

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: P885177

Luminaire Tested: **NAV-SB6B-830-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885177  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6B-830-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

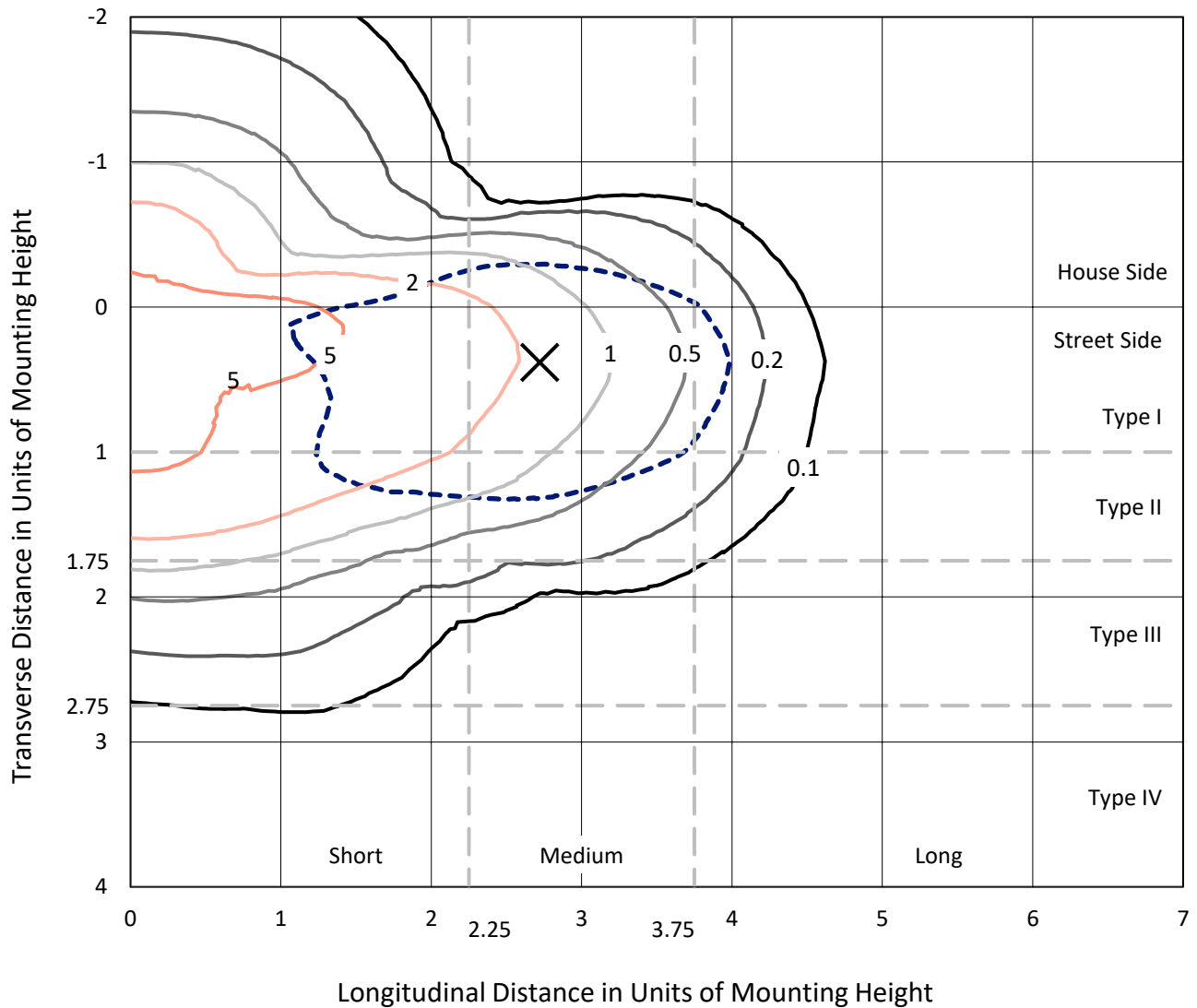
Lumens per Lamp: N/A  
Luminaire Lumens: 29632 lumens  
Efficiency: N/A  
Efficacy: 134.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 220.4  
Input Voltage (V): 120.0  
Input Current (Ain): 1.838  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
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

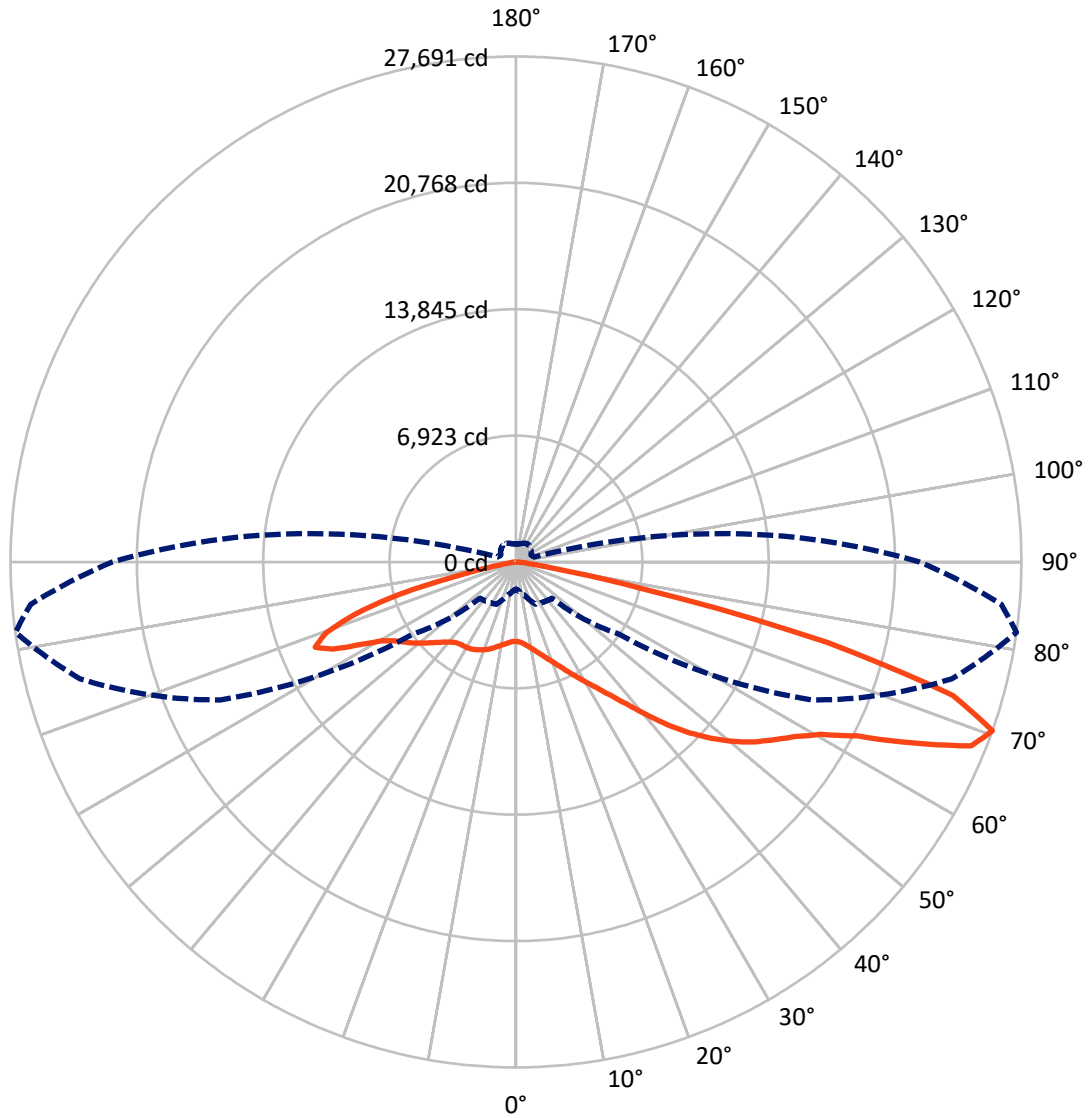
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7305.0	0.0	7305.0
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	22327.0	0.0	22327.0
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	29632.0	0.0	29632.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	410.2	1.4
10°-20°	1178.5	4.0
20°-30°	1971.5	6.7
30°-40°	3080.0	10.4
40°-50°	4905.3	16.6
50°-60°	6826.3	23.0
60°-70°	7140.6	24.1
70°-80°	3732.1	12.6
80°-90°	387.5	1.3
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°	29632.0	100.0
0°-180°	29632.0	100.0

**Coefficient of Utilization**



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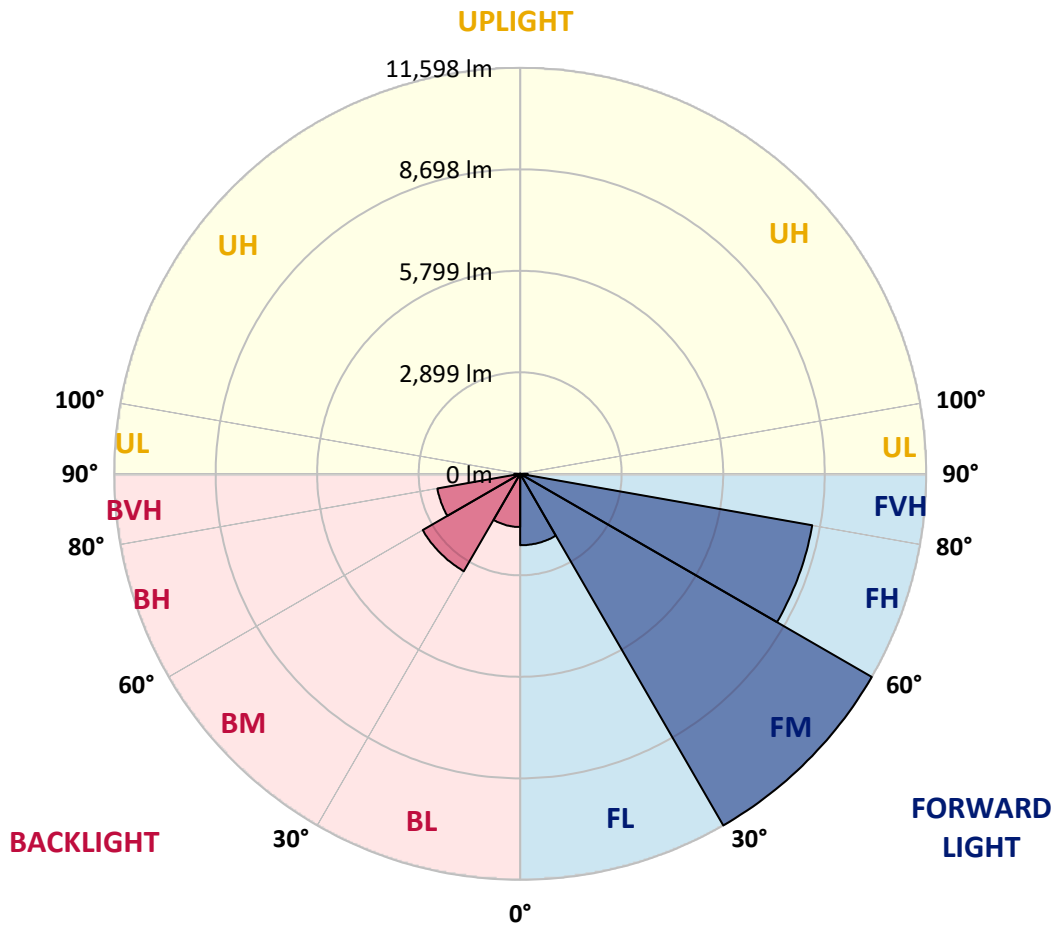
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2040.5	6.9			
FM (30°-60°)	11597.7	39.1			
FH (60°-80°)	8471.9	28.6			G4/12000
FVH (80°-90°)	216.9	0.7			G2/225
BL (0°-30°)	1519.7	5.1	B3/2500		
BM (30°-60°)	3213.9	10.8	B3/5000		
BH (60°-80°)	2400.8	8.1	B3/2500		G3/2500
BVH (80°-90°)	170.6	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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4
2.5°	4448.2	4473.4	4465.5	4457.6	4457.6	4446.6	4445.1	4429.3	4416.8	4396.3	4391.6
5°	4504.8	4531.5	4528.4	4534.7	4555.1	4559.8	4564.6	4555.1	4530.0	4504.8	4493.8
7.5°	4454.5	4484.4	4493.8	4531.5	4594.4	4651.0	4693.5	4710.8	4687.2	4651.0	4633.7
10°	4284.7	4317.7	4350.7	4440.3	4552.0	4685.6	4798.8	4866.4	4861.7	4827.1	4797.3
12.5°	3940.3	3974.9	4045.7	4220.2	4424.6	4660.5	4871.2	5012.7	5061.4	5036.3	4984.4
15°	3665.2	3695.0	3748.5	3927.7	4193.5	4552.0	4897.9	5173.1	5297.3	5283.1	5220.2
17.5°	3657.3	3669.9	3702.9	3787.8	3992.2	4382.2	4869.6	5330.3	5567.7	5566.1	5487.5
20°	3795.7	3800.4	3819.3	3836.6	3952.9	4253.2	4797.3	5460.8	5871.2	5871.2	5786.3
22.5°	3987.5	3984.4	4003.2	3987.5	4044.1	4242.2	4751.7	5575.6	6209.2	6234.4	6127.5
25°	4275.2	4259.5	4254.8	4218.6	4229.6	4344.4	4802.0	5706.1	6610.2	6662.1	6528.4
27.5°	4658.9	4633.7	4616.4	4533.1	4504.8	4555.1	4956.1	5863.3	7056.7	7146.4	6976.5
30°	5158.9	5113.3	5088.1	4943.5	4841.3	4849.1	5188.8	6072.4	7523.7	7668.4	7453.0
32.5°	5841.3	5770.5	5702.9	5465.5	5278.4	5217.1	5489.1	6361.8	8030.0	8261.2	7984.4
35°	6605.5	6548.9	6476.5	6110.2	5822.4	5680.9	5894.8	6765.9	8622.8	8989.2	8629.1
37.5°	7341.3	7292.6	7327.2	6833.5	6462.4	6256.4	6426.2	7308.3	9354.0	9894.8	9437.3
40°	8102.4	8064.6	8069.3	7597.6	7165.2	6934.1	7070.9	7989.1	10192.0	10971.9	10409.0
42.5°	8929.4	8901.1	8806.8	8388.5	7902.7	7687.3	7813.0	8775.3	11091.4	12198.3	11475.1
45°	9855.5	9838.2	9750.2	9270.6	8714.0	8471.9	8641.7	9643.3	11995.5	13352.5	12545.8
47.5°	10655.9	10670.0	10659.0	10254.9	9677.9	9322.5	9525.3	10548.9	12836.7	14437.4	13572.6
50°	11041.1	11115.0	11223.5	11097.7	10739.2	10377.6	10416.9	11423.2	13638.6	15454.7	14556.9
52.5°	10839.8	10979.8	11275.4	11476.6	11615.0	11539.5	11434.2	12291.1	14393.4	16373.0	15487.7
55°	10089.8	10286.4	10776.9	11262.8	11968.8	12517.5	12655.9	13253.4	15129.2	17181.1	16368.2
57.5°	8723.4	9042.6	9482.9	10465.6	11654.3	12990.8	14080.5	14588.3	15909.1	18044.4	17289.6
60°	6380.6	6808.3	7355.5	8817.8	10553.7	12737.7	15292.7	16638.7	17017.6	19162.3	18489.3
62.5°	4083.4	4347.6	4850.7	6228.1	8223.4	11440.5	15663.8	19201.6	18896.6	20995.7	20288.1
65°	2795.7	2965.5	3426.2	4199.8	5316.1	8515.9	14670.1	21123.0	21880.9	23901.4	23363.6
67.5°	2031.5	2160.4	2553.5	3231.2	3463.9	5039.4	11383.9	21035.0	24781.9	26895.2	26058.7
70°	1481.2	1572.4	1902.6	2553.5	2665.1	2803.5	6896.4	17880.8	24719.0	27690.8	26689.2
72.5°	1097.5	1160.4	1382.1	1981.2	2157.3	1893.1	3413.6	12995.5	21241.0	25046.1	24242.6
75°	794.0	841.2	1004.7	1515.8	1726.4	1441.9	1702.9	7594.5	14816.3	17618.3	17759.8
77.5°	606.9	643.1	750.0	1110.1	1382.1	1081.8	1056.6	3493.8	7025.3	7059.9	7456.1
80°	487.4	511.0	569.2	781.5	1059.8	809.8	688.7	1410.4	2220.2	1879.0	1971.7
82.5°	358.5	397.8	481.1	548.8	757.9	558.2	419.8	712.3	844.4	726.4	732.7
85°	204.4	231.1	290.9	393.1	484.3	341.2	240.6	316.0	393.1	322.3	287.7
87.5°	72.3	94.3	102.2	154.1	210.7	141.5	92.8	91.2	128.9	95.9	80.2
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°	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4	4344.4
2.5°	4375.9	4368.0	4336.6	4294.1	4250.1	4207.6	4193.5	4163.6	4143.2	4132.2	4144.7
5°	4463.9	4438.8	4364.9	4270.5	4171.5	4064.5	3989.1	3919.9	3869.6	3822.4	3841.3
7.5°	4589.7	4545.7	4418.3	4253.2	4077.1	3899.4	3767.4	3666.7	3599.1	3555.1	3564.5
10°	4735.9	4668.3	4473.4	4226.5	3954.5	3699.8	3544.1	3457.6	3415.2	3391.6	3397.9
12.5°	4904.2	4808.3	4530.0	4165.2	3767.4	3476.5	3369.6	3344.4	3346.0	3347.5	3350.7
15°	5111.7	4978.1	4575.6	4031.5	3523.7	3305.1	3286.2	3327.1	3369.6	3390.0	3388.4
17.5°	5346.0	5157.3	4583.4	3811.4	3284.7	3195.0	3254.8	3342.8	3407.3	3435.6	3441.9
20°	5597.6	5339.7	4526.8	3500.1	3088.1	3105.4	3212.3	3325.5	3396.3	3432.5	3441.9
22.5°	5885.3	5534.7	4391.6	3173.0	2927.7	3007.9	3133.7	3243.8	3317.7	3353.8	3363.3
25°	6214.0	5753.3	4179.3	2897.9	2789.4	2897.9	3023.6	3114.8	3174.6	3207.6	3217.0
27.5°	6578.7	5981.2	3896.3	2679.3	2668.3	2784.6	2888.4	2959.2	2990.6	3015.8	3025.2
30°	6945.1	6188.8	3553.5	2514.2	2562.9	2673.0	2746.9	2778.4	2787.8	2792.5	2803.5
32.5°	7341.3	6368.0	3193.5	2377.4	2462.3	2564.5	2608.5	2622.7	2578.7	2548.8	2558.2
35°	7820.9	6559.9	2841.2	2268.9	2363.3	2451.3	2465.5	2452.9	2401.0	2339.7	2342.8
37.5°	8413.7	6798.9	2559.8	2191.9	2270.5	2328.7	2311.4	2308.2	2312.9	2240.6	2245.3
40°	9140.1	7110.2	2353.8	2132.1	2195.0	2207.6	2158.8	2185.6	2209.2	2099.1	2102.2
42.5°	9946.7	7486.0	2223.3	2091.2	2132.1	2102.2	2026.8	2056.6	2053.5	1908.8	1907.3
45°	10769.1	7894.8	2177.7	2061.4	2073.9	2014.2	1930.9	1938.7	1872.7	1742.2	1746.9
47.5°	11586.7	8333.5	2206.0	2036.2	2001.6	1934.0	1869.5	1834.9	1737.5	1640.0	1640.0
50°	12388.6	8794.2	2309.8	1985.9	1902.6	1863.2	1816.1	1754.8	1651.0	1567.6	1561.4
52.5°	13132.3	9258.0	2426.1	1902.6	1778.3	1801.9	1772.0	1701.3	1599.1	1514.2	1515.8
55°	13836.7	9721.9	2471.7	1787.8	1662.0	1748.5	1731.2	1600.7	1478.0	1408.8	1402.5
57.5°	14604.0	10280.1	2421.4	1641.5	1567.6	1687.1	1621.1	1476.4	1405.7	1353.8	1349.1
60°	15667.0	11155.9	2312.9	1460.7	1478.0	1595.9	1482.7	1423.0	1345.9	1287.8	1284.6
62.5°	17432.7	12789.5	2138.4	1281.5	1372.7	1460.7	1416.7	1356.9	1278.3	1221.7	1221.7
65°	20042.8	15060.0	1809.8	1141.5	1254.7	1328.6	1345.9	1286.2	1204.4	1144.7	1147.8
67.5°	22244.1	16484.6	1369.5	1025.2	1133.7	1221.7	1270.5	1212.3	1125.8	1067.6	1069.2
70°	22123.1	15450.0	1045.6	910.4	1026.7	1116.4	1179.3	1133.7	1040.9	985.9	990.6
72.5°	19649.7	12924.8	845.9	794.0	918.3	1006.3	1081.8	1047.2	952.8	899.4	899.4
75°	14435.8	9174.7	676.1	676.1	783.0	891.5	974.9	952.8	866.4	828.6	817.6
77.5°	6085.0	3849.1	529.9	561.3	651.0	765.7	869.5	877.4	801.9	849.1	770.5
80°	1618.0	1061.3	404.1	441.8	511.0	632.1	756.3	753.2	671.4	627.4	583.3
82.5°	616.4	418.2	287.7	311.3	369.5	484.3	599.1	617.9	536.2	463.8	463.8
85°	237.4	179.2	177.7	187.1	215.4	320.8	452.8	468.6	404.1	342.8	353.8
87.5°	61.3	53.5	66.0	62.9	99.1	171.4	259.4	268.9	246.9	143.1	204.4
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)