247.3	12374.9	12321.5	5574.2	1022.6	729.7	593.8	440.1
82.5°	943.3	982.2	1711.9	3422.2	6350.9	6252.2	1775.0	587.4	512.9	406.1	271.8
85°	368.9	412.6	755.6	1582.5	2750.7	2690.8	640.8	291.3	328.5	265.4	161.8
87.5°	121.4	147.2	270.2	542.0	856.0	825.2	157.0	100.3	142.4	121.4	58.3
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°	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5	3988.5
2.5°	4022.5	4048.4	4079.1	4124.4	4163.3	4195.6	4229.6	4250.6	4258.7	4283.0	4281.4
5°	4051.6	4108.2	4184.3	4258.7	4331.5	4375.2	4414.1	4433.5	4451.3	4464.2	4467.5
7.5°	4100.2	4173.0	4292.7	4389.8	4451.3	4486.9	4512.8	4506.3	4512.8	4516.0	4520.8
10°	4142.2	4244.2	4386.6	4478.8	4525.7	4527.3	4520.8	4498.2	4486.9	4488.5	4491.7
12.5°	4192.4	4305.6	4459.4	4537.0	4550.0	4514.4	4486.9	4448.0	4433.5	4427.0	4423.8
15°	4260.3	4389.8	4538.6	4567.8	4535.4	4490.1	4443.2	4380.1	4347.7	4321.8	4329.9
17.5°	4342.9	4485.3	4600.1	4579.1	4509.5	4435.1	4359.0	4263.6	4197.2	4169.7	4171.3
20°	4457.7	4585.6	4647.1	4554.8	4449.7	4336.4	4206.9	4090.4	4029.0	4001.5	3998.2
22.5°	4596.9	4719.9	4692.4	4512.8	4363.9	4182.7	4020.9	3935.1	3904.4	3885.0	3888.2
25°	4763.6	4868.7	4724.7	4451.3	4223.1	3978.8	3854.2	3826.7	3812.1	3797.6	3797.6
27.5°	4980.4	5037.0	4749.0	4360.7	4003.1	3762.0	3716.7	3721.5	3716.7	3692.4	3697.3
30°	5266.8	5255.4	4771.6	4213.4	3750.7	3566.2	3569.4	3590.5	3593.7	3577.5	3585.6
32.5°	5643.8	5528.9	4783.0	4022.5	3509.6	3394.7	3397.9	3420.6	3436.8	3409.2	3422.2
35°	6100.1	5847.7	4765.2	3783.0	3323.5	3231.3	3207.0	3213.5	3218.3	3192.4	3210.2
37.5°	6632.4	6205.2	4685.9	3517.7	3169.8	3071.1	3019.3	2975.6	2949.7	2925.4	2941.6
40°	7216.5	6595.2	4540.3	3258.8	2998.3	2901.2	2823.5	2741.0	2653.6	2621.3	2635.8
42.5°	7828.2	6996.5	4363.9	3011.2	2800.9	2721.6	2639.0	2519.3	2388.3	2321.9	2330.0
45°	8462.4	7407.5	4190.8	2766.9	2598.6	2564.6	2469.2	2325.1	2182.8	2098.6	2092.1
47.5°	9083.8	7795.8	3936.7	2520.9	2409.3	2446.5	2372.1	2239.4	2080.8	1948.1	1933.6
50°	9677.6	8159.9	3520.9	2271.8	2255.6	2410.9	2339.7	2148.8	1967.6	1797.7	1783.1
52.5°	10266.6	8454.3	2988.5	2045.2	2173.0	2401.2	2297.6	2087.3	1865.6	1687.6	1668.2
55°	10766.5	8606.4	2475.6	1851.1	2053.3	2318.7	2247.5	2014.5	1721.6	1532.3	1516.1
57.5°	11051.3	8483.5	2048.5	1660.1	1888.3	2182.8	2161.7	1859.1	1550.1	1404.5	1385.1
60°	10928.4	7985.1	1699.0	1493.5	1731.3	2035.5	2012.9	1705.4	1419.0	1281.5	1262.1
62.5°	10250.4	7035.3	1422.3	1347.8	1588.9	1885.0	1864.0	1587.3	1318.7	1186.0	1165.0
65°	8884.7	5723.1	1207.1	1226.5	1444.9	1703.8	1734.6	1488.6	1239.4	1110.0	1089.0
67.5°	6776.4	4145.5	1038.8	1121.3	1304.2	1525.8	1614.8	1417.4	1173.1	1050.1	1030.7
70°	3862.3	2354.3	896.4	1019.4	1179.6	1360.8	1522.6	1360.8	1101.9	1000.0	987.0
72.5°	1464.3	1080.9	775.0	917.4	1059.8	1221.6	1420.7	1271.8	1019.4	943.3	930.4
75°	781.5	658.5	652.1	797.7	922.3	1085.7	1292.8	1184.4	957.9	996.7	1029.1
77.5°	532.3	466.0	545.3	682.8	771.8	935.2	1156.9	1051.7	830.1	826.8	762.1
80°	368.9	330.1	443.3	550.1	597.1	786.4	1009.7	902.9	676.3	631.0	603.5
82.5°	221.7	215.2	331.7	411.0	422.3	606.8	836.5	757.3	553.4	482.2	485.4
85°	121.4	127.8	212.0	241.1	245.9	423.9	655.3	585.7	425.5	357.6	360.8
87.5°	34.0	43.7	77.7	95.5	118.1	220.1	390.0	347.9	213.6	148.9	148.9
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)